

Putting Heart into Protecting the Brain

Fast Facts from the Evaluation Report

July 2008

Background:

A Transient Ischemic Attack (TIA) is a stroke-like event with symptoms that resolve within 24 hours. It is estimated that, annually, 7000 Ontarians experience a TIA. Individuals who experience a TIA are at very high risk: **90 days after a TIA, 25% of patients have experienced a stroke or other adverse event.** Each year in Ontario there are 15,000- 20,000 hospital admissions for stroke. Cardiac disease and stroke share several risk factors. **There are potential scientific, clinical and economic advantages to integrating the management and secondary prevention services of these two chronic vascular conditions.**

The Project:

- The purpose of the trial was to test effectiveness and feasibility of a comprehensive, integrated vascular disease management and secondary prevention program after TIA/MNDS, without having to build additional infrastructure and incur associated costs.
- Individuals who had sustained a Transient Ischemic Attack (TIA) or Mild Non-disabling stroke (MNDS) were, with consent, referred from the Secondary Prevention Clinic (SPC) to the existing Cardiac Rehabilitation (CR) program; both services are offered by London Health Sciences Centre.
- This project involved the creation of a **systematic linkage and referral structure between SPC and CR.**
- The project exemplified key elements of the chronic disease model and Ontario's CDPM framework.
- This pilot project now forms the foundation of a four-phase research program that has recently entered its third phase.

Findings:

- There were **statistically significant and clinically meaningful improvements** in key outcomes which mediate future risk

of TIA, stroke, heart attack, re-hospitalization or death related to chronic vascular disease risk.

- There is **preliminary evidence that comprehensive CR improves cognitive functioning** in memory, learning and psychomotor speed, after TIA or MNDS.
- **Comprehensive CR after TIA or mild stroke is an effective and feasible approach** to management and secondary prevention of chronic vascular disease.
- Comprehensive CR has promise to be a **cost-effective secondary prevention strategy** following TIA or MNDS:
 - **No new infrastructure**
 - **Significant reduction in risk for events**
 - **Low stroke recurrence rate (1.9%); therefore, fewer readmissions**

Recommendations:

- The Ministry of Health and Long Term Care and Local Health Integration Networks consider **strategies to develop and foster linkages between existing comprehensive CR services and SPCs** to advance vascular chronic disease management and secondary prevention following TIA/MNDS.
- The experience gained from application of chronic disease management and prevention principles to vascular conditions in **this project could contribute to informing implementation of Ontario's CDPM Framework.**

Ongoing/Future Research:

- Current - evaluation of above strategy with RCT at London & Ottawa
- Future – larger study to evaluate above strategy on mortality & morbidity