

C-SPIN Patient Engagement: Acronyms and Terminology

C-SPIN Studies:

	Animals as for the Deduction of Thrombe Embelians in Detionts with
ARTESIA	Apixaban for the Reduction of Thrombo-Embolism in Patients with
	Device-Detected Sub-Clinical Atrial Fibrillation
ASSERT	Subclinical Atrial Fibrillation and the Risk of Stroke
BRAIN-AF	Blinded Randomized Trial of Anticoagulation to Prevent Ischemic
	Stroke and Neurocognitive Impairment in Atrial Fibrillation
C-CUSP (ED)	Canadian Community Utilization of Stroke Prevention – Emergency
	Department
ESCAPE	Endovascular treatment for Small Core and Anterior circulation
	Proximal occlusion with Emphasis on minimizing CT to recanalization
	times
ESUS	Embolic Stroke of Undetermined Source
LAAOS III	Left Atrial Appendage Occlusion Study III
OCEAN	Optimal Anticoagulation for Higher Risk Patients Post-Catheter Ablation
	for Atrial Fibrillation
PIAAF	Program for the Identification of "Actionable" Atrial Fibrillation
PIAAF-FP	Program for the Identification of "Actionable" Atrial Fibrillation – Family
	Practice
PIAAF-Home (Screen AF)	Program for the Identification of "Actionable" Atrial Fibrillation – Home-
	Based Screening for Early Detection of Atrial Fibrillation in Primary
	Care Patients

C-SPIN Organizations:

CCC	Canadian Cardiovascular Congress
CCS	Canadian Cardiovascular Society
CHAP	Cardiovascular Health Awareness Program
CHEP	Canadian Hypertension Education Program
CHRS	Canadian Heart Rhythm Society
EAC	External Advisory Committee
EMC ²	Education, Mentoring and Career Continuity Committee



PEC	Patient Engagement Committee
SEC	Scientific Executive Committee

C-SPIN Acronyms and Terminology:

AARCC	Alliance for Adult Research in Congenital Cardiology
AE	Adverse Events
AF	Atrial Fibrillation (a condition involving an irregular heart rhythm, known as an arrhythmia)
AFL	
AFTER	Atrial Fibrillation in the Emergency Room
AT	Atrial Tachycardia
B.S.	Bachelor of Science
BSN	Bachelor of Science in Nursing
CADTH	Canadian Agency for Drugs and Technologies in Health
CDA	Confidentiality Agreement
CIEDs	Cardiac Implantable Electronic Devices
CIHR	Canadian Institutes of Health Research
Co-PI	Co-Principal Investigator
CT	Computed Tomography
DISCERN AF	Discerning the Incidence of Symptomatic and Asymptomatic Episodes of Atrial Fibrillation Before and After Catheter Ablation
EAB	External Advisory Board
ECG	Electro Cardio Gram
ED	Emergency Department
ERLI	Emerging Research Leaders Initiative
ESC	European Society of Cardiology
FHRS	Fellow of the Heart Rhythm Society
FMSC	Finance and Network Management Sub-Committee
FRCPC	Fellow of The Royal College of Physicians of Canada
FRCSC	Fellow of The Royal College of Surgeons of Canada
GCP	Good Clinical Practice
GEA	Group on Educational Affairs
HiREB	Hamilton Integrated Research Ethics Board
HTA	Health Technology Assessment
HRM	Health Research Methodology
HRS	Heart Rhythm Society
ICD	Implantable Cardioverter Defibrillator



INVOLVE	National Institute for Health Research
ISACHD	International Society for Adult Congenital Heart Disease
KT	Knowledge Translation
KTP	Knowledge Translation and Policy Committee
MD	Medicine Doctor
MBChB	Bachelor of Medicine and Bachelor of Surgery
MESRE	Medical Education Scholarship Research Evaluation
MHICC	Montreal Health Innovations Coordinating Center
MRI	Magnetic Resonance Imaging
MSc	Master of Science
NIH	National Institutes of Health
OACs	Oral Anticoagulants (a class of drugs that work to prevent the clotting of blood)
PATH	Programs for Assessment of Technology in Health
PCORI	Patient-Centered Outcomes Research Institute
PhD	Doctor of Philosophy
PHRI	Population Health Research Institute
PI	Principal Investigator
PM	Project Manager
RCT s	Randomization Clinical Trials
SCAF	Sub-Clinical Atrial Fibrillation
SJHH	St. Joseph's Healthcare Hamilton
SPOR	Strategy for Patient-Oriented Research
TIA	Transient Ischemic Attack (When blood flow to part of the brain stops for a short period of time, also called TIA, it can mimic stroke-like symptoms)
TOR	Terms of Reference
TORCH	TomorrOw's Research Cardiovascular Health Care Professionals
t-PA	Tissue Plasminogen Activator



C-SPIN Studies:

ARTESIA: to determine if treatment with apixaban, compared to aspirin, will reduce the risk of stroke and systemic embolism in patients with device-detected sub-clinical atrial fibrillation (SCAF) and additional risk factors for stroke.

ASSERT: to evaluate the hypothesis among patients with a standard indication for pacing and no previous history of AF, detection of AHRE predicts an increased risk of stroke and systemic embolism. The second hypothesis to be tested is that overdrive atrial pacing with the AF suppression algorithm will reduce the risk of symptomatic AF in patients with standard indication for pacing and no previous history of AF.

BRAIN-AF: the primary hypothesis is that anticoagulation with low dose of rivaroxaban in patients with non-valvular atrial fibrillation and a low stroke risk will reduce the combined endpoint consisting of stroke or cognitive impairment when compared to aspirin.

C-CUSP (ED): is a multi-center pragmatic three-phase implementation study which aims to determine if a multidisciplinary ED-based intervention, using provider and patient education, oral anticoagulation (OAC) sample toolkits in the ED and immediate follow-up by a community-based specialized AF clinic, can improve emergency physician prescription of new OAC for patients presenting to the ED with AF.

ESCAPE: to understand whether a new treatment of stroke – endovascular clot removal – can be added to the current standard of care to improve patient outcomes.

ESUS: to evaluate whether rivaroxaban is superior to aspirin in reducing the risk of recurrent stroke and systemic embolic events in patients with a recent ESUS.

LAAOS III: to determine if removing the left atrial appendage can reduce stroke and other complications on top of usual therapy.



OCEAN: to compare medical approaches for stroke prevention in people who have atrial fibrillation (AF) but have undergone a successful ablation to eliminate or substantially reduce the arrhythmia.

PIAAF: to gather essential data to guide the design of a Canadian cluster-randomized controlled trial whose ultimate goal is to prevent stroke by early detection and treatment of atrial fibrillation.

PIAAF-FP: to identify at risk patients that fall into one of two groups: 1) those with unrecognized AF and 2) those diagnosed with AF but not receiving appropriate OAC therapy. With the availability of new screening tools and readily obtainable novel oral anticoagulants, the burden stroke can be alleviated by identifying at risk patients earlier. A better understanding of stroke prevention through early detection and treatment of AF will help to inform guidelines, change practice and reduce health costs.

PIAAF-Home (Screen AF): to investigate new portable devices to screen patients for AF in their own home. The goal of PIAAF-Home is similar to the other PIAAF studies – to identify at risk patients with AF, but do not know they have AF. With the availability of new and portable screening devices and readily obtainable novel oral anticoagulants, at risk patients can be identified earlier and can get onto medications that could help prevent strokes from occurring.

C-SPIN Organizations (Affiliates):

CCC: provides a broad spectrum of cardiovascular health professionals with current scientific information, accredited education opportunities and an ideal forum to connect with other cardiovascular health and care colleagues.

CCS: is the national voice for cardiovascular clinicians and scientists, promoting cardiovascular health and care excellence through knowledge translation, professional development and leadership in health policy and advocacy.

CHAP: a community based program that brings together local family physicians, other health professionals, public health representatives, volunteers, and health and social service organizations to work together to promote and actively participate in the prevention and management of heart disease and stroke.



CHEP: the CHEP reviews the hypertension literature annually and provides detailed recommendations regarding hypertension diagnosis, assessment, prevention and treatments.

CHRS: is a professional organization of Canada's heart rhythm specialists and allied health professionals. It carries out its work through research, advocacy, education and development of best practices in the field of heart rhythm disorders.

CIHR: is the major federal agency responsible for funding health research in Canada. It aims to create new health knowledge, and to translate that knowledge from the research setting into real world applications.

EAC: is a committee of knowledgeable members in their field of expertise from within and outside their organization who meet annually to discuss and provide perspectives on the planning process of research strategies.

EMC²: to focus on the development of career clinician scientists. A balanced approach to career development and support, with a financial emphasis on the at-risk years spanning the end of training and first five years of faculty appointment. The tools include travelling fellowships, webinars, trainee workshops, junior faculty supports, limited sabbatical support, structured curricula, and emeritus faculty travel support.

HiREB: to ensure that all research involving human subjects under the auspices of its institutions meet current ethical standards. The HiREB also provides advice on the ethical, scientific and technical aspects of planning research projects.

KTP: to improve how research results are communicated. To develop a consensus on terminology and methods for measuring success. To evaluate various approaches (clinical decision rules, audit and feedback). To find ways to ensure that KTP efforts have a lasting impact across the continuum of care by engaging health professionals, community members and various health decision-making groups.

MHICC: to conduct clinical trials efficiently and effectively through innovation in order to fulfill customer needs.

PEC: to work with C-SPIN researchers and members to foster the understanding of the importance of patient engagement. Continuing to work with patients and researchers to



make decisions about what type of engagement will best support C-SPIN, carefully considering the preferences of patients.

SEC: provides recommendations, prioritization, coordination of activities, and program vision.

C-SPIN Acronyms:

Atrial Fibrillation: an irregular and often rapid heart rate that commonly causes poor blood flow to the body.

Atrial Flutter: is an abnormality in the beating of the heart. Such abnormalities, whether in the rhythm or speed of the heartbeat, are known as arrhythmias.

Biomedical Research: this type of research studies normal and abnormal human function from the level of cells and molecules all the way up to the whole body. Basic biomedical researchers do their work in a laboratory using test tubes, cell samples, microscopes, chemical analysis, and other applicable tools or methods.

Blinding: a method of controlling for bias in study by ensuring that those involved are unable to tell if they are in an intervention or control group. For example, this can be accomplished in a drug study by making the active drug and the placebo identical in appearance. In a single blind experiment, subjects are unable to tell whether they are receiving the active drug or a placebo. In a double blind experiment, neither the subjects nor the persons administering the treatments know which subjects are receiving the active drug. In a triple blind experiment, the subjects, the persons administering the treatments, and the persons evaluating the results are blinded. Triple blinding is considered to be the most objective way to conduct a study, although it is not always possible to achieve.

Bradycardia: an abnormally slow heart rate.

Cerebral Embolism: a blood clot that travels from the heart to the brain. Embolism of a cerebral artery is one of the three main causes of stroke syndrome.

Citizen: encompasses interested representatives of the general public, consumers of health services, patients, caregivers, advocates and representatives from affected community and voluntary health organizations.



Citizen Engagement: the meaningful involvement of citizens in its activities, from agenda setting and planning to decision making, implementation and review.

Clinical Research: clinical research is health research on people, typically to evaluate the effectiveness of drugs, medical devices and practices. It may involve researchers asking questions, administering drugs, taking blood or tissue samples, or checking the progress of patients as they take a treatment according to a study's protocol. Clinical research studies often have specific criteria to define who can be recruited or enrolled in a particular study.

Clinical Trial: are pre-planned studies used to evaluate the safety and effectiveness of a treatment. For example, a clinical trial might compare a new drug to a placebo, or to a drug already used to treat the condition (a comparator), if one exists. Once the safety of the new drug has been demonstrated in tests on animals, it goes through a multi-phase testing process to determine its safety and efficacy in treating human patients. If a drug shows success in one phase, the evaluation moves to the next phase, with successful completion of Phase 3 being the point where the drug is considered ready to be marketed. These phases test a single drug but usually involve different researchers and different patients, and may be carried out several years apart. All clinical trials conducted in Canada must first have Health Canada approval.

- Phase 1 trials test a drug on a very small number of healthy volunteers to establish
 overall safety, identify side effects, and determine the dose levels that are safe and
 tolerable for humans.
- **Phase 2 trials** test a drug on a small number of people who have the condition the drug is designed to treat. These trials are done to establish what dose range is most effective, and to observe any safety concerns that might arise.
- Phase 3 trials test a drug on a large number of people who have the condition the
 drug is designed to treat. This phase is usually structured as randomized controlled
 trials, to see how much better the new product is than no treatment (placebo) or
 the best existing treatment (comparator). Adverse effects are noted and
 investigated. After successful Phase 3 trials, the drug can be approved by Health
 Canada for release to the public.



• **Phase 4 trials** can investigate uses of the drug for other conditions, on a broader patient base (e.g. elderly patients), or for longer term use. Recommended uses can be amended as a result of these studies.

Co-Build: patients, researchers and practitioners work together from the beginning to identify problems and gaps, set priorities for research and work together to produce and implement solutions.

Comparator: when a treatment for a specific medical condition already exists, it would be unethical to do a randomized controlled trial that would require some participants to be given an ineffective substitute. In this case, new treatments are compared to the best existing treatment, known as the "gold standard". The existing treatment is considered a comparator, and the trial will test the new treatment against the comparator.

Double-Blind Studies: neither the participants nor the researchers know which participants belong to the control group, nor the test group.

Efficacy and Effectiveness: efficacy is a measure of how effective a treatment is under ideal conditions, such as those within a clinical trial. Most clinical trials try to isolate the disease condition being treated from other factors, which means that the subjects they select will be motivated adults with no other medical conditions. Once enrolled, clinical trial participants are also monitored to ensure that they are compliant with dosages. Although these constraints are imposed to make sure that the maximum effect of the drug is achieved, typical, real-life patients are unlikely to do as well as those in a clinical trial. The term effectiveness is applied to the success of the treatment when typical patients are evaluated.

Embolic Stroke: occurs when a blood clot that forms elsewhere in the body (embolus) breaks loose and travels to the brain via the bloodstream.

Enroll: to register or be registered as a participant in a clinical trial or course of study.

Ethics: health research must be based on a fundamental moral commitment to protecting and advancing human welfare, knowledge, and understanding, while also examining cultural dynamics. Research should respect free and informed consent, vulnerable



persons, privacy and confidentiality, justice and inclusiveness. Ethical health research should always work to maximize benefits while minimizing harm.

Evaluation: is the careful and complete collection of information about a program or process in order to determine whether it achieved its goal. Both research and evaluation have features that center on answering a question but the purpose of evaluation is essentially to improve an existing program, while research is intended to provide support for a theory or hypothesis.

Health Systems and Health Services Research: is a type of research that seeks to improve the efficiency and effectiveness of health professionals, such as doctors, nurses, or physiotherapists, or the health care system itself through changes to practice and policy. Health services researchers often use surveys, focus groups, randomized controlled trials, and comparisons of data from health records and other sources in their studies.

Inclusion/Exclusion Criteria: the medical or social reasons why a person may/may not qualify for participation in a clinical trial.

Inclusiveness: patient engagement in research integrates a diversity of patient perspectives and research is reflective of their contribution, i.e. patients are bringing their lives into this.

Informed Consent: in any study involving humans, it is crucial that the participants voluntarily agree to take part in the research, and that they do so with a full understanding of their rights and the possible risks associated with participating in the study. Throughout the entire study, the researcher has an ethical obligation to share plain-language information with all participants that will enable them to give their free and informed consent.

Intervention: in a clinical trial, the intervention is the treatment being studied. The intervention group consists of the study participants that have been randomly assigned to receive the actual treatment.

Observational Studies - Case Reports, Case-Control Studies, Cohort Studies, Cross-Sectional Surveys: an observational study, as distinguished from



a randomized study, is usually undertaken when it is impossible, impractical, or unethical to have a control group. They are useful for generating hypotheses that can be more rigorously tested in randomized controlled trials. Their major disadvantage is that there is no assumption that participants are representative of others with that condition. The four most common forms of observational studies are case reports, case-control studies, cohort studies, and cross-sectional surveys.

- Case Reports describe a unique patient, group or event that may be of interest to others.
- Case-Control Studies examine a disease in an attempt to identify risk factors.
 Two groups are identified. Everyone in one group has a particular condition and no one in the other group has that condition (e.g., heart disease). Both groups are studied to see if more people in one group have a particular event or behavior in their history that could be associated with either causing the disease or protecting against it (e.g., smoking, exercise).
- Cohort Studies examine risk factors in an attempt to identify a disease. These studies follow two or more groups of people, or cohorts, over time. The people in each group are as similar as possible, except each group has an event, condition, or behavior in their pas that the other doesn't (e.g., smoking, exercise). Cohort studies can be either prospective or retrospective. A prospective cohort study begins at a certain date and then follows subjects over time to see how the groups in the study differ in terms of developing certain disease. A retrospective cohort study starts in the present when it is already apparent who has the condition being measured, and traces events backward in time to see if a particular behavior or event that occurred previously that may have caused the condition.
- Cross-Sectional Surveys examine a large group of people at a point in time to see what proportion has a particular condition. Researchers then attempt to correlate the condition with other information about the subjects that was collected at the same time (e.g., diet, age). A census would be an example of a crosssectional survey.

Patient: an overarching term that includes individuals with personal experience of a health issue and informal caregivers, including family and friends.



Patient Engagement: meaningful and active collaboration in governance, priority setting, conducting research and knowledge translation. Depending on the context, patient-oriented research may also engage people who bring the collective voice of specific, affected communities.

Patient-Oriented Research: refers to a continuum of research that engages patients as partners, focusses on patient-identified priorities and improves patient outcomes. This research, conducted by multidisciplinary teams in partnership with relevant stakeholders, aims to apply the knowledge generated to improve healthcare systems and practices.

Perinatal Stroke: focal diseases of brain blood vessels that lead to injury in the brain during the fetal or newborn period.

Placebo Effect: there is always a psychological component to being enrolled in a clinical trial designed to test a treatment that might improve an existing medical condition. It's natural for a participant to hope that they are in the group receiving the active treatment and that it will improve their condition. For this reason, even patients who are receiving placebo treatment will often report an improvement, particularly in short term trials, even if it is impossible that the effects are caused by the placebo.

Power: the power of a statistical test is a measure of a study's ability to detect a statistically significant difference between the results of the intervention group and the control group in a randomized controlled trial. A difference is considered statistically significant when it is highly unlikely to have occurred by chance. A study's power is partly determined by the size of the difference in scores between the groups, but it is also affected by how many people are included in the study and how much variation there is within each of the groups. For example, if there are too few people in the study, even a large difference may not produce a statistically significant result.

Prevention - Primary, Secondary and Tertiary

Primary Prevention means preventing a disease before it occurs. An
example would be a healthy person with a family history of heart disease
taking a blood pressure reducing medication to prevent a heart problem in the
future.



- Secondary Prevention means preventing a worsening or future occurrence
 of a disease after evidence of the disease has already been found. An example
 would be a doctor removing a suspicious growth before it becomes cancerous
 and spreads.
- **Tertiary Prevention** means treatment for an ongoing disease. This type of prevention could include reducing the effect of symptoms, slowing the progress of the disease, or taking steps to cure the disease.

Prognosis: is a prediction of the course of a disease and likelihood of recovery, disability, or death, based on medical expertise. It includes factors such as the patient's medical history, the course of treatment being followed, and the statistical likelihood of the outcome of the disease in other people.

Randomization: most randomization in health research has to do with the selection of intervention and control groups for clinical trials. The process begins with a group of people who have been carefully selected to meet all of the criteria defined for the trial. These usually include people who have a disease at the same stage, along with other similar factors such as age or weight, and none of the study's exclusion factors, such as multiple diseases or pregnancy. Even within this group, no two people are identical so randomly dividing them into two (or more) subgroups ensures that the same characteristics of the larger group are likely to be represented in the subgroups. Most randomization is done by using computer-generated lists of random numbers based on the number of groups to be studied (e.g., 1s and 2s for two groups) and giving each person enrolled the next number on the list. This will usually result in nearly even numbers of people in each group.

Screening: is a method of secondary prevention. Screening programs check large numbers of individuals who are otherwise healthy for known symptoms before a disease is established.

Social, Cultural, Environmental, and Population Health Research: this research works to enhance the health of Canadian populations (or subpopulations, such as those from a particular region or ethnic group) by understanding how social, cultural, environmental, work-related, and economic factors affect people's health. It also involves



the evaluation of certain health interventions such as the effect of tobacco control programs on populations.

Stroke: a sudden disabling attack or loss of consciousness caused by an interruption in the flow of blood to the brain, especially through thrombosis.

Tachycardia: an abnormally rapid heart rate. Tachycardia is caused by something that disrupts the normal electrical impulses that control the rate of your heart's pumping action.

Thrombosis: the formation or presence of a blood clot in a blood vessel. The vessel may be any vein or artery. For example, in a deep vein thrombosis or a coronary (artery) thrombosis. The clot itself is termed as thrombus. If the clot breaks loose and travels through the bloodstream, it is a thromboembolism. Thrombosis, thrombus, and the prefix thrombo- meaning a lump or clump.

Webinar: a seminar conducted over the internet.

C-SPIN Language (Terminology):

Adverse Events (Effects): are harmful or undesirable consequences of a medication or treatment. In clinical trials, researchers must always report adverse events, even if they are not likely to be caused by the study medication or treatment, because not all adverse effects can be anticipated in advance. Useful information on possible risks can sometimes be gained by comparing the kind and number of AE in the control group with those in the intervention group. Serious Adverse Events or Serious Adverse Effects (SAE) are events that cause death, permanent damage, birth defects, hospitalization, or are life threatening.

Alliance for Adult Research in Congenital Cardiology: a research group to foster collaborative relationships between programs and investigators, to further sustain research efforts, and to include the goals of innovative investigations, advancing knowledge, and improving outcomes.

Anticoagulants: a class of drugs that work to prevent the coagulation (clotting) of blood.

Atrial Fibrillation in the Emergency Room: is the most common cardiac arrhythmia managed by emergency physicians. Symptoms include fast/irregular heart rate, dizziness



and chest pain. The first goal of the ER medical team is to slow down then patient's heart rate, and second is to reduce the patient's risk of blood clotting by giving blood thinning medication.

Atrial Tachycardia: is a type of atrial arrhythmia in which the heart's electrical impulse comes from ectopic atrial pacemaker, that is to say an abnormal site in the upper chambers of the heart or atria, rather than from the SA node which is the normal site of origin of the heart's electrical activity.

Bachelor of Medicine and Bachelor of Surgery: is a highly challenging but extremely rewarding program that will give you the medical knowledge, clinical and research skills, attitudes, awareness and enthusiasm for a vocation in any field of medicine. You will learn how to develop a rapport with patients from diverse range of cultures as well as learning how to work effectively with colleagues in other healthcare professions.

Bachelor of Science: is an undergraduate academic degree awarded for completed courses that generally last three to five years.

Bachelor of Science in Nursing: is an academic degree in the science and principles of nursing, granted by an accredited tertiary education provider. The course of study is typically three or four years.

Canadian Cardiovascular Congress: is the largest gathering of cardiovascular and allied health professionals in Canada. The CCC provides a broad spectrum of cardiovascular health professionals with current scientific information, accredited education opportunities and an ideal forum to connect with other cardiovascular health and care colleagues.

Canadian Agency for Drugs and Technologies in Health: is a national organization whose stated mission is to provide Canada's federal, provincial and territorial health care decision makers with credible, impartial advice and evidence-based information about the effectiveness and cost-effectiveness of drugs and other health technologies.

Canadian Cardiovascular Society: is the national voice for cardiovascular clinicians and scientists, promoting cardiovascular health and care excellence through knowledge



translation, including dissemination of research and application of best practices, professional development and leadership in health policy and advocacy.

Confidentiality Agreement: is a standard written agreement used when two corporations start working together. Any individual that may have access to sensitive information is often required to sign a confidentiality agreement and it is often a clear indication that the information is private.

Cardiovascular Health Awareness Program: a community based program that brings together local family physicians, pharmacists, other health professionals, public health representatives, volunteers, and health and social service organizations to work together to promote and actively participate in the prevention and management of heart disease and stroke.

Canadian Hypertension Education Program: to provide updated evidence-based recommendations for the prevention, diagnosis, assessment and treatment of hypertension in adults.

Cardiac Implantable Electronic Devices: encompasses pacemakers for bradyarrhythmia treatment, implantable cardioverter defibrillators for tachyarrhythmia management, and cardiac resynchronization therapy devices for systolic dysfunction with conduction delays.

Canadian Institutes of Health Research: is Canada's federal funding agency for health research. CIHR provides leadership and support to more than 13,700 health researchers and trainees across Canada.

Co-Principal Investigator: to ensure a project is conducted in compliance with applicable laws and regulations and institutional policy governing the conduct of sponsored research.

Computed Tomography: an x-ray imaging procedure used for a variety of clinical applications using a specialized scanner, x-ray system, patient table and a computer workstation. Also used to perform noninvasive angiographic imaging to assess the large blood vessels.



Deputy Director: will assume the role of the PI in their absence, will have special responsibility for education, mentoring and career continuity.

Doctor of Philosophy: is a degree a person gets from a university by finishing a doctorate program. In many areas of study, the PhD/DPhil is the highest degree that a person can earn.

External Advisory Board: provides non-binding strategic advice to the management of a corporation, organization or foundation.

Electro Cardio Gram: a test that checks for problems with the electrical activity of your heart.

Emergency Department: a medical treatment facility specializing in emergency medicine, the acute care of patients who present without prior appointment, either by their own means or by ambulance. The emergency department is usually found in a hospital or other primary care center.

Emerging Research Leaders Initiative: an establishment grant program for researchers at the transition stage from post-doctoral fellow to early professional career stage.

European Society of Cardiology: a unique and diverse organization of over 90,000 members, representing cardiology professionals in Europe and worldwide. The ESC also supports the development of strong policies for the prevention of cardiovascular disease in the European Union, through its European Heart Agency in Brussels.

Fellow of the Heart Rhythm Society: to improve the care of patients by advancing research, education and optimal health care policies and standards. Fellowship in the Heart Rhythm Society will help to distinguish you among health care providers and researchers for your advanced training, certification, and commitment.

Finance and Network Management Sub-Committee: to share the workload in managing and monitoring the organizations finances.

Fellow of the Royal College of Physicians of Canada: to improve the health and care of Canadians by leading in medical education, professional standards, physician competence and continuous enhancement of the health system. The Royal College sets



the highest standards for specialty medical education in Canada. At the same time, they support lifelong learning for specialist physicians and promote sound health policy.

Fellow of the Royal College of Surgeons of Canada: to improve the health and care of Canadians by leading in medical education, professional standards, physician competence and continuous enhancement of the health system. The Royal College sets the highest standards for specialty medical education in Canada. At the same time, they support lifelong learning for specialist physicians and promote sound health policy.

Good Clinical Practice: is an international ethical and scientific quality standard for the design, conduct, performance, monitoring, auditing, recording, analyses and reporting of clinical trials. It also serves to protect the rights, integrity and confidentiality of trial subjects.

Group on Educational Affairs: to advance medical education and medical educators through faculty development, curriculum development, educational research, and assessment in undergraduate, graduate, and continuing medical education.

Hamilton Integrated Research Ethics Board: to safeguard the rights, safety, and well-being of all research participants.

Health Technology Assessment: is a multidisciplinary process that summarizes information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner.

Health Research Methodology: to educate a variety of people and health care professionals with backgrounds in social and biological sciences, population health, clinical epidemiology, health care and health services research methods.

Heart Rhythm Society: is a non-profit organization that promotes education and advocacy for cardiac arrhythmia professionals and patients.

Implantable Cardioverter Defibrillator: is a device implanted to regulate irregular heart rhythms. Like a pacemaker, and ICS consists of two parts. The leads are wires with electrodes at the tip that transmit electrical signals to and from the heart muscle.



International Society for Adult Congenital Heart Disease: to promote, maintain and pursue excellence in the care of adults with congenital heart disease worldwide. The society is dedicated to the advancement of knowledge and training in medical disciplines pertinent to congenital heart disease in adults.

Knowledge Translation: is the umbrella term for all of the activities involved in moving research from the laboratory, the research journal and the academic conference into the hands of people and organizations who can put it to practical use. A+ dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.

Knowledge Translation and Policy Committee: a group of people who provide ideas or plans that are used by an organization for making decisions. A dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.

Medicine Doctor: are physicians who work in hospitals, clinics, medical centers, or private practice. They treat people for illness and injuries, also prescribe medications, order diagnostic tests, diagnose ailments, and record patient information. Doctors of medicine often have a specialization such as general practice, gynecology, dermatology, pediatric medicine, orthopedics, and many others.

Medical Education Scholarship Research Evaluation: to enhance the quality of research in medical education and to promote its application to educational practice.

Montreal Health Innovations Coordinating Center: strives to conduct clinical trials efficiently and effectively through innovation in order to fulfill customer needs. The MHICC is a full service clinical academic research organization, providing services to the community and to the pharmaceutical, biotechnology and medical device industries, in the fields of cardiology, neurology, oncology, dermatology, endocrinology and pharmacogenomics. The MHICC's fully integrated range of services can handle all Phase II to IV clinical research needs, surpass all regulatory requirements and meet enrollment targets.



Magnetic Resonance Imaging: is a test that uses a magnetic field and pulses of radio wave energy to make pictures of organs and structures inside the body. In many cases, MRI gives different information about structures in the body that can be seen with an x-ray, ultrasound, or computed tomography scan. MRI also may show problems that cannot be seen with other imaging methods.

Master of Science: is a type of master's degree awarded by universities in many countries. The Master of Science degree is typically granted for studies in the sciences or engineering or medicine, and is usually for programs that are more focused on scientific and mathematical subjects, however, different universities have different conventions and may also offer the degree for fields typically considered within the humanities and social sciences. While it ultimately depends upon the specific program, individuals who pursue a Master of Science degree typically require a thesis.

National Institute for Health Research: to improve the health and wealth of the nation through research. It is a large multi-faceted and nationally distributed organization. Together, NIHR people, facilities and systems represent the most integrated clinical research system in the world, driving research from bench to bedside for the benefit of patients and the economy.

National Institutes of Health: to acquire new knowledge to help prevent, detect, diagnose and treat disease and disability. NIH wants to uncover new knowledge that will lead to better health. This is done by conducting research in its own laboratories, supports the research of non-federal scientists in universities, medical schools, hospitals, and research institutions throughout the country and abroad; helping and training of research investigators and fostering communication of medical and health sciences information.

Network: a group of health professionals and organizations working in a coordinating manner.

Oral Anticoagulants: a class of drugs that work to prevent the coagulation (clotting) of blood, and are taken by mouth.

Programs for Assessment of Technology in Health: based at St. Joseph's Healthcare Hamilton but has strong affiliations with McMaster University as well. PATH is working to improve population health by conducting and promoting evidence-based evaluations of



the effectiveness and efficiency of new and existing health care technologies. Consists of multiple research programs in economic evaluation and health technology assessment.

Patient Engagement Committee: working together with patients and researchers to make decisions about what type of engagement will best support meaningful, active collaboration in priority setting, conducting research, governance, and knowledge translation. Patients who have experience with a health issue have the potential to collaborate in a meaningful and active way in the research process together with researchers. This type of collaborative process requires careful planning and is needed to ensure success over the long term. The committee works with researchers and members to foster the understanding of the importance of patient engagement.

Patient-Centered Outcomes Research Institute: to improve the quality and relevance of evidence available to help patients, caregivers, clinicians, employers, insurers, and policy makers make informed health decisions.

Population Health Research Institute: provides a forum for the conduct of large international clinical trials, population health studies, and studies in outcomes research. While its primary role is to provide leadership in international health research, the PHRI also plays an active role in the education of individual researchers, and in building capacity internationally for the development of global research programs.

Principle Investigator: is the holder of an independent grant administered by a university and the lead researcher for the grant project, usually in the sciences, such as a laboratory study or a clinical trial.

Program for the Identification of "Actionable" Atrial Fibrillation: participants will be screened for AF using three methods (pulse check, single-lead ECG, and blood pressure machine with automated AF detection algorithms). Subjects screening positive on any test will attend for a 12-lead ECG within 24 hours. For all patients with AF detected, clinical characteristics and medications will be compared at baseline and 90±14 days later.

Program for the Identification of "Actionable" Atrial Fibrillation – Family Practice: to find atrial fibrillation among patients 65 years or older, a family practice based screening program that will be implemented using three simple methods – manual pulse check,



single lead handheld ECG and blood pressure machine with automated AF detection algorithms.

Program for the Identification of "Actionable" Atrial Fibrillation – Home: to offer patients new technologies to detect AF. The aim is to establish a practical and cost-effective screening strategy that could be easily applied in primary care for early detection and treatment of AF, The SCREEN-AF trial is a Canadian multicenter study of atrial fibrillation screening being conducted in a home based setting.

Project Manager: a professional in the field of Management. Project Managers have the responsibility of the planning, procurement and execution of a project. They are the first point of contact for any issues or discrepancies arising from within the heads of various departments in an organization.

Randomization Clinical Trials: a study in which the participants are assigned by chance to separate groups that compare different treatments; neither the researchers nor the participants can choose which group. Using chance to assign people to group's means that the groups will be similar and that the treatments they receive can be compared objectively. At the time of the trial, it is not known which treatment is best. It is the patient's choice to be in a randomized trial.

Sub-Clinical Atrial Fibrillation: pertaining to an early or mild stage, having no noticeable clinical symptoms.

Scientific Executive Committee: is a committee within that organization which has the authority to make decisions and ensures that these decisions are carried out.

St. Joseph's Healthcare Hamilton: delivers high-quality, evidence based, compassionate care to patients in Hamilton-Niagara-Haldimand-Brant and beyond. St. Joseph's Healthcare Hamilton is the largest acute care hospital and only academic and research centre in the St. Joseph's Health System.

Strategy for Patient-Oriented Research: to ensure that the right patient receives the right intervention at the right time. The objective is to foster evidence-informed health care by bringing innovative diagnostic and therapeutic approaches to the point of care to ensure greater quality, accountability and accessibility of care.



Transient Ischemic Attack: is like a stroke, producing similar symptoms, but usually lasts only a few minutes with no permanent damage. TIA is caused by a clot with the blockage being temporary. The blood flow to part of the brain stops for a short period of time.

Terms of Reference: describes the purpose and structure of a project, committee, meeting, negotiation, or any groups of people who work together to accomplish a shared goal. Terms of reference shows how the object in question will be defined, developed, and verified.

TomorrOw's Research Cardiovascular Health Care Professionals: an innovative strategic Canadian research training program at the Universities of Alberta and Calgary with the mission to prepare Canada's next generation of cardiovascular health research leaders.

Tissue Plasminogen Activator: is a protein involved in the breakdown of blood clots. It is a serine protease found on the cells that line the blood vessels. Tissue plasminogen activator is used in clinical medicine to treat embolic or thrombotic stroke.

Resources developed collaboratively by the Canadian Institutes of Health Research (Jargon buster and Strategy for Patient-Oriented Research) and Population Health Research Institute.