Project generated by:	Contribution 1mission-1million an Initiative of Boehringer Ingelheim published in https://www.heartofstroke.com/all-applications
Country:	Canada
Titel of the project:	Atrial Fibrillation – The CRAFT-EE Care Approach

Project details

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Award amount: €100,000

The aim of the present program is to utilize a remote patient monitoring modality that will allow exercise evaluation and cost effective real time feedback to patients with atrial fibrillation regarding their symptoms, rate control, appropriateness of anticoagulation,education and where needed, when to seek medical attention based on information provided.

For the CRAFT-EE Care Approach (Community Remote Atrial Fibrillation Telemonitoring - Education and Exercise) program, a patient monitoring device developed for cellular phones will be used. Through appropriate monitors as blood pressure cuffs, point of care testing, etc., clinical data can be automatically or directly entered from the home and permit analysis of that data on the mobile platform itself. The device can also be utilized to directly feedback information on symptoms entered by the patient via text messaging. Together with the received nominal data, this modality has the possibility to provide near real time direct clinical advice and care. The present project will deploy this mobile based clinical remote patient management system with thirty smart phones in three rural communities Further, very little prospective data exists in this population regarding the effects of prescribed physical activity on control of symptoms, exercise tolerance or Quality of Life and no data on remote evaluation of this in atrial fibrillation. As the present project will utilize the smart phone platform which also has GPS capabilities and imbedded accelerometers, it is a unique opportunity to evaluate the role of prescribed exercise in the management of atrial fibrillation in the community. All patients over the age of 18 with a primary diagnosis of atrial fibrillation will be eligible. All patients will be advised regarding nutrition and regular physical activity according to established national guidelines. To evaluate prescribed physical activity, patients will be randomized in a 1:1 fashion to a physical exercise program as is done in standard cardiac rehabilitation program. All patients will have their amount of physical activity monitored and tracked on the mobile device. Those randomized to specific exercise regimes will have message reminders on weekly basis regarding their prescription. Patients will be able to feedback information to the medical team regarding symptoms related to their exercise prescription and adjustments will be made accordingly by the program coordinator. INR information will be obtained through validated point of care devices that will be maintained in the patients nearest local pharmacy. Blood pressure, heart rate along with glucose monitoring for those with diabetes will be measured by the remote monitoring device. Patient feedback message algorithms will be developed to inform, educate and advise the patient relative to symptoms entered , data transferred (such as INR) and when to seek medical attention. Patients will also be provided access to patient related management systems as the Heart and Stroke Foundation as well as other educational sites pertinent to self management of atrial fibrillation. When 50% of enrollment is complete, two patient focus groups will be set up to evaluate the advantages and disadvantages of the system and improve on the messaging and feedback experienced to date. Patients will have direct input to changes that will be re-evaluated and compared after 100% enrollment is complete. The sample size for this pilot project will be set at 200 patients over two years. Data analysis will determine utility and effectiveness with view to a larger clinical trial.

Audience

Type

- AF Patients
- Healthcare professionals
- Carers of AF Patients

Location

Canada, North America