

## **Nurse practitioners (NP) orchestrating Atrial Fibrillation (AF) care in the Electrophysiology (EP) Group**

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Atrial fibrillation is a chronic disorder that in the last two decades has become one of the most important public health issues and cause of health care expenditure (Zoni-Berisso et., al. 2104). The disease course fluctuates over time and demands “fine tuning” beyond anticoagulation, or rate and rhythm control. Cardiology and electrophysiology resources are saturated which leads to delay in AF assessment, treatment and important follow up. Any delay in the management of AF can lead to risk of complications such as stroke and heart failure. Atrial fibrillation is generally not considered a life threatening arrhythmia, but impacts quality of life. Patients with AF often utilize significant health care resources throughout the course of their disease process. A collaborative approach beyond medicine and the initial diagnosis is essential to maintain patient well-being over time and to adequately allocate human and economic resources (Zoni-Berissoet., al. 2014).

A number of publications have demonstrated the benefits of nurse –led care and the significance of consistent AF care (Hendricks et., al 2012; Berti et., al 2013; Carter et., al 2017). Physician time is limited and focused on the vital aspects of diagnosis and initiation of treatment (Berti et., al 2013). Follow up after diagnosis and ongoing management may be diverted to family health teams who may not have expertise or confidence to manage AF. Additionally, non-medical aspects of care such education and support in regard to living with atrial fibrillation can be overlooked.

Clinical nurse specialists (CNS) are cited in the literature as practitioners that can aid in AF management in conjunction with the physician (Picture). They have more time for patients’, are easily accessible and can facilitate communication throughout the trajectory of AF care. They can coordinate time consuming assessments, arrange diagnostic investigations and plan follow up for the patient living with AF. Many CNS are master- prepared nurses that are equipped with research skills. They are proficient in coordinating multidisciplinary teams to aid in AF care beyond the initial diagnosis. A limitation in this care model is that the CNS or specialty nurse requires medical directives and algorithms supported by the physician to carry out daily practice or make changes in treatment.

In Canada, a nurse practitioner (NP) is commonly a master’s prepared nurse with specialized education in pharmacology and advanced clinical assessment. An NP is a licensed health care provider who can autonomously order tests, diagnose, and prescribe medications. The advantage of utilizing an NP in a nurse-led clinic is that they can independently oversee patient care, alter treatment and order investigations in situations where by a physician is not readily accessible. They can provide services in a nurse – led clinic independently and are accountable for the treatment decisions they make. They generally do not require a defined list of medical directives to manage patient care scenarios.

The NP can enhance quality of life for the patient living with atrial fibrillation. Clinical support provided by the NP can transpire in community or outpatient clinics, on the telephone, in emergency rooms and in the inpatient care setting. The NP often manages medical and non-medical issues via telephone calls, thus supporting AF care holistically and preventing delay of care until a clinic appointment. These telephone encounters may involve titration of medication, follow up after cardioversion or ablation or simply providing education and support to the AF patient who is “having a bad day”. The NP can evaluate each patient situation based on clinical guidelines, expertise and familiarity with the patient to determine if acute intervention is necessary. This consistent involvement can endorse patient confidence to understand that AF is generally not a medical emergency and that many live successful lives with the condition. Indeed, AF related knowledge for patients followed by nurse-led care was found to be better than that of usual care (Hendricks et., al. 2012). In addition, patients cared for in a nurse – led environment suffer less complication and hospitalization (Hendricks et., al 2012). Based on this, one could hypothesize that NP intervention and navigation has great potential to divert emergency room visits, admissions and decrease burden on the health care system.

An NP that concentrates on AF care often is affiliated with an electrophysiology team (EP). The NP specialization is nurtured within this team environment. The NP becomes well versed in rate and rhythm control strategies with medications and confidently ensures that stroke prevention is in place. The NP can facilitate ablation procedures with colleagues when medical management is hitting a flat note. They can provide consistency and continuity in pre and post procedure care.

AF NP’s are frequently called upon to aid community partners to troubleshoot concerns with anticoagulation and symptom management. They participate in lectures, conferences and construct written pathways to support care for patients and families living with atrial fibrillation. NP’s are well respected leaders and contribute to the development of nationwide patient education programs for the Canadian Cardiovascular Society and Canadian Heart and Stroke Foundation, focusing on AF.

Electrophysiologists are leaders in research and technological advances to enhance arrhythmia care beyond atrial fibrillation management. AF care is time consuming but of great significance as our population ages. Utilizing an NP or a CNS can support timely unsurpassed, guideline based care while enabling EP colleagues to compose new approaches for overall arrhythmia care.

This non-traditional model of care is currently embraced in many Canadian centers and evidence is mounting on the positive impact it has on the health and well-being of those living with atrial fibrillation.

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