The British Heart Foundation ran a pilot to improve care pathways for patients with long-term arrhythmias by giving them access to a dedicated care coordinator.

Benefits of arrhythmia care coordinators

**In this article...**
- Symptoms and treatment of arrhythmias
- The process of introducing arrhythmia care coordinators
- Advantages to patients, staff and the health service of the role

**5 key points**

1. Atrial fibrillation affects 7% of those aged over 65 and can increase the risk of stroke.
2. Arrhythmia patients benefit from having one point of contact throughout their care.
3. Nurse-led clinics can cut waiting times and the number of appointments each patient needs.
4. Arrhythmias and their symptoms can cause great anxiety in patients, who should be referred to psychological services.
5. Professional development support is vital for arrhythmia care coordinators to deliver excellent care and advise other health professionals.

Around a million people in the UK live with atrial fibrillation (AF), according to calculations by the British Heart Foundation based on data from the Health and Social Care Information (2013). AF is the most common type of abnormal heart rhythm; it affects 7% of people aged over 65 (Hobbs et al, 2005) and increases the risk of stroke fivefold (Wolf et al, 1991). The most severe arrhythmias can cause sudden cardiac death. Arrhythmias are consistently among the top 10 reasons for hospital admission, and the direct healthcare costs of AF alone have been shown to account for almost 1% of the entire NHS budget (Stewart et al, 2004).

A great many patients with arrhythmia experience anxiety and reduced quality of life. Depression is common in those living with an implantable cardioverter defibrillator (Thomas et al, 2006), an important therapeutic device for some arrhythmic conditions. Advanced devices, sophisticated procedures and effective medicines now exist to control most arrhythmias, but many patients still need regular follow-up.

**Stimulus for change**

In 2005, an eighth chapter of the National Service Framework for Coronary Heart Disease was published (Department of
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A new service

The BHF has a track record of initiating and piloting innovations in patient care through specialist nurse-led programmes. In response to chapter eight of the NSF, we launched a three-year pilot scheme to fund 32 ACCs in 19 NHS trusts across England and Wales. Of these 19 sites, nine were awarded funding for a single ACC, eight for two ACCs and two sites were funded for three and four ACCs respectively.

The ACCs were all registered nurses, appointed at band 6 or 7, and more than three-quarters had previous experience in cardiology settings. They were placed in primary, secondary and tertiary centres to provide much-needed integration between these care settings.

An “ideal” job description for an ACC, developed by an expert panel, was provided to the trusts. The new roles were recommended to cover the four domains outlined in Box 1; most trusts stuck closely to the template.

An arrhythmia service had already been established in 13 out of the 19 trusts. In these, the ACCs had to fit into pre-existing organisation structures. In the remainder, the ACCs had to develop a completely new service and establish their niche within the organisation.

We required ACCs to complete a newly developed MSc module in arrhythmia management and provided a personal annual fund for continuing professional development. An advanced communication course was available to help them to develop the skills needed to support patients.

Evaluation

In 2010, an independent evaluation of the programme was completed by the University of York. This was framed around the requirements set out in the NSF, including measuring waiting times and hospital attendance, among others. It found that the ACCs significantly improved patients’ experiences of arrhythmia services and prevented more than 4,200 readmissions each year during the pilot.

It was calculated that the cost savings made by service improvements brought about by an ACC would pay for the post and associated costs, and save an additional £29,357 every year in each trust (University of York, 2010).

Improving efficiency

Services that had previously been fragmented and slow to respond to patient needs became more integrated and efficient due to the work of the ACCs. Previously, many patients had had to endure a protracted journey through primary, secondary and tertiary care, probably seeing several different clinicians, with long waits for each appointment. Redesigned services meant patients had early and consistent contact with their named ACC and their appointments were combined, resulting in fewer trips to hospital.

Some ACCs based in tertiary centres led outreach clinics in general cardiology settings. In these cases the specialist nurse would be a patient’s first point of contact after GP referral, and the first appointment would be a one-stop-shop of assessments, diagnosis and pre-procedure counselling. This greatly reduced waiting times. As one ACC commented:

“I saw a chap a month ago, and he’s having his cardioversion this week, so it’s a month, waiting from referral to cardioversion... if he had been seeing the consultant he wouldn’t even have had his [first] appointment yet.”

Post-procedure follow-up was often vastly improved by the presence of an ACC, with patients visiting a nurse-led clinic a couple of weeks after the procedure rather than having to wait several weeks or months for a consultant appointment.

A positive side-effect of taking routine follow-ups from a consultant’s workload was that clinics were more productive as consultants had the time to see more complex cases.

Reassurance and support

The evaluation reported vital reductions in anxiety and improvements in patients’ quality of life. Patients were given telephone and email contact details for their ACCs, which proved to be a lifeline for many. A quick call to the friendly, familiar, knowledgeable nurse offered welcome peace of mind when frightening symptoms or side-effects recurred.

This ad hoc consultation facility prevented patients from using accident and emergency as their first response or being readmitted. When appropriate, ACCs could reassure their patients that they were not at immediate risk and that the symptoms could be addressed by their GP, perhaps with an adjustment to their medication. The ACCs would then contact the patients’ GPs with their recommended course of action. The evaluation estimated that one readmission was prevented for every two patients under the care of an ACC.

A patient under the care of an ACC commented on the helpfulness of this service:

“The service is extremely important. They reassure you. It’s a confidence booster. If you’ve got an illness, that’s the one thing...”
Innovation

you need – to have someone to say, 'Don’t worry about it, ring us and we’ll sort it out with you.” (University of York, 2010).

ACCs took time to help patients understand their condition better and talk about their anxieties. Patients felt they could ask questions about apparently minor concerns, about which they might be embarrassed or afraid to ask a consultant during a short appointment.

Education

ACCs delivered a valuable service in educating other health professionals across primary, secondary and tertiary settings about spotting patients at risk of arrhythmia, and about the role of the ACC. Over the three-year pilot, 930 teaching sessions were carried out by the ACC cohort. Direct GP referrals to ACCs accounted for 15% of the total (60% of referrals came from consultants) and it was felt that GP education events were increasing direct referral rates from primary care.

By educating and maintaining good networks with colleagues on the wards, ACCs found that potential cases of arrhythmia were flagged to them when they might have otherwise slipped through the net.

Exceeding expectations

As part of the evaluation, 30 patients were interviewed and gave an overwhelmingly positive response to the ACC service. Many expressed relief at the continuity that came with having a designated specialist ACC who coordinated the various aspects of their treatment in a holistic and personal way. As one patient commented:

“The whole set-up has been extremely positive. I compare and contrast with my brother-in-law who had this serious heart condition and who was pushed from pillar to post and who hardly ever saw the same person twice…” (University of York, 2010).

Being in the role

The ACCs reported a high degree of job satisfaction in the evaluation. They were unanimously proud of how much better they had made their services for patients and they treasured the regular compliments and thank-you letters that they received.

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The challenges

Embedding

Most of the ACCs were placed in established arrhythmia services with traditional consultant-led clinics. Although in some sites the consultants were very keen to hand over some responsibility to the ACCs, others found it harder to adapt to a new way of working. Some ACCs found they had to build the trust of consultants over time before they were able to show the full potential of their skills and training, and really make a positive impact on service delivery.

Capacity

Once services had been developed, ACCs became victims of their own success to some extent.

Consultants developed trust in the ACCs’ abilities and were happy to give them more power in decision making (although they always had access to consultants when needed) and in leading clinics. Patients also often preferred to see an ACC rather than wait for a consultant appointment. As such, once the ACC service was established, its demand grew. ACCs wanted to expand their services, but were concerned that quality of care would suffer if they spread themselves too thinly.

The evaluation analysed how much time was spent on various activities in the ACCs’ working week. Around 11 hours were spent on patient contact, either face-to-face or on the phone. ACCs expressed frustration that around seven hours each week was taken up with administrative duties. It was estimated that around half of these duties would be suitable for delegation to an assistant, if available.

Psychological support

ACCs are acutely aware of the high levels of anxiety and depression experienced by patients with arrhythmias. Although the evaluation found a reduction in anxiety between first assessment and follow-up, it reported that a quarter of patients remained borderline or clinically anxious at the follow-up and 18% were borderline or clinically depressed.

ACCs in the pilot did receive funding from the BHF for a course in advanced communication skills, to help them counsel patients. However, the ACCs are not trained counsellors or psychologists and they expressed a need to have better access to psychological services for patients who need them. Future plans

On completion of the evaluation, we supported the ACCs to draw up a business case for the NHS to sustain them. As a result, 31 out of the 32 original posts were taken on by the NHS. Our current model of funding for health professionals is to provide a “supported package” of financial assistance for professional development, access to BHF courses, events and conferences, and access to the BHF’s website and resources aimed at health professionals. We currently support 56 ACC posts across 40 sites, with their salaries and associated costs paid for by the NHS.

This year our pilot evaluation has been accepted by the National Institute for Health and Care Excellence for the Quality, Innovation, Productivity and Prevention collection – a resource to share best practice across the NHS.