

Global Spotlights

A multinational European network to implement integrated care in elderly multimorbid atrial fibrillation patients: the AFFIRMO Consortium

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The increasing ageing of the general population has led to a significant burden of multimorbidity in the general population, requiring significant changes to healthcare and management, as well as clinical approaches. Hence, increasing attention to the progressively increasing burden of multimorbidity and the need for more integrated care management in patients with chronic long-term conditions.^{1,2} Even in the most common heart rhythm disorder, atrial fibrillation (AF), the presence of multimorbidity has proven to significantly influence clinical management and prognosis.^{3,4}

The burden of multimorbidity in AF patients, similar to the overall general population, requires new strategies to manage patients and reduce the risk of adverse outcomes. This holistic or integrated care approach has been proposed and framed as the 'Atrial fibrillation Better Care' (ABC) pathway⁵ and is based on three main pillars: (i) 'A': avoid stroke by anticoagulation management; (ii) 'B': better symptom control by patient-centred symptom-directed decisions on rate or rhythm control strategies; (iii) 'C': cardiovascular and non-cardiovascular risk factors and comorbidities, as well as lifestyle changes. Adherence to the ABC pathway has been shown to improve clinical outcomes, including the reduction in mortality, stroke, major bleeding, and hospitalizations.⁶ Given the growing evidence-base, the ABC pathway has been recommended in AF clinical management guidelines from Europe and Asia-Pacific.^{7,8}

There is also a close relationship between AF and the concept of 'frailty', which is a clinical syndrome characterized by reduced physiological reserve and increased vulnerability.⁹ The presence of frailty in

AF patients increases the chance of not being correctly treated, but also influences significantly the risk of adverse outcomes.⁹

Given this background, the European Union through the Horizon 2020 research programme has funded the 'Atrial fibrillation integrated approach in frail, multimorbid and polymedicated older people' (AFFIRMO) Programme (grant agreement no. 899871). Twenty European institutions (*Figure 1*) comprising the European Geriatric Medicine Society (EuGMS), the Italian National Research Council (CNR) and Heart Care Foundation, the Arrhythmia Alliance, and other major research centres, led by Aalborg University and the University of Liverpool, established a consortium to provide a systematic analysis of the role of multimorbidity in AF patients and to validate the effectiveness of patient-centred, stratified care for AF older patients with multimorbidity, by applying the ABC pathway, with the aim of facilitating a multi-disciplinary, shared decision-making process.

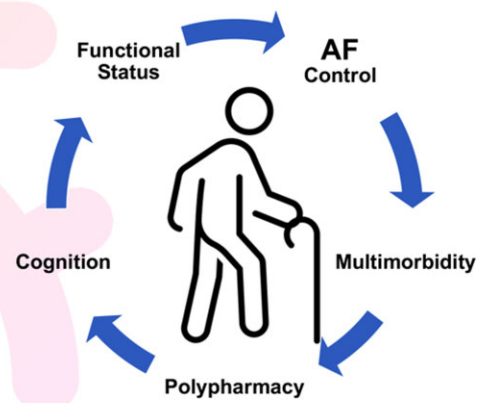
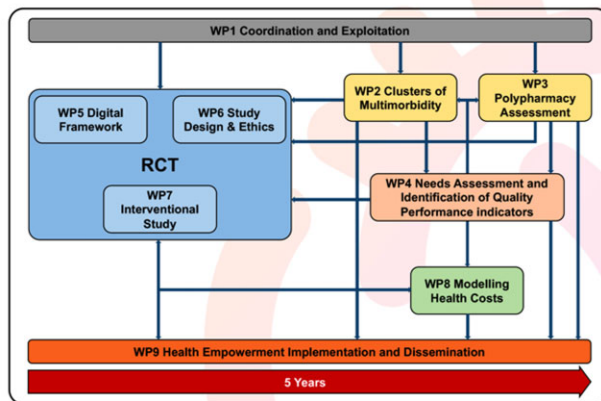
Central to the AFFIRMO Programme will be the inclusion of the comprehensive geriatric assessment (CGA) into the ABC pathway, to provide a comprehensive evaluation of health status in elderly multimorbid patients and to characterize each patient by the level of frailty and specifically manage functional status domains. Indeed, the application of CGA is associated with a significant improvement in health status and outcomes in older adults.¹⁰ The AFFIRMO Programme started in April 2021 and its work is based on nine work packages (WPs) over 5 years of total duration (*Figure 2*).

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Figure 1 The AFFIRM consortium institutions.



AFFIRM

Figure 2 The AFFIRM programme structure. AF, atrial fibrillation; RCT, randomized controlled trial; WP, work package.

The work implemented throughout the AFFIRMO Programme will provide improved risk stratification tools for multimorbid AF patients with polypharmacy, as the goal of WP2 and WP3, which would more accurately characterize these patients and provide useful information for structured follow-up and interventions. The core of the project will be a multinational cluster randomized clinical trial which will test a web- and mobile app-based version of the ABC pathway (iABC) integrated with the functional assessment provided by the CGA compared with the standard usual care regarding the occurrence of major clinical outcomes (WP5, WP6, and WP7). Work ongoing in WP4 will evaluate a detailed assessment of patients' needs and quality performance indicators. Based on the randomized controlled trial results, WP8 will perform an economic health and cost-effectiveness analysis. Patient empowerment is also a key feature of the programme, which will be explored in WP9 and WP9 will also be responsible for the study dissemination strategies.

All the consortium activities are coordinated and organized by WP1 under the scientific coordination of Prof. Søren Johnsen (Aalborg University) and Prof. Gregory Lip (University of Liverpool and Aalborg University) who will act as the Principal Investigator and co-Principal Investigator. The AFFIRMO Programme (see [Supplementary material online](#), Appendix for consortium partners and investigators) is present online (<https://affirmo.eu>) and on major social network platforms.

In conclusion, the AFFIRMO Programme will provide novel evidence on specific care models to be implemented in the general multimorbid AF population which will help to improve clinical management and reduce the risks of major clinical adverse outcomes in an increasingly common and important group of patients.

Supplementary material

[Supplementary material](#) is available at *European Heart Journal* online.

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