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Country: **Spain**

Titel of the project: **ESCARVALFA:DEVELOPMENT AND VALIDATION OF A
STROKE RISK SCALE IN ATRIAL FIBRILLATION FOR
PRIMARY CARE**

Project details

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Award amount: €100,000

The aim of the study is to generate a stroke risk scale based on data available in primary care from Electronic Health Recording (EHR) register of 5 millions of inhabitants. The variables to include (hypertension, diabetes, ...) should take in account the degree of control.

The aim of the study is to derive a score risk of stroke from a population-based cohort of five millions of people, and to validate the score in a prospective population-based cohort (ESCARVAL Project, n=50000). Design: The study will have a retrospective analysis followed by a prospective one as follows: • The retrospective will check the clinical records of patients with AF registered in the Valencia Community and those with and without stroke during the last year. • The prospective, subjects with atrial fibrillation will be followed during three years in order to record the main variables of risk which potentially can be associated with the development of stroke. With these approaches we will construct the scale by using the retrospective and then will be tested and refined in the prospective cohort. The main source of data will be the ABUCASIS Electronic Health Record and mortality registers. The system provides support for the administrative functions (appointments, schedule management, activity records) and the management functions (to obtain indicators), forming, above all, a complete healthcare process management system. The system closely interacts with other applications: mortality register, GAIA (pharmaceutical prescription or electronic prescription module), the Nominal Vaccination Registry (RNV), and the Population Information System (SIP). The EHR system is based in 850 Centers in the 24 Healthcare Departments, covered 5,1 million citizens, 98% of the population, have 4,7 million healthcare records, 7.8 million electronic prescriptions per month, 4.1 million appointments per month, 3.6 million visits per month. For the outcome variables, this source will be completed with hospital morbidity records (Discharge Data sets and other systems being implanted), hospital accident and emergency records, and the regional Ministry of Health's mortality registry. Baseline data, including the patient's risk factors at the time of recruitment into the cohort, will be collected during the initial visit, using a new modified version of the ABUCASIS specifically developed to collect information about the variables used in the study. These new developments have also been introduced in the main EHR. Outcomes Assessment: The primary outcome is hospitalization or death from ischemic stroke. (ICD-9-CM codes:434 (occlusion of cerebral arteries), 435 (transient cerebral ischemia), and 436 (acute, but ill-defined, stroke). Statistical analysis: For descriptive analysis the cut-points defining control of each risk factor will be taken from the European Guidelines on CVD prevention; for estimates of dyslipidemia control based on LDL and non-HDL cholesterol, we will use the cut-points agreed in the consensus statement from the American Diabetes Association and the American College of Cardiology Foundation. The primary outcome for this study will be the estimation of the probability of stroke in the presence of other competitive events. Cumulative incidence of stroke will be analyzed by competing risk survival methods, where each subject is at risk of failure from different causes. The cumulative incidence function regression model of Fine and Gray will be used for multiple regression analyses.

Audience

Type

- AF Patients

Location

Spain, Europe