MESSAGE FROM CANET’S BOARD CHAIR AND SCIENTIFIC DIRECTOR

As a result of a rigorous strategic planning process, we are pleased to share with you the Cardiac Arrhythmia Network of Canada’s (CANet) first strategic plan. This plan reflects where the Network wants to go in the next three years and how to get there.

This is a critical time for the network and the formation of this plan was a collaboration between our network investigators, our partners, the board and the administrative centre. Continuing this collaboration will also be critical in executing the plan and ensuring our future success.

We are committed – as demonstrated in this plan – to world-class, patient-focused excellence in research; international collaborations; and solutions-driven outcomes that will impact the lives of the millions of Canadians affected by arrhythmia-related illnesses.

At the core of the Network’s success are our connections with our researchers, trainees, and our fully-engaged patients and partners.

CANet is harnessing the talents of the best arrhythmia researchers, engineers and social scientists in Canada with an end goal of making new discoveries and transforming them into products, services, and improved processes to achieve national and global impact.

Together, we are working towards the future, which is shaped by a clear vision: a transformed Canadian arrhythmia care ecosystem focused on the individual needs of each patient.

Dr. Pierre Boyle
Board Chair
CANet

Dr. Anthony Tang
Scientific Director and CEO
CANet
ABOUT CANET

As part of the Federal Government’s Networks of Centres of Excellence (NCE) program, CANet is a multidisciplinary, multi-sectoral research and development network of over 100 investigators, well-positioned industry partners, patients, and healthcare providers focused on arrhythmia research and commercialization activities.

CANet brings together health care professionals, academia, government, industry, not-for-profit organizations, and patients to support new ideas and groundbreaking research. By putting the right tools in the right hands at the right time, CANet aims to empower people to manage their own health, empower caregivers to improve patient care at home and in the community, and empower the health care system to provide timely, effective, and efficient services to people and populations.

VISION
Access for all Canadians to early detection, effective prevention, efficient and timely treatment of arrhythmia and related conditions, through a transformed, patient-driven care model.

MISSION
CANet’s mission is to use our internationally recognized research groups to assemble key stakeholders, work with patients and other end users to strike key priorities, generate new knowledge, use novel technology to identify patients at risk of arrhythmia, and work as a cohesive team to develop, implement, and evaluate new technologies and health strategies.

MANDATE
CANet’s approach is to empower:
- Patients to co-manage their health
- Caregivers to improve patient care at home and in the community
- Healthcare providers to give timely, effective, and efficient services
EXCELLENCE

From management and governance to world-class, patient-focused, innovative research programs and partnerships, CANet strives for excellence bringing together the best minds in the field to transform arrhythmia care and achieve the targeted health and economic outcomes for Canadians.

PATIENT-FOCUSED

To transform arrhythmia care into a patient-driven care model requires a full-scale engagement of patients into the Network from governance to strategic plan to the conduct of research and knowledge mobilization. This will ensure the Network will meet the needs of patients, ensure arrhythmia care will be effective, efficient, timely, and will improve health outcomes.

COLLABORATION

A successful Network demands close working relationships among the Network’s investigators, patients, and our national and international partners. This allows the utilization of diverse expertise to achieve the Network’s goal.

ADAPTABLE

In the ever-changing landscape of research and innovation in Canada and abroad, we maintain flexibility to respond rapidly and strategically to new opportunities and challenges.
The Growing Problem of Arrhythmias

Heart rhythm disturbances (arrhythmias) affect millions of Canadians resulting in reduced productivity, reduced quality of life, or tragic, unexpected deaths. Heart rhythm problems include:

(1) Sudden Cardiac Death, which is the leading cause of death in Canada, killing 40,000 Canadians yearly and is projected to be the number one cause of mortality and morbidity in the world by 2020.

(2) Atrial Fibrillation, which is the most common heart rhythm disorder encountered in the community affecting 350,000 Canadians and has become an epidemic in the developed and developing world. In 2010, 33.5 million people in the world had AF. The prevalence of AF is increasing each year due to the aging population. It is estimated that 1 in 4 adults (40 years and older) in developed countries, like Canada, have or will have AF in their lifetime. Direct costs of care are $5,000 annually per patient, driven primarily by repeated emergency room visits and hospitalizations.

(3) Syncope (loss of consciousness), which affects millions of Canadians whose quality of life is jeopardized due to inadequate risk assessment and ineffective treatment, while generating health service over-utilization at great expense to our healthcare system. Over 140,000 Canadians with fainting spells will visit the emergency department annually. As much as 10 - 20% of these patients will be admitted to the hospital and undergo investigations accounting for $127 million per year, although the majority of these patients are at low risk of major adverse events.

The costs associated with these three conditions are staggering; when indirect costs such as the loss of productivity of the patients and their caregivers are included, the economic burden of these three arrhythmia-related conditions is well over $10 billion per year in Canada.
Challenges with the Management of Arrhythmias

There are some key challenges with the diagnosis, recognition, and treatment of these conditions:

- These conditions are not well recognized by Canadians. The patients at risk are not aware of their risk, and are not identified even though risk assessment tools do exist. The Network's solutions include the development and implementation of strategies to identify people at risk of sudden cardiac death (SCD) and to apply appropriate treatments to reduce SCD; the early detection of atrial fibrillation (AF), to prevent later AF recurrences and reduce subsequent consequences of AF such as development of heart failure and stroke; and the education of individuals with respect to the implications and management of low risk syncope, with the intent of reducing recurrent emergency department visits and unnecessary investigations.

- Traditional continuing medical education of health care providers has not been effective in convincing clinicians of the importance of identification of patients at risk of SCD, primarily achieved by determining left ventricular ejection fraction after myocardial infarction, and possibly recognizing signs and symptoms preceding SCD events. These patients are at risk for not receiving life-saving treatments. The Network's solution is to engage patients to be their own health care advocates by putting their own health information in their hands and to provide patients with aids to make health care decisions.

- Due to the intermittent and unpredictable nature of arrhythmias, it is difficult to identify which patients are experiencing which arrhythmia. The Network’s solution is to embrace advanced technologies to integrate accurate heart rhythm diagnostics with a patient's clinical experience.

- Due to limited time and resources, most patients with arrhythmias and their caregivers are not getting personalized education of their condition. The Network's solution is to develop an education portal that is personalized to the individual's arrhythmia condition, educational profile, and language preference.

- Health care professionals are not obtaining individual patient information, such as background health data, previous arrhythmia occurrence, and details regarding the arrhythmia in a timely manner to manage the arrhythmia effectively. Without access to ongoing personalized health data, diagnostic and predictive analytics, effective care planning and management by the patient and by the health care professional is difficult, often resulting in inefficiency. The Network's solution is to develop a system to assimilate the patient’s personalized health data with health informatics to assist the health care professionals in delivering the most effective and efficient care.

Opportunities for Effective Solutions

Innovations in the field of Information Technology, biosensors and analytics of large databases provide an outstanding opportunity to put relevant and timely personalized health data for arrhythmia patients into their own hands and those of health care professionals.
**STRATEGIC INITIATIVES**

**Research and Innovation Strategies**

**VIRTUES - Virtual Integrated Reliable Transformative User-Driven E-Health System**

A transformed Canadian arrhythmia care system that delivers personalized, patient-driven, integrated care resulting in improved access, quality, effectiveness, and efficiency of care.

- To bring together CANet investigators, clinicians, and patients, with technology industry partners to co-design and co-develop a Virtual Integrated Reliable Transformative User-Driven E-Health System (VIRTUES). By delivering the best care to the patient at the right time and in the right environment, VIRTUES will result in the most efficient and effective care for each arrhythmia patient. Furthermore, once developed, the VIRTUES data platform will strategically enrich high-quality research directed at further improving outcomes of arrhythmia care.

- Combining wearable biosensor technology (providing personalized physiological data), digital multi-media interfaces (providing personalized demographic structured and unstructured data) and validated analytics, VIRTUES will immediately integrate symptom-driven validated physiological data (rhythm, BP, others) into a patient-specific, personalized context and trigger an appropriate care plan from a set of plans previously co-developed with the patient.

- To develop personalized education material for each specific patient’s medical condition, adapted to the patient’s educational profile, and other specific requirements such as language preference, family caregiver’s accessibility, and other specific requirements for the individual.

- To develop and test improved care planning tools and care pathways for the management of arrhythmias, with the help of patients and in close cooperation with the Canadian Heart Rhythm Society, Canadian Cardiovascular Society, major health care institutions and provincial health authorities.
• When fully developed, VIRTUES will include data from several thousand patients and thus could additionally serve both as a research and knowledge translation strategy enabling further technology development.

• The vision of VIRTUES has been discussed with CANet’s board of directors and the NCE; the planning of VIRTUES has begun with discussions with the track captains, the CANet core operation group, the CANet administrative staff, and key partners. An operational business plan is being developed in the summer of 2016, with step-by-step operational milestones articulated.

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**Heart-SIGN (System for Information Gathering and Networking)**

A state of the art informatics platform that partners advanced analytics with data storage, federation and management.

Heart-SIGN will be an informatics platform that manages the acquisition, integration, storage, federation, analysis and sharing of multidimensional data collected from CANet study patients.

Heart-SIGN will not only be the data resource for arrhythmia research and clinical practice but also will provide a platform for research-based and clinical initiatives to identify clinical needs, track patients through the medical care system, and to measure outcomes. This unprecedented level of information and analytical capability will inform change processes leading to system and patient level advances in treatment.

**Research and Innovation Strategy**

• To establish a platform to manage data generated from all CANet research projects. This will facilitate rapid communication and track study progress between the CANet data management centre and the research coordinating centres, and between each research coordinating centre and participating centres of the study.

• To federate all CANet research studies into a comprehensive dataset that will be available for further analysis by CANet investigators when the originated study has been completed.

• To facilitate integration and enable access to existing external data contained in siloed registries.

• To enable the federated dataset to be used in conjunction with VIRTUES to build advanced analytic capability for precision personalized management for future patients.

• In partnership with IBM, Heart-SIGN will be equipped with the latest in advanced analytical software and tools. Advanced analytics will allow researchers to answer questions that previously took years to answer, leading to immediate clinical outcomes.
Bringing Arrhythmia Awareness to the Public

Public awareness programs to inform the public, patients, potential patients and health care providers, and policy makers of the prevalence, socioeconomic impact and management of heart rhythm disturbances.

Now more than ever, patients and caregivers are educating themselves before and after diagnosis and treatment. Within CANet’s priority of patient-driven health care, patients and caregivers are critical in ensuring patients receive the best care.

CANet and the Heart and Stroke Foundation are partnering to create an online resource that will allow patients and caregivers access to accurate and up-to-date information about their disease and treatments. This information will be personalized to individual education levels, interests and desired level of detail giving them access to information as unique as they are.

CANet will access our network of the country’s leading arrhythmia experts to create the information and ensure it is accurate and up-to-date. Various channels of print, video, online and social media resources will be used to communicate and deliver this uniquely tailored resource. Additionally, an on-line peer support group will be available so patients can support each other as they go through their care journey.

Through a uniquely tailored resource, CANet’s vision is to have engaged and educated patients and caregivers allowing them to take control of their care within a patient driven care system.

Strategic Research Programs

_Sudden Cardiac Death; Atrial Fibrillation; Syncope_

**Sudden Cardiac Death**

The SCD research track aims to decrease SCD by 10% over 10 years.

The _challenges_ are:

- A comprehensive national system to track the incidence of SCD is not available. Furthermore, the causes of SCD are not well understood. Carefully tracking all deaths and identification of SCD and determination of their cause will greatly advance knowledge regarding this condition and will lead to strategic action to prevent SCD. CanROC (Canadian Resuscitation Outcomes Consortium) has developed a system to track and analyze the cause of SCD in parts of Ontario. This expertise can be adopted for use by the rest of Canada.
(Challenges cont’d)

- In certain individuals, such as patients with a history of myocardial infarction resulting in low left ventricular ejection fraction (LVEF), the risk of SCD is high. Many of these individuals are not identified because LVEF is not measured within 3 to 6 months after hospital discharge. As a consequence, effective SCD prevention (with optimal medications and insertion of an implantable cardioverter-defibrillator) is not provided.

- The technology required to measure LVEF is present throughout Canada. However, since most patients discharged from hospital after acute myocardial infarction are followed-up in the community (family practitioner, internist, community clinic, etc.), there are no incentives nor reminder mechanisms for care providers to act on the need for LVEF measurement in the 3-6 months following post-MI discharge. Furthermore, many family practitioners do not recognize the need for such measurement as a risk-assessment and prevention tool for SCD.

The research program will:

- develop the required hardware and software
- assess its acceptability to patients, caregivers and health care providers
- assess its effectiveness in a randomized controlled trial
- assess the cost-effectiveness of the intervention.

Implementation of the program will include assessment of the impact of LVEF determination on the use of guideline-directed medications and ICD implants.

This program will be incorporated into the VIRTUES care platform.

The Network's solution is to derive a mechanism to inform and remind targeted patients and their care providers that LVEF should be determined for SCD risk assessment. The research strategy will develop and test a patient-driven solution so that patients discharged from hospital after acute care of MI will be identified. An electronic application will be installed onto the patient's choice of mobile computing device (smart phone, tablet, computer), which will provide each patient's personalized education, medical data, and a reminder that LVEF should be determined after 3 to 6 months. The same information will be sent to the patient's healthcare providers (family health team, internist, cardiologist). Follow-up reminders will be sent periodically, until the information is recorded so that a recommendation of action will be delivered to the patient and to the healthcare provider.
It has long been recognized that there is an inverse relationship between the incidence of SCD and absolute numbers of events in the at-risk categories, as illustrated in this figure:

The CANet SCD program will have more population-based impact if patients with intermediate risk are further discriminated regarding their risk of SCD and the likelihood that an ICD can be used cost-effectively.

The REFINE-ICD program is designed to identify among the intermediate-risk population those featuring other abnormalities (in cardiac repolarization and in abnormal autonomic tone) that are further markers of SCD risk that could make them prime candidates for an ICD implant for the purpose of prevention of subsequent sudden death. Presently, most of these patients are not identified and do not undergo such treatment.

The research program will determine if the mortality risk of these patients is reduced by the ICD. If so, the discriminative tools will be employed widely in the medical community and will be implemented routinely by deploying the Network knowledge mobilization strategies, notably involving professional societies (CHRS) and provincial health authorities. This will have significant impact on SCD rates in Canada and, eventually, internationally.

**Atrial Fibrillation (AF)**

The AF research track aims to reduce inappropriate AF hospitalizations and emergency department (ED) visits while improving access, quality and effectiveness of care for AF patients.

The challenges and solutions are:

- As the prevalence of AF is increasing, the number of patients with AF presenting to the emergency department (ED) is also increasing. Some of these patients are admitted for observation and treatment. Most are discharged from ED, but more than 50% of these patients are not seen by any health care provider in the subsequent 90 days. Little is known of the underlying drivers of patients seeking attention in the ED. Knowledge of these drivers would inform a process to address these patients' needs more efficiently.
The Network’s solution is an AF research program to identify AF patients’ concerns leading to ED visits. This will lead to the development of an individualized patient education and management program, in order to provide alternatives to emergency room visits for appropriate patients, through evidence-based alternative care plan options. This will be integrated into the VIRTUES Platform. This will have a direct impact on reducing AF-related ED visits and hospitalizations, while improving the quality and continuity of care for AF patients.

- Multi-disciplinary AF clinics have been shown to be effective in improving patient outcomes, including quality of life, morbidity and mortality. However, in Canada AF clinics are only established in some health districts, mostly in tertiary health care institutions. As effective as these AF clinics may be, they are not scalable to cover the diverse population and geography of a country like Canada. The Network’s solution is to embrace existing and developing digital technologies that can provide near real-time data capture, transmission, and feedback to a patient-driven solution that will also put in the hands of health providers the information and advanced analytics necessary for advice on appropriate treatment options. This will provide timely, efficient, state-of-the-art AF care to people across geographic barriers.

The solution is an AF research program to identify AF patients’ concerns leading to ED visits.

AF is a complex medical condition. For some patients, AF is a primary electrical disorder; for others, AF may be a result of ongoing vascular disease or other metabolic syndromes. The Network’s solution is to devise treatment to address diverse etiologies including:

- Reduction of risk factors (hypertensive, diabetes, obesity, sleep apnea, inactivity, alcohol consumption and smoking) predisposing people to have AF
- Early detection and treatment to abolish AF with catheter ablation, thus retarding progression
- For patients later in the disease progression, some clinical parameters such as AF type, imaging parameters such as left atrial size, atrial fibrosis, and genetic factors may predict the success of AF ablation. Such patient factors should guide effective and efficient treatment strategy.

AF research programs are designed for each of these steps. If effective, risk factor modification can retard or abolish AF early in its course and significantly impact the prevalence of AF, and thus significantly improve the socioeconomic impact of this condition. Later in the disease process, identification of appropriate treatment options will improve efficiency of care so that appropriate treatment will be delivered to appropriate patients in a timely fashion, thus improving overall cost-effectiveness of AF care in Canada.
**Syncope**

The syncope research track aims to streamline care for patients with recurrent syncope to achieve a 30% reduction in health care costs attributable to syncope over 10 years while achieving measurable improvements in overall mortality, morbidity, and quality of life.

The challenges are:

Patients with sudden loss of consciousness are often taken to the ED. A great majority (~90%) of these patients have vasovagal syncope, which is a condition with minimum-to-no serious consequences. A small percentage have serious medical conditions that may be life-threatening. Distinguishing these rare individuals with a serious condition from the numerous individuals with a benign condition may be difficult. As a result, many of the individuals with recurrent vasovagal syncope attend the ED; approximately 15% are admitted to the hospital, where extensive and expensive but unnecessary diagnostic investigations are often performed. For example, expensive tests of brain structure and function are often obtained that have a diagnostic yield of about 1%.

The solutions are:

Better education and implementation of better, alternative care on several levels along the pathway of care:

1) Better, Alternative Care to Emergency Departments
   - Qualitative and quantitative assessments of the attitudes of people and patients who faint, regarding why and how they choose to access health care
   - Development and testing of simple tools for paramedics to assess and release low-risk syncope patients
   - Development of an electronic tool that can be accessed by patients, family members, and health care professionals for education and advice
   - Cluster randomized trial of tool to prevent transport of low-risk patients to emergency departments, and into alternate care pathway

In this research program, we aim to reduce visits to the emergency department by 35% by providing paramedics with appropriate tools and training to effectively screen low-risk syncope patients and thus avoid useless transport to the ED.

2) Better, Alternative Care to Hospital Admissions
   - Development of a pilot ambulatory syncope unit for medium risk patients
   - Pilot study of early ED discharge of medium-risk patients using Ottawa Syncope Rule
   - Cluster RCT of Ottawa Syncope Rule will be performed to test the cost effectiveness of this solution

In this research, we aim to reduce admissions through the emergency ward to hospital by 30% for medium-risk patients.
3) Smarter Care During Hospital Admissions
- Use a combination of CME and electronic medical record prompts to reduce the unnecessary use of specific investigations such as CT and MRI of the head in the assessment of hospitalized syncope patients
- Develop prompts and perform phase 1 uptake studies in 3 health care systems
- Perform a cluster RCT to test the effectiveness and cost-effectiveness of prompts in reducing unnecessary investigations in those patients admitted to the hospital for syncope

Highly Qualified Personnel (HQP)
Building a new generation of scientists with the new skills needed to optimize knowledge creation and translation in a changing world

To build capacity for research and innovation in the field of arrhythmia by providing unique and innovative training programs focused on building new skills in an inter-sectoral environment as well as one where patients are active partners in the research enterprise, as well as supporting the successful launch of these well-trained young investigators.

CANet programs provide trainees with life-long research skills necessary to be successful in the academic, commercial and health services sectors.

CANet programs provide unique practical mechanisms not only for facilitating teamwork, but also inter-sectoral knowledge creation and translation, at the core of the health research enterprise. CANet trainee programs span all areas including clinical and basic sciences, engineering, social sciences, knowledge translation, entrepreneurship, industry and government.
By using its network of outstanding academic institutions, industry partners and knowledge-users, CANet programs facilitate multi-site training whenever appropriate and will seek to break down traditional silos not only between disciplines, but also between sectors, building a new generation of scientists able to interact and develop across the entire research and innovation spectrum.

Since CANet’s research programs are patient-focused and the resulting change in care is patient-driven, it is key for CANet to be able to rely on a cadre of competent and effective patient partners. Training patients to become engaged and competent partners in CANet’s knowledge development and translation programs is a key element of CANet’s training strategy. Scientists and clinicians will be trained to be effective co-developers and collaborators with these patient partners. This is accomplished with the support and expertise of a recognized centre of excellence in patient partnerships.

Finally, CANet’s efforts not only focus on training, but also provide effective mechanisms, in collaboration with established partners, ensuring that once trained, young investigators are provided with the conditions necessary for a successful career launch. Therefore, CANet facilitates high-quality individuals entering the workforce in areas critical to Canadian productivity thus leading to economic growth, contributions to public policy and improvement of overall quality of life.

“By interacting with some of the biggest experts in our field, I learned a tremendous amount - not only about clinical trials but also about current hot topics in the arrhythmia field.

Katherine Allen, CANet CHAT Academic Lead
Networking and Partnerships

A culture of collaboration among researchers, patients and partners to work in a multi-disciplinary, multi-sectoral, global capacity to advance knowledge and improve health outcomes.

Generate $40M in additional research investments from partners

Over the last three decades, Canadian arrhythmia researchers have been recognized around the world as having a leading role in defining the appropriate investigations and treatments for patients with heart rhythm disorders. Amazingly, this has been accomplished largely through a grass-roots effort with no formal pan-Canadian network, nor cohesive research agenda. Building on the common goals, existing and mutually beneficial connections, and a high degree of commitment, CANet has formalized the network and has created a stable and resilient research community. CANet will take a cohesive approach to arrhythmia research in Canada with common goals, priorities and approaches. Further, building on members' advanced clinical expertise, CANet adds a new dimension to arrhythmia research by bringing together multidisciplinary, multi-sectoral partners and academic colleagues from engineering and social science.

CANet will act as the conduit between our national/ international partners from industry and NGO's and our network investigators. We will facilitate the development of new ideas through strategic linkages between research and technology across sectors - including medicine, engineering, social sciences and information technology. These multidisciplinary, multi-sectoral connections will be critical in developing new technologies that will help CANet achieve its mission and vision.

As CANet advances its patient engagement and empowerment program, partnerships with the Heart and Stroke Foundation and the Centre of Excellence for Partnership with Patients and the Public will be integral in combining resources and ensuring that patients are engaged and the public is informed.

As CANet advances research and clinical practice related to arrhythmia disorders it will be crucial to build on and expand our partner base. In the area of clinical practice research, relationships with the HRS, CHRS, CCS and federal/provincial/territorial health authorities will be integral in translating our clinical research findings into practice.

Bringing advanced analytics and technological advances to the field of arrhythmia research and care will require dedicated expertise. This expertise can be found in large multinationals that have advanced this field such as IBM, Verily and TELUS. Multinational companies that are already members of the CANet community of partners such as 3M Canada, Baylis Medical, Biosense Webster Canada, Boston Scientific Canada, Medtronic Canada and St. Jude Medical Canada will be critical in translating our ideas to practice and ensuring technology gets into the hands of the patients that need it most.
Access to CANet’s leading-edge network of investigators allows us to validate our therapies and move them to the market – and bring relief to patients, faster.

Kris Shah, President of Baylis Medical

Patient-Led Research

From governance to research to disease management, patients will be co-leaders in our Network

Our goal is to ensure patient involvement throughout the research cycle through conception, to execution, to implementation and to evaluation, leading to outcomes that will allow patients to co-manage their arrhythmia disorders and help produce both economic and social benefits for Canada.

A MULTIDIMENSIONAL FRAMEWORK FOR PATIENT ENGAGEMENT IN CANet

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<thead>
<tr>
<th>Level of Engagement</th>
<th>Continuum of Engagement</th>
<th>Involvement</th>
<th>Partnership</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNANCE STRUCTURE</td>
<td>Consultation</td>
<td>Patients consulted regarding governance</td>
<td>Patient recommendations on governance be considered</td>
</tr>
<tr>
<td>OPERATIONAL STRUCTURE</td>
<td></td>
<td>Patients consulted regarding operations</td>
<td>Patient recommendations on operational structure considered</td>
</tr>
<tr>
<td>RESEARCH PROGRAM STRUCTURE</td>
<td></td>
<td>Patient focus groups on health issue</td>
<td>Patient research priority recommendations considered for the RFP</td>
</tr>
</tbody>
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Throughout the network, patients will be engaged and empowered to identify unmet needs in each of CANet’s priority areas, and to co-develop research programs that will provide real clinical, social and economic benefits. In addition, there is an unprecedented opportunity to evaluate the impact of patient involvement on Network operations and outcomes, and in doing so, add to the growing science on patient engagement that will provide evidence for future public policy development in health care delivery and innovation.

A Patient Advisory Committee (PAC) of patients and caregivers living with arrhythmia is already active and has identified patients for various roles throughout CANet, to serve as patient partners on the Board, committees of the network, and the network’s major projects and activities. The PAC will also serve as an important knowledge dissemination conduit to and from public audiences. Furthermore, a complete action plan with yearly objectives has been designed to achieve our major goals regarding patient engagement. This plan covers all aspects including training of CANet members and patients, evaluation of the patient engagement plan, knowledge mobilization of patient perspective, metrics and evidence base to measure the impact of PE on CANet processes and outcomes and knowledge transfer regarding impact to decision-makers.

“I took my son to the park on our street and I realized, we are the only ones here. How is my 4 year old going to get home … if something happens to me. The work you are doing will make a demonstrable difference in the communities you live in, across Canada - and potentially world wide. Thank You.

Stephen Blais, Patient and Sudden Cardiac Arrest Survivor

Knowledge Transfer and Technology Exchange
To generate social and economic benefits by ensuring the rapid flow of ideas and innovations from researchers to Canadian knowledge users

CANet will work with investigators and partners to mobilize the benefits from its research and development in two major spheres: 1) their use by patients, clinicians, health services managers, and policy makers to optimize high-quality care and 2) their exploitation by commercial enterprises to generate economic benefits to Canada.

As part of its KTTE strategy, CANet will ensure that its research priorities are aligned with the needs of patients through engagement of its Patient Advisory Committee through the integration of patients as partners and co-developers of each CANet research program. Furthermore, very early in its research and innovation programs, industry partners are engaged to develop new or optimize existing solutions. This will facilitate creation and management of new intellectual property and optimize commercialization opportunities, thus maximizing economic benefits to Canada.
Finally, required changes in public awareness of arrhythmia as a health issue as well as changes in clinical practice and in the health system resulting from CANet-funded research will be facilitated by close ongoing collaboration with NGO’s with recognized expertise (i.e. Heart & Stroke Foundation of Canada), with professional societies (Canadian Heart Rhythm Society and Canadian Cardiovascular Society) involved in the continuous update of best practices, as well as with federal/provincial/territorial health authorities in whose hands system change often rests.

The CANet partnership strategy will provide mechanisms for nurturing and continuously monitoring these essential partnerships within each research and innovation program to foster the true collaboration necessary to capture and act upon all opportunities for knowledge translation and commercialization, ensuring CANet’s legacy of impact on health outcomes and the Canadian economy.

CANet will conduct an online need assessment/environmental scan to ensure our KTTE strategy and activities are aligned with the needs of our researchers and end users. CANet will work closely with Network investigators to identify existing and new knowledge translation and commercialization opportunities within funded projects and with our partners, ensuring the technology gets into the hands of the company that can best put it into the hands of patients and health professionals.

Effective Governance, Management and Communications

Dynamic and effective governance, management and communications that advance CANet’s mission and vision

From day-to-day operations to long-term strategic planning, the Network will operate with its mission, vision and strategic goals at the heart of its decision-making process.

Having attracted as members a host of committed leaders from a wide variety of diverse and complementary backgrounds, the Board of Directors will work cohesively to provide guidance and leadership to the network while forging partnerships, advancing ideas and ensuring the advancement of the network.

CANet management and the administration centre will provide streamlined operations that facilitate research excellence, knowledge transfer, development of highly qualified personnel, networking and foster long-lasting and valued partnerships. Through a well-formulated integrated strategic communication plan, we will be a trusted source of information for our network of investigators and partners, increase public/patient engagement and raise awareness of arrhythmia disorders, and the management of the disorders; and rapidly share discovery and spread innovation with and among clinicians and clinician-scientists in the arrhythmia field and beyond.
CANet is at an advantage as it draws on the country’s already established collaborations. The CANet research community is unique. There are high-volume clinical heart rhythm centres around the world making important observations in this field and developing new knowledge. Nevertheless, no centre approaches the capacity of the combined CANet community and no collection of heart rhythm research centres in the world has been able to combine their efforts with the effectiveness and impact of the CANet community.

By building on this established collaboration, and integrating our partners and patients, we have the opportunity to leverage this ‘true partnership’ to achieve a common goal: to reduce the burden of heart rhythm disturbances for millions of Canadians.