ESC and EHRA lead a path towards integrated care for multimorbid atrial fibrillation patients : the Horizon 2020 EHRA-PATHS project

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Transforming health care is a difficult task: although physicians know which evidence-based treatments work, delivering those in a unified fashion as integrated management often lacks adequate implementation. EHRA and ESC have been entrusted by the European Research Council to lead a consortium with the aim to do just that.

Atrial fibrillation usually is the expression of other diseases and/or its outcome is influenced by other conditions. In fact, 93.5% of AF patients have a least one additional comorbidity, and AF patients over 65 years old have an average of five comorbidities.[1-3] Therefore, AF needs to be considered as a blinking light that these comorbidities need to be addressed, which is a much more gargantuan task than just dealing with the arrhythmia itself and with anticoagulation. As a consequence of the multiple comorbidities, polypharmacy, defined as taking ≥5 different drugs concomitantly, is present in 76% of AF patients.[4] This obviously leads to challenges concerning correct adherence to drugs and treatments that have proven to improve prognosis and quality of life. The EHRA-PATHS project, which unites 14 partners throughout Europe and which is led by EHRA/ESC as coordinator (Figure 1) wants to "address multimorbidity in elderly atrial fibrillation patients through interdisciplinary, patient-centered, systematic care pathways". These pathways are not just cardiovascular, but span all disciplines that touch on the comorbidities that are seen in elderly AF patients. A unique feature of the consortium is that each partner involves another specialty than cardiology/arrhythmology, including general practioners.

Figure 2 illustrates the work at hand. In a first work package (WP), the consortium wants to better delineate the magnitude and scope of the comorbidity and polypharmacy profile of AF patients, based on data that are available in the ESC-managed EORP databased (European Observational Research Progam).[5, 6] WP2 will perform a gap analysis to better understand the obstacles in different EU countries for implementation of a systematic management approach. Obstacles can be resources- or training-related, or dependent on the health care organisation in different regions.

The centerpiece of the project will consist of the development of a pragmatic management tool that helps the care team to carefully map each AF patient with his/her comorbidities. The basic concept is that comorbidities that have not been identified (ranging from hypertension and diabetes to sleep-disordered breathing) will never be therapeutically tackled. The approach should be as lean as possible. In WP3, different partners will (together with their affiliated non-cardiac disciplines) develop minimalistic diagnostic approaches and key identification parameters for different co-morbidities. Also, they will define target outcomes for the treatment of these comorbidities. These different care paths will later be integrated in an overall care path and management tool in WP4 (coordinated by Antwerp University Hospital). It explains the project name EHRA-PATHS. The consortium will look for IT implementations that are generic; hence, that can be linked to diverse health care systems in different countries and regions.

It is beyond the scope of the project to evaluate whether such an approach is improving health outcomes. That is also not needed: indeed, practice recommendations like the ESC Guidelines on the Management of AF and others have defined which care should be given in order to improve outcomes.[7, 8] What counts is whether such care is effectively delivered, which in turn depends on whether

comorbidities have been identified in a systematic fashion. Moreover, measuring outcomes itself would require a clinical trial of a much different scope which cannot be done with the available funding and timeline. Therefore, the project will include a randomised clinical trial in WP5 (coordinated by University Medical Center Groningen) that will evaluate how many comorbidities have been identified and addressed in AF patients. There will be a base mapping phase, which will look at patients from 65 cardiology centers from 10 to 12 EU countries. We will evaluate how many multimorbidities of newly presenting elderly AF patients have effectively being addressed after a 6 month period under current care conditions. Later, WP5 will evaluate the same in a prospective cluster-based randomised fashion, comparing centers that evaluate AF patients with or without the newly developed management tool.

How exactly the comorbidities are addressed is left to the discretion of the care teams, based on local, regional and national realities. E.g. an obese AF patient may be referred to a hospital-based dietician in one center or region, while elsewhere the patient may be referred to a local self-support group since reimbursed dietician care is not available. What EHRA-PATHS aims for is to remind the care team to systematically define comorbidities and address those according to local possibilities, striving for a given outcome (e.g. desired BMI in the case of an obese patient). Many PATHS may lead to the same outcome...

As already mentioned, two characteristics are special in the set-up of EHRA-PATHS. Together with CORE-MD, EHRA-PATHS is one of two projects for which ESC (and in this case, EHRA) takes up the coordinating role. That is a radical new direction since apart from 'merely' being responsible for education and dissemination (WP6), ESC has to guarantee the successful completion of the full project. Such a role is important for ESC and its Associations (like EHRA), since members expect such a leading role from their scientific societies. EHRA-PATHS will involve a wide network of centers throughout Europe which benefits not only the scientific development of these centers, but also the quality of care of patients throughout Europe. Leading a scientific consortium will also strengthen the advocacy role that ESC has to play towards European and national healthcare regulators. The second novelty for EHRA-PATHS is that each of the consortium partners involves another specialty next to cardiology, which clearly strengthens the scope of the project.

For managing the consortium, ESC has teamed up with Catalyze (Amsterdam, The Netherlands), the company that also helped deliver the grant application. Prof. Hein Heidbuchel, EHRA Past-President, will act as scientific coordinator within the day-to-day Management Team, in collaboration with Lien Desteghe (Antwerp University Hospital and Hasselt University) and Isabelle Van Gelder (University Medical Center Groningen). Governance of the project is further ensured by work package leaders and a Steering Committee with representatives from all partners. Finally, a Patient Advisory Board will ensure representation of AF patients as stakeholders and a Worldwide Scientific Advisory Board guarantees worldwide validity of the findings.

The EHRA-PATHS project application was successful in ensuring funding at its first submission, which illustrates that also European authorities value our strive for a more systematic and universal approach of multimorbid AF patients throughout Europe. EHRA-PATHS officially kicked-off on April 1st 2021, and

was presented at a session during the EHRA congress. It has a project duration of 5 years. The project website www.ehra-paths.eu provides more information. Or stay tuned via Twitter (@ehrapaths and #EHRA_PATHS)!

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L.D. has nothing to declare.

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Figure legends

Figure 1

The EHRA-PATHS consortium

Figure 2

Time-line and work packages for EHRA-PATHS

Figure 1

The EHRA-PATHS consortium

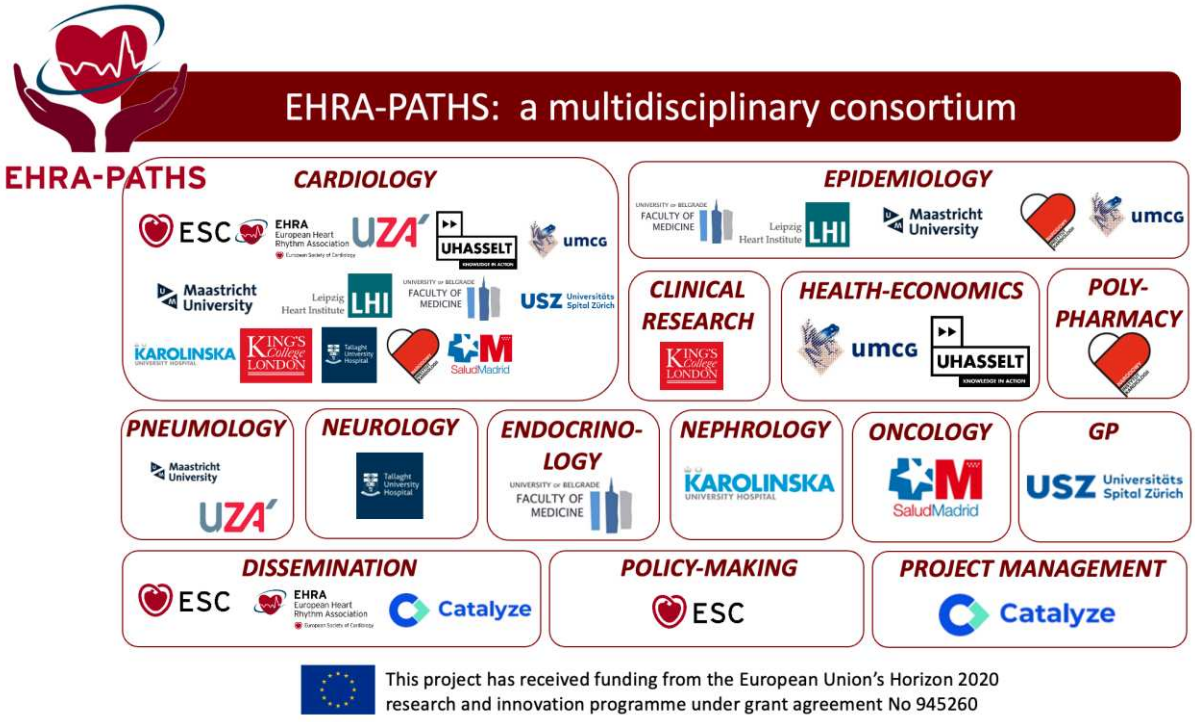

Figure 2

Time-line and work packages for EHRA-PATHS