$1.4 Million Allocated to Cardiac Rehabilitation Services!

Cardiac Rehabilitation in New Brunswick- A Province on the Move!

Background

The incidence of cardiovascular disease (CVD) in New Brunswick (NB) is above the national average with higher admission rates for both acute myocardial infarction (17%) and angina (42%).[i] In June 2006 the NB Heart Centre was given the mandate from the New Brunswick Cardiac Advisory Committee to conduct a province wide review of cardiac rehabilitation programming. This directive occurred following a recommendation from an external review based on evidence that patients attending Cardiac Rehabilitation programs experience a 20 to 30% reduction in mortality and cardiac related hospitalizations.[ii]

The NB Heart Centre Provincial Advisor for Cardiac Wellness and Rehabilitation facilitated the process. Cardiac rehabilitation professionals from the provinces eight Regional Health Authorities (RHA's) formed a working group that provided information through surveys, focus groups, face-to-face group meetings, email and teleconferences over a 6 month period. As a result, a collaborative report and funding proposal identifying current perspectives and future opportunities for cardiac rehabilitation and secondary prevention in the province was developed.

The Canadian Association of Cardiac Rehabilitation defines cardiac rehabilitation as "the enhancement and maintenance of cardiovascular health through individualized programs designed to optimize physical, psychological, social, vocational, and emotional status. This process includes the facilitation and delivery of secondary prevention through risk factor identification and modification in an effort to prevent disease progression and recurrence of cardiac events".[ii] Gaps in service were evident in New Brunswick. As part of the collaborative report, recommended opportunities for improvement were identified, special considerations highlighted and priority areas for funding proposed. Issues identified relating to gaps in cardiac rehabilitation care included access to programs, equipment and space shortages, lack of trained interdisciplinary staff and lack of a provincial data registry.

Proposal Highlights

Patient Eligibility Criteria

Data was obtained from the provincial *3M Health Data Management (HDM)* reporting tool for Complexity Case Mixed Groupings (CMG's) in an effort to establish a baseline to understand the number of patients who required secondary prevention cardiac rehabilitation programs. It was determined that for the 2005-2006 fiscal year 8, 051 patients with cardiovascular disease by discharge diagnosis were eligible for cardiac rehabilitation programming. Unfortunately only 10% of those patients were admitted to programs during the same time period. Enrollment varied from 0% to 23% in various health regions with the majority occurring in urban versus rural areas.

The Canadian Cardiovascular Society Access to Care Working Group for Cardiac Rehabilitation in Canada has determined that all CVD patients require access to core aspects of Cardiac Rehabilitation as a standard of care within a preferable timeframe of 1 to 30 days and an acceptable time frame of 7 to 60 days.[iii] Recognizing the enormity of expanding cardiac rehabilitation services in New Brunswick and the need to improve access to care within preferable timeframes, a staged approach was suggested to accommodate moderate but consistent growth in regional service delivery over the next 5 to 7 years. Specific caveats for each region were identified with the expectation that regions would continue to increase services offered and expand services in both urban and rural areas without charging a fee to patients.

It was determined that core interdisciplinary program personnel should include physicians, nurses, physiotherapists and kinesiologists (or combination of both), dietitians, psychologists, and administrative assistants. Peripheral personnel whose services are needed and benefit provision of cardiac rehabilitation include pharmacists, occupational or vocational therapists, and social work professionals.

Priority Funding Areas

Based on combined data from each health region it was determined that the actual cost per patient for participation in a traditional 12 week cardiac rehabilitation program with case managed follow-up for one year is $1745. A micro costing worksheet was collaboratively developed and based on data collected through multiple iterative processes eight priority areas were recommended for funding. A comprehensive document titled *Cardiac Rehabilitation in New Brunswick: A Collaborative Report Identifying Current Perspectives & Future Opportunities for Secondary Prevention* was submitted to the Department of Health through the NB Cardiac Advisory Committee.

Representatives of the department carefully reviewed the proposal and to the pleasure of all those involved allocated a total of $1.4 million provincially for cardiac rehabilitation services. Priority areas were either partially or fully supported, or recommended for review in future budgetary processes (Table 1). Each RHA received funding to increase provision of service by 5 to 10% following a provincially coordinated evidenced based approach. New Brunswick is the first province in Canada to do so and received recognition at the October 2007 Annual General Meeting of the Canadian Association of Cardiac Rehabilitation.

Future Directions

Members of the provincial cardiac rehabilitation working group have continued to hold knowledge sharing meetings following submission of the proposal and as a result have recently formalized their group process. In September 2007 Terms of Reference were developed and *Cardiac Rehab New Brunswick (CRNB)* was formed. CRNB is a professional body dedicated to the primary and secondary prevention of cardiovascular disease and reports to the NB Cardiac Advisory Committee. CRNB members will be leaders in the progressive advancement of cardiac rehabilitation in the province. Innovative case management practices, home exercise programs, telehealth, web based applications and self- management processes are strategies under development.

Cardiac rehabilitation has been recognized as a progressive Chronic Disease Management model as outlined in the 2004 Canadian Association of Cardiac Rehabilitation guidelines[ii]. Therefore, interdisciplinary professional education using case managed cardiac rehabilitation as a model that includes patient self-management for the purpose of lifestyle change using behavioural and coaching processes is a priority.

Summary

In today's environment of shorter hospital lengths of stay the needs of patients with cardiovascular disease are not fully addressed by acute care alone. In order to reduce mortality, morbidity and readmission rates as well as improve the quality of life for those living with cardiovascular disease in New Brunswick, a coordinated interdisciplinary approach is essential. Cardiac rehabilitation services are effective and efficient channels for the delivery of care designed to stabilize and minimize the progression of the atherosclerotic disease processes. In New Brunswick the need for cardiac rehabilitation to be expanded as a chronic care model is recognized by the fact that a mere 10% of eligible patients were able to access programs in 2006.

Although health regions vary in their capacity to provide outpatient cardiac rehabilitation services, it is important that recognition has been given to cardiac rehabilitation as a standard of care in New Brunswick. Although gaps remain, strategies under development by Regional Health Authorities in collaboration with *Cardiac Rehab New Brunswick*, the *NB Cardiac Advisory Committee* and the *Department of Health* will result in the provision of more accessible care for patients living with heart disease. Stay tuned for future updates. New Brunswick is indeed a province on the move!

References

i Provincial & Health Region Data Table: Survey of findings in the Canadian Cardiology Atlas (2006). Retrieved December 18, 2006 from www.ccort.ca

ii Stone JA, Arthur HM. Canadian Association of Cardiac Rehabilitation (2004) Canadian Guidelines for Cardiac Rehabilitation and Cardiovascular Disease Prevention: Enhancing the Science, Refining the Art. Second Edition.

iii Dafoe, W., Arthur, H., Stokes, H., Morrin, L., & Beaton, L. (2006). Universal Access: But When? Treating the right patient at the right time: Access to cardiac rehabilitation. Canadian Journal of Cardiology, 22(11). For the Canadian Cardiology Society Access to Care Working Group.

Table 1: Priority Funding Areas

Recommended Priority Areas for Funding	**Funding Support Provided (Total received $1.4 million)**
1. Regional Coordinator for each RHA (with materials support)	Supported
2. Funding for multidisciplinary health care professionals to initiate and expand programs	Supported to provide increases in programming of 5% in regions with current programs and 10% in regions without programs.
3. Large equipment costs to support new programs and assist with expansion of current programs	Partially supported
4. Yearly professional education funds	Partially supported and recurring
5. Telemetry systems for four specific sites	Funded over several years
6. Resource material costs to the NB Heart Centre to develop a health care professional modular education program	Supported
7. Funding to establish a provincial cardiac rehabilitation database	Further evaluation required
8. Data entry support for provincial database	Further evaluation required
Other areas addressed:	
1. That a funding fee structure specific to cardiac rehabilitation programming be explored for physicians	Referred to appropriate process
2. That kinesiologists be considered for provincial employee contract designations	To be reviewed by Health Human resources. There is no barrier to hiring as non-bargaining employees