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**“I don’t know how you can be the decision maker when you don’t understand”: designing a tailored E-health intervention to empower patients living with non-valvular atrial fibrillation**

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## SUPPORTING INITIATION OF ANTICOAGULATION WITH 'JACK', A VIDEO COUNSELLING TOOL

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**Introduction:** Optimising the use of medicines and ensuring patient adherence is high on the national agenda (1). Anticoagulants are a high risk group of medicines and ensuring that patients have sufficient knowledge and understanding to take their medicines properly is a priority for healthcare professionals (2). Both NICE AF guidance and Medicines Optimisation guidelines encourage joint decision making between prescriber and patient when anticoagulants are started, supported by comprehensive counselling to ensure patients understand their medicines and what to do if something goes wrong. (3)

"Starting Anticoagulation with Jack" was developed to support Healthcare Providers (HCP) with patient discussions and to provide an easy to access video tool for patients newly started on anticoagulation.

**Method:** An unrestricted educational grant was obtained from Bayer. A multidisciplinary project group including 2 patient organisations, The Royal Pharmaceutical Society (RPS) and Wessex Academic Health Science Network (AHSN) developed the clinical content and storyboard with a creative writer and an animation team. It took 11 months from the first meeting to the launch of the video and accompanying patient information leaflet. A campaign including Twitter and Facebook messaging accompanied the release of the video along with a link to an evaluation survey.

**Results:** Since Launch on 15<sup>th</sup> March 2017 the video has been viewed 8,528 times and the leaflet viewed 1606 times.

The video has been presented to patients at an AFA group meeting and formal feedback, been obtained via Survey Monkey from 6 patients and 2 carers/family members has demonstrated usefulness: 100% said they would recommend to other people, 100% said they had a better understanding of how to manage problems with their medicine and 83% said they felt more confident talking anticoagulant medicine after watching the film. Feedback was also obtained from 17 Healthcare professionals and 96% said they would recommend the video to other people and use with their patients

*I think this is an absolutely fantastic resource for patients - it's spot on, answers questions, explains accurately- brilliant, I will be sharing it with my patients Thank you*

**Conclusions/Implications:** Video counselling appears to be a useful method of providing patients with critical information about anticoagulation. Feedback has been positive, and has also highlighted that the video serves as a useful reminder about key messages that patients have either not been told or have forgotten. As a consequence the video tool has been taken up by 6 of 15 AHSNs in England and also appears on the website of The Stroke Association. It is supported by both Anticoagulation Europe and Atrial Fibrillation Association. Following the initial launch of

the video, views have slowed and this highlights the energy required to disseminate resources and support HCPs with building educational tools into every day clinic activity

### References

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## "I DON'T KNOW HOW YOU CAN BE THE DECISION MAKER WHEN YOU DON'T UNDERSTAND": DESIGNING A TAILORED E-HEALTH INTERVENTION TO EMPOWER PATIENTS LIVING WITH NON-VALVULAR ATRIAL FIBRILLATION

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**Background:** Prevention of thromboembolism is key in individuals with non-valvular atrial fibrillation (NVAF) and nonadherence to oral anticoagulant (OAC) therapy is a frequent causative factor of stroke. Many factors contribute to the complexity of medication nonadherence. Thus, education aimed at changing health behaviors must be tailored to address the unique internal motivations and information needs of those confronted with the daily choice to take a medication to prevent stroke. Delivery of tailored health education and medication reminders may be an effective way to empower individuals with NVAF and in consequence, improve OAC adherence.

**Methods:** We applied a patient-centered approach and conducted 1) focus groups, 2) online design survey, and 3) one-on-one design sessions with NVAF patients receiving OAC therapy. Analysis was sequentially conducted for each phase and utilized in the design of a tailored algorithm for patient health messaging to be sent through a personal health record (PHR). Patients with NVAF were recruited from a large institution-based cardiology practice under IRB approval.

**Results:** Focus group participants (N=17) expressed a desire to have more information related to their condition and demonstrated gaps in knowledge related to NVAF and OACs. Analysis revealed significant themes for preferred content, timing, and delivery of tailored messaging. Design survey (N=118) and design session (N=18) findings uncovered nuanced information needs specific to OACs, lifestyle behaviors, and understanding of NVAF. Patients diagnosed with NVAF for a longer period of time (>1 year) expressed greater interest in information regarding lifestyle modifications. In comparison, patients recently diagnosed with NVAF (<1 year) expressed greater interest in information regarding medication side effects. Comprehensive analysis led to development of a tailored algorithm based on specific clinical indications of individuals. These include type of OAC, length of NVAF diagnosis and near real-time adherence rates measured using e-prescribing refill history and smart pill bottle data (Figure 1).

**Conclusion:** Our study revealed that individuals living with NVAF have a desire to better understand and manage their condition, and feel that targeted health information may help them to do so. In this presentation we share the results of an iterative design process to build a tailored messaging algorithm and PHR-based intervention for patients living with NVAF and receiving OAC therapy. The next phase of our work will evaluate the effectiveness of the intervention on patient engagement and the resultant effect on medication adherence and health outcomes.

