1<sup>st</sup> Keynote Speaker Address

### CARDIOVASCULAR RESEARCH New Brunswick Heart Centre

Dr. Ansar Hassan External Review Planning Committee 2016



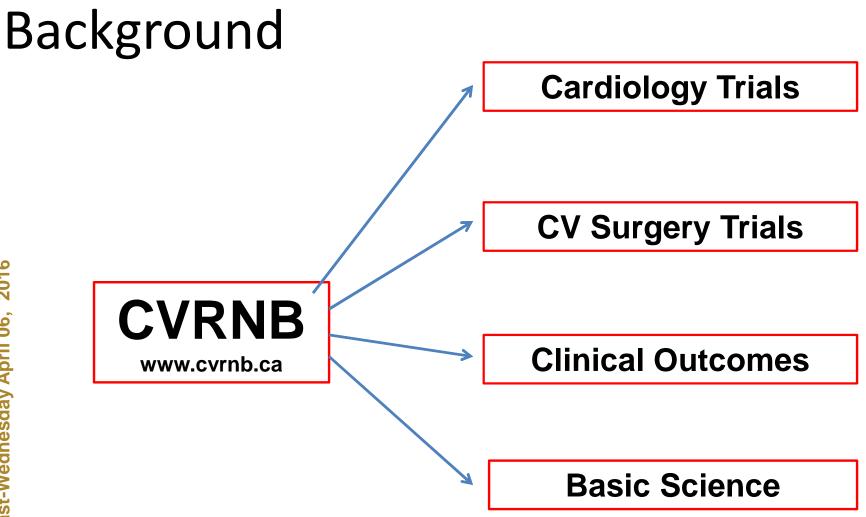
New Brunswick Heart Centre Centre cardiaque du Nouveau-Brunswick



Cardiovascular Research New Brunswick

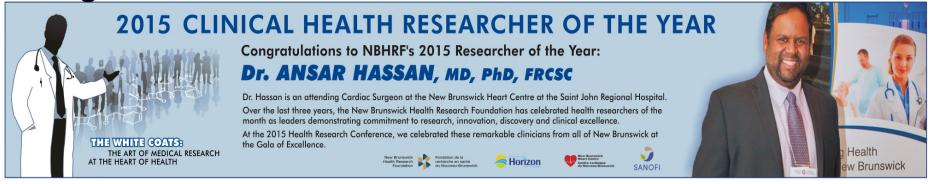
"That under the leadership of the New Brunswick Heart Center a surveillance system should be established in New Brunswick to monitor the prevalence of cardiac risk factors and cardiac related morbidity and mortality. This is perhaps best organized through the provincial epidemiology services. Furthermore a task force should be identified to plan strategies to decrease the high prevalence of cardiac risk factors in New Brunswick."

External Review of New Brunswick Cardiac Services Report (2004)



• SUCCESS !

- Established robust research infrastructure
- Acquired peer and non-peer reviewed funding
- Fostered collaborations locally and abroad
- Supervised / mentored medical students
- Published abstracts / manuscripts





#### Dr. Ansar Hassan named health researcher of year

Dr. Ansar Hassan's team analysed cardiovascular surgery outcomes at New Brunswick Heart Centre

CBC News Posted: Nov 04, 2015 7:39 AM AT | Last Updated: Nov 04, 2015 12:22 PM AT



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#### Increased Distance From the Tertiary Cardiac Center Is Associated With Worse 30-Day Outcomes After Cardiac Operations

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Dalhousie Medicine New Brunswick; Cardiovascular Research New Brunswick, New Brunswick Heart Center, Saint John Regional Hospital; and Horizon Health Network, Saint John, New Brunswick, Canada

*Background.* Numerous studies have examined the effect of geographic place of residence on access to cardiovascular care, but few have examined their effect on outcomes after cardiac operations. This study examined the effect of geographic place of residence on in-hospital and 30-day outcomes after cardiac operations.

Methods. We performed a retrospective analysis of all patients undergoing nonemergency cardiac operations at a single institution between April 2004 and March 2011. Geographic place of residence was defined as the driving distance from the patient's home to the tertiary cardiac care center divided into the following categories: 0 to 50 km, 50 to 100 km, 100 to 150 km, 150 to 200 km, 200 to 250 km, and more than 250 km. Multivariable logistic regression was used to determine the independent effect of driving distance on in-hospital and 30-day outcomes.

Results. The final study population included 4,493 patients, of whom 3,897 (86.7%) had 30-day follow-up.

After adjusting for differences among patient groups, no consistent relationship existed between distance and in-hospital outcomes. However, increased distance beyond 100 km was significantly associated with a greater risk of adverse outcomes at 30 days (0 to 50 km: referent; 50 to 100 km: odds ratio, 1.16 [95% confidence interval, 0.83 to 1.62]; 100 to 150 km: 1.32 [1.05 to 1.65], 150 to 200 km: 1.68 [1.33 to 2.11], 200 to 250 km: 1.41 [1.06 to 1.88], and >250 km: 1.30 [1.04 to 1.63]).

*Conclusions.* Patients who live at an increased distance from the tertiary cardiac care center are more likely to have worse 30-day outcomes after cardiac operations. Further study is required to determine the mechanisms underlying this relationship and how such inequalities may be minimized.

> (Ann Thorac Surg 2015;100:2213–9) © 2015 by The Society of Thoracic Surgeons

## **Current Infrastructure**

- Cardiac surgery and cardiology clinical trials research program
  - 2 research coordinators
  - 5 research nurses
- Cardiovascular clinical outcomes research department
  - 1 statistical analyst
  - 2 research assistants

### **Existing Issues**

- Inconsistent source of funding for health research personnel
  - Peer-reviewed funding, unrestricted industry funds, NBHC operational budget
- Lack of funding / structure to support clinician scientists currently working within NBHC
  - Protected time, alternate funding model
- Need to recruit additional clinician scientists in all clinical domains of New Brunswick Heart Centre

### Vision



# Vision

• NBHC Cardiovascular Research Institute

- Foster high-leveled academic productivity
- Train student and graduate-leveled researchers
- Collaborate government to affect/effect health policy
- Partner with industry to make the NBHC a priority destination for novel clinical trials, "first-in-man" device implants

# Vision

New Brunswick Heart Centre is a world-class research organization

- We have demonstrated tremendous success
- Huge potential for development remains

• Time is now to plan for the future

• THANK YOU !!!!!