

Through the Looking Glass: The Cardiac Care Network of Ontario 10 Years Later

BARRY MONAGHAN, CHRIS MORGAN, BILL SHRAGGE, LYALL HIGGINSON, MARK VIMR AND JOANN TRYPUK

The Cardiac Care Network of Ontario (CCN) is a pioneering partnership of health professionals, hospitals and government that focuses on appropriate and timely access to adult cardiac services by patients and their physicians. Established by the Ontario Ministry of Health and Long-Term Care in 1990, CCN advises the Ministry and coordinates the provision of advanced cardiac services for adult Ontarians.

CCN'S HISTORY AND CCN TODAY

The old adage "necessity is the mother of invention" applies to the creation of CCN. In the late 1980s, media coverage of concerns about cardiac care led to a public crisis of confidence in Ontario's system. It was difficult for the Ministry and providers to determine the extent of the problems with cardiac care, how serious they were, and the solutions. It became clear that systems and processes needed to be put in place to ensure equitable and timely access to meet the growing demand for cardiac services in the province. The Ministry responded by launching and supporting a number of initiatives that paved the way for the establishment of CCN.

Over the past 10 years, CCN has evolved and grown as a network. Compared to 1990 when CCN had 12 member hospitals, it now has 17. Initially established by the Ministry in response to the "crisis du jour" – cardiac surgery – its mandate was expanded in 1999 to include cardiac catheterization, angioplasty and stent procedures. This expansion has

tripled the number of patients monitored by CCN and the cardiac centres to more than 40,000 patients a year. Additional expansions will be made over the next two years for pacemakers, implantable cardiac defibrillators and cardiac rehabilitation.

CCN is made up of a number of key players who participate in fulfilling the mission of the organization. These players include:

- Health service professionals who participate on CCN's committees, consensus panels and working groups, providing valuable clinical and administrative expertise on cardiac service issues.
- Designated cardiac hospitals.
- Regional cardiac care coordinators, funded by the Ministry and located at each of the designated cardiac centres. Each centre has a coordinator for surgery and one for catheterization, where these services are provided.
- Provincial office staff, who support four functional areas: clinical practice, communications, informatics, and operations and special projects.
- Independent researchers, particularly those at the Institute for Clinical Evaluative Sciences, many of whom volunteer their time to provide valuable scientific and research expertise on cardiac issues.
- The Ministry of Health and Long-Term Care, which looks to CCN for expert clinical advice and recommendations on strengthening Ontario's system of cardiac care services.

This article was informed by input received from key stakeholders in January and February 2001 in preparation for a CCN strategic planning retreat. A total of 19 individuals were interviewed and 69 surveys were analyzed. Interviewees and survey respondents commented on CCN's strengths, weaknesses, its priorities and threats to meeting these priorities. Many of these observations are also included in CCN's 10-year case study, Cardiac Care Network of Ontario: Ten Years 1990-2000.

In response to the network's increased scope of responsibilities, growth in the number of designated cardiac centres and CCN's expanded advisory role in the cardiac care continuum, CCN has revised its vision, mission, values and role statements, and broadened its governance structure. As of July 1, 2000, CCN's governance structure includes the CCN Committee (governing body) and four standing committees: the Executive Committee; the Clinical Services Committee; the Informatics Committee; and the Regional Cardiac Care Coordinators Committee.

In addition, CCN has expanded its database, which supports the provincial cardiac network and patient registry, and has refined its processes for facilitating and monitoring patient access to cardiac services. (Processes for cardiac surgery were developed first, followed by processes for catheterization, angioplasty and stents in 2000.) The data from each cardiac hospital on patients waiting for advanced cardiac procedures are transmitted nightly to CCN. This centralized system is used to support regional and provincial analyses of how long patients wait for procedures and whether their waits are within a recommended time frame.

VISION As a dynamic partnership between professional providers, institutions, community members and government, providing advice based on data analysis and scientifically valid information, we will become an essential resource in improving the delivery of adult cardiac care in Ontario.

MISSION We are an advisory body to the Ministry of Health and Long-Term Care that is dedicated to improving quality, efficiency, access and equity in the delivery of the continuum of adult cardiac services in Ontario. Using data- and consensus-driven methods, we offer planning advice for the future of cardiac services and the provision of exemplary care in collaboration with the Ministry and others.

WHAT HAS CCN ACHIEVED AND HOW HAS IT MADE A DIFFERENCE TO ONTARIO'S CARDIAC SERVICES SYSTEM?

Over the past 10 years, CCN has contributed to significant improvements in the system of cardiac services in Ontario. These achievements have been the result of intensive, dedicated efforts by a wide variety of stakeholders. These achievements do not necessarily mean that CCN's work is done and that it has attained an optimal level of performance in all of these areas. Rather, these achievements represent a process of ongoing improvement that must continue into the future.

1. Improved Patient Access to Cardiac Services

Ontarians spent less time waiting for bypass surgery in 1999/2000 than in any year since 1993/94, the first year that CCN reported this statistic. The median waiting time for urgent patients has also remained constant despite changes in the number of patients waiting for cardiac surgery. A number of strategies have contributed to improved access:

- CCN has promoted the adoption of population-based minimum target rates for advanced cardiac procedures.
- CCN's provincial patient registry and management information system provide a concrete, objective profile of Ontarians waiting for an advanced cardiac procedure and guide referrals for these procedures. Data are gathered from referring physicians by regional cardiac care coordinators. CCN continuously monitors and evaluates waiting times and mortality rates for advanced cardiac services and alerts the Ministry when access may be jeopardized.
- The Urgency Rating Score (URS) – a fundamental component of CCN's database – quantifies the severity of a person's illness and helps to prioritize patients. The URS supports the underlying premise that the more serious a patient's condition, the sooner he or she will receive care. The URS helps to guide the prioritization of patients and to monitor the timely availability of, and equity of access to, care within centres, regions and the province. The URS for surgery has been in use since 1990. The catheterization URS was implemented in 2000, and the valve surgery URS will be implemented in 2001.

- Regional cardiac care coordinators, located at the cardiac centres, are a primary contact for cardiac patients waiting for an advanced procedure. Coordinators are aware of the severity and urgency of these patients and use CCN-related information and cardiac guidelines to monitor patient's access to care. Coordinators can alert the attending physician if a patient's clinical condition changes or waiting time is excessive, and alert CCN if there are fundamental access problems for patients at their facility. The network acts as a safeguard by providing a mechanism for critical patients to have a procedure performed at an alternative centre in the province.

2. Formalized and Strengthened a Joint Approach to Cardiac Care as a System of Services in Ontario

CCN was established as a partnership between cardiac care providers in Ontario and the Ministry. This partnership emphasizes a joint approach to the system of cardiac care services that goes beyond individual practitioners and cardiac centres working in isolation from each other and from the

funding body. This joint systemic approach has been mutually beneficial to CCN's key players. For example:

- CCN provides a forum where practitioners and government come together for the timely sharing of knowledge and ideas. This dialogue and interaction between clinicians and non-clinicians, front-line providers and planners/policy-makers, has resulted in a mutual understanding of issues and an effective mechanism for problem-solving.
- CCN provides a forum where a broad range of clinicians come together to discuss best practices, new and creative approaches to treatment and strategies to increase effectiveness and efficiency in the provision of cardiac services.

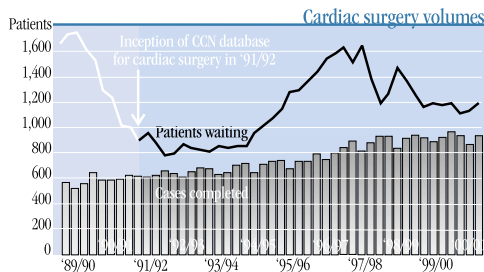
3. Systematically Improved Decision-Making in the Cardiac Services System

CCN has systematically improved decision-making using two key strategies. The first of these – consensus panels of experts – has successfully been used to develop guidelines and advice in specific areas of cardiac care. This effective strategy brings clinical, research, administrative and policy experts together to determine solutions using the best available evidence and their experience. These individuals typically review the literature, analyze available data, discuss the issues and collectively agree upon the actions that should be recommended to the Ministry.

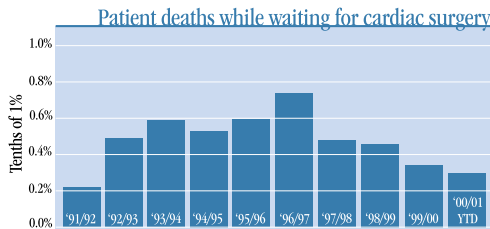
Consensus panels are viewed by both practitioners and the Ministry as an effective strategy for improving decision-making. This is evident in the fact that many knowledgeable individuals give their time and expertise to participate in these intensive and focused problem-solving initiatives. As well, the Ministry has used the vast majority of advice from CCN's consensus panels for policy and investment decisions. Since 1996, CCN has convened nine provincial consensus panels with Ministry support. Taken together, these consensus panels provide a framework and advice to government on cardiac care from diagnostics through to rehabilitation.

The second strategy used by CCN – database development – supports accurate, objective information and data-based decision-making. When CCN was established, its first priority was to develop and implement a registry and management information system for cardiac surgery. This was successfully achieved in the first few years of its operation. The Ministry subsequently supported the expansion of the registry to reflect more of the continuum of care – catheterization, angioplasty, stents, pacemakers, implantable cardiac defibrillators and cardiac rehabilitation.

CCN's database has improved decision-making in a number of significant ways:

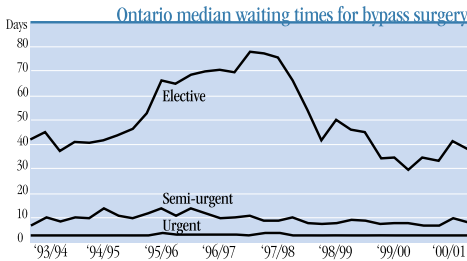


Vertical bars indicate cases completed; lines indicate patients waiting. All statistics are monthly averages by quarter (three-month period) of the fiscal year, including Ontario and non-Ontario residents.



While patient deaths are always a cause for concern, Ontario's death rate in the queue for bypass surgery has been considered low by researchers (Heart 1998;79:345-349). Longer waiting times are associated with modest increases in the risk of death, not to mention unmeasured effects on quality of life. However, for the overwhelming majority of patients, the vital risk of waiting for bypass surgery is very similar to, if not lower than, the baseline and the post-surgical risks accepted by thousands of other individuals living with coronary disease, according to researchers.

- The database, which uses standardized cardiac definitions, enables CCN to monitor and evaluate case loads, urgency, waiting lists and mortality between hospitals, regions and across the province. Regional cardiac care coordinators located at each of the designated cardiac centres use the information to track the success of their patients in obtaining care in a timely fashion.
- CCN uses its database to provide timely advice to the Ministry on current and potential cardiac service issues. Unlike most other clinical conditions where waiting-list information is kept by individual physicians and hospitals, CCN's centralized database gives a picture of local, regional and provincial demand for a procedure, how long people



Waiting times are counted from the date a patient is accepted for surgery by a cardiac surgeon. Waiting times vary by hospital and by surgeon. "Median" means that half of patients had a shorter waiting time and half had a longer one.

Recommended maximum waiting times (RMWT):

Emergency patients: Surgery without delay

Urgent patients: 0-14 days

Semi-urgent patients: 15-42 days

Elective patients: 43-180 days

Each patient has his/her own RMWT within a category.

wait for treatment, and to what extent available resources are meeting current and anticipated demand. This accurate and objective information has enabled the Ministry to make well-researched decisions on cardiac services.

4. Contributed to the Body of Knowledge and to Continuous Improvement in the Delivery of Cardiac Services through Research CCN has contributed to cardiac services research largely through a working partnership with the Institute for Clinical Evaluative Sciences (ICES). ICES has been a leader in the use of CCN's data, conducting targeted research studies as well as ongoing analyses of cardiac services. The results of these studies have increased the body of knowledge about cardiac services, been used to improve the provision of services, and strengthened accountability to the public and government for resources spent.

Scientists at ICES routinely link cardiac surgery data to hospitalization data from the Canadian Institute for Health Information, and generate reports on in-hospital death rates and post-operative lengths of stay. These data are distributed to the cardiac surgery centres for their review and to facilitate improvements.

CCN-ICES collaborations have resulted in the first public report card on coronary artery bypass graft surgery outcomes for all cardiac surgery centres in Ontario (1996/97) (Naylor et al. 1999), revised urgency rating scores for bypass surgery and current development of urgency rating scores for catheterization and valve surgery, and provided a study of waiting lists for

cardiac surgery in Ontario, which concluded that the province remains a world leader in measuring and managing cardiac surgery waiting lists (Sykora et al. 1999).

In addition to cardiac services research, CCN has also routinely evaluated its operations and strategic directions so that its activities continue to contribute to improvement in the delivery of adult cardiac services in Ontario. The network conducted formal program evaluations in 1993 and 1997, with another scheduled in the spring of 2001. CCN has also held operational planning retreats with staff and the regional cardiac care coordinators, and a number of strategic planning retreats since its inception.

5. Became an "Early Warning System" for Cardiac Issues in the Province

CCN is an important resource to the Ministry on cardiac service issues. As a group of expert advisers, CCN is the Ministry's "brain trust" on cardiac services, providing timely, well-researched, expert advice on the provision of cardiac services. Acting as the Ministry's early warning system for cardiac issues, the network's advice has enabled the Ministry to be proactive rather than reactive. For example:

- CCN's data indicated that waiting lists for cardiac surgery were increasing in 1995 and 1996. The Ministry responded by increasing funding to support an expansion in cardiac surgery capacity and effectively addressed a crisis that was quickly developing. Waiting lists were reduced by 13% from September 1997 to September 1998.
- CCN's Target Setting and System-Modelling Group recently evaluated and recommended increases in Ontario's population-based minimum target rates for cardiac catheterization, angioplasty and surgery to ensure accessibility to these services (CCN October 2000). The Ministry is reviewing these recommendations.
- In June 2000, CCN submitted a report to the Ministry's expert panel on human resources pointing out that the ability to provide advanced cardiac services to Ontarians is significantly hampered by the lack of available professional care providers (CCN June 2000).

6. Promoted a Responsible Public Profile for Cardiac Issues

Typically, healthcare issues get public attention when they reach a crisis and are reported by the media. Over the past 10 years, CCN has actively promoted open and ongoing communications and a responsible public profile for cardiac issues. CCN has a website that includes current hospital-specific statistics on access to care, referral information, annual reports, consensus panel documents, operating plans and other releases. These documents include a great deal of information on the

process and outcomes of cardiac services. This transparency of information has increased accountability of the Ontario cardiac care system to the public and government.

LESSONS LEARNED AND THE CHALLENGES THAT STILL LIE AHEAD
CCN's growth has not been without its challenges, and a number of "lessons learned" are evident from the experiences of the network. These lessons are evolving, since they reflect issues that continue to present ongoing challenges for the network in a number of areas.

ROLE AND MANDATE

CCN has revisited its role a number of times over the past 10 years. Although there have been some changes, fundamentally the network has remained true to its original role as an advisory body to the Ministry that advocates for the system of cardiac care services.

The network's role continues to be challenged by those who believe that CCN should advocate and lobby on behalf of designated cardiac centres, hospitals that want to provide cardiac services, cardiac professionals and/or consumer groups. Not surprisingly, the pressure on CCN to lobby for particular interests has increased in direct proportion to its success and credibility with government. Although CCN continues to grapple with this advisory-advocacy dichotomy, to date the majority view is that advocacy and lobbying for particular interests could harm the network's credibility and reputation as providing expert advice based on scientific evidence, consensus and data.

CCN's role also continues to be challenged by those who believe that the network will only have "real impact" if it goes beyond giving advice to actually controlling cardiac care funding. This would enable CCN to manage and resolve access issues more quickly and give it the authority to establish standards and force compliance. It is highly unlikely that the Ministry would give CCN funding authority. As well, the majority view within CCN is that such authority would put CCN in the position of being fiercely lobbied by its members. Its work would become highly politicized, and its reputation of providing expert advice would be jeopardized.

CCN's mandate has expanded quite dramatically compared to its singular focus on cardiac surgery 10 years ago. There are conflicting opinions about CCN's response to this increased mandate. Some members believe that CCN has been slow to change, maintaining its focus on traditional advanced cardiac procedures, the larger academic centres and physicians. The phrase "old boy's network" has been used to describe this perceived inability to be more inclusive, fast moving and innovative. In contrast, others believe that CCN's solid achievements are due to the fact that priorities were established and targeted areas "completed" before others were begun.

Although there have been some changes, fundamentally the network has remained true to its original role as an advisory body to the Ministry that advocates for the system of cardiac care services.

CCN could not be all things to all people all at once. There is some concern within the network that CCN's expanded mandate – its middle-age spread – may threaten the network's ability to maintain its focus and high-activity levels.

RELATIONSHIPS

CCN and the Ministry of Health and Long-Term Care

Ongoing efforts have been made to maintain a CCN-Ministry relationship that is characterized by mutual understanding and consideration of each other's position through open dialogue. Although CCN and the Ministry routinely seek to clarify their expectations of each other, the relationship is a symbiotic one that is not without its tensions. On the one hand, the Ministry operates within a political system with a fiscal responsibility, and retains the right to accept or reject CCN's advice. On the other hand, CCN's success in focusing quickly on issues and galvanizing volunteer expertise to develop cardiac-system advice rests on trust that the advice will not be disregarded.

CCN's members invest their time and clinical, administrative and research expertise to advise the Ministry, either at its request or at the network's own initiative. CCN's advice has had a significant influence on Ministry policy and funding decisions. In some instances, the Ministry's decisions have been contrary to the network's advice. These cases have been viewed by some as publicly undermining and challenging CCN's credibility and have frustrated those who conclude that their volunteered time has been wasted and their expertise has been questioned.

An ongoing challenge for CCN will be to continue to attract clinical, administrative and research experts to volunteer their time and expertise, with the knowledge that their advice will make a contribution to the debate but may not be fully or immediately adopted by the Ministry. At the same time, CCN must continue to guard against perceptions by some that it operates under implicit constraints since the network was established and is fully funded by the Ministry.

CCN and the Cardiac Centres

Administrative and clinical representatives from the cardiac centres who volunteer their time and expertise to CCN have responsibilities and accountabilities to their institutions as well. At the CCN table, these individuals must focus on and address system issues and not use the CCN forum inappropriately to advance institution-specific issues and agendas.

The CCN experience has shown that it is possible to bring clinicians, planners and representatives of government together to develop practical plans that increase access.

Whenever this is not successful or when some cardiac centres do not agree with CCN's final advice, a conflict may arise which can introduce an element of cynicism in CCN as well as undermine the network's credibility as an advocate for the cardiac-services system.

KEY ACTIVITIES

Database Development

CCN's experience developing a successful provincial database points to the importance of:

- Consistent standardized definitions and data forms that enable data to be uniformly interpreted across the sites.
- A sufficient number of skilled staff devoted to supporting the database.
- Information that has a simplicity that makes data gathering manageable and relatively easy to complete.

One ongoing database challenge is the extent to which CCN's data should be used to target improvement efforts when there are variations in practice. Although publicizing hospital-specific information usually encourages improvements in performance, a future debate will be whether CCN should actively manage waiting lists by routinely policing and responding to performance issues of individual institutions.

Consensus Panels

CCN has learned the power of the consensus panel approach to problem-solving. An effective and successful consensus panel must have the appropriate expertise at the table, geographic representation, dedicated and qualified project management support, well-defined tasks, timelines, deliverables and a momentum so that participants feel they are making a significant contribution to the issue without wasting their time.

In CCN's experience, the above conditions have resulted in excellent turnaround and rigorous and timely advice. The challenge of consensus panels will be continuing to harness the expertise of clinicians, administrators and research scientists who volunteer their time and expertise. Maintaining and nurturing the energy and commitment of these individuals, many of whom have other demands on their time, is critical to CCN's ongoing success.

Communications

A key lesson learned by CCN has been the importance of investing in internal and external communications through the development and support of a communications strategy. A concerted and organized effort to put a public "face" to CCN, and to distribute information openly and broadly to the key players and the public, has resulted in a responsible public profile for cardiac issues.

STRATEGIES FOR GETTING THE WORK DONE

Approach to Conducting Activities

The approach that CCN has adopted to conducting its activities has helped to build credibility among its members and the Ministry. The network has worked diligently to build a reputation of being organized, focused, and clear about its deliverables and timelines and meeting scheduled deadlines. CCN does not respond to issues in an ad hoc way. This approach has served the network well. The business of the network gets done effectively and efficiently, and clinical, research and administrative experts continue to volunteer their time believing it is well spent with tangible accomplishments for their efforts.

Clinical, Executive and Ministry Leadership

Over the past 10 years, CCN has learned that a partnership of clinical and executive leadership has been invaluable for infusing the network with a broad base of knowledge about the political system, hospitals, professionals and patient care. This dual leadership has also encouraged the participation of a wide range of key players in CCN's activities, especially clinicians who bring their "on-the-ground" knowledge to CCN's tables.

In addition to clinical and executive leadership, it has been critical to have Ministry leadership at both the civil service and political levels. CCN has been successful in meeting with the Minister of Health and Long-Term Care and senior officials at the deputy and assistant deputy levels. Ministry participation has also been provided by civil service representatives who sit on CCN's committees. Effective representation requires these Ministry officials to be at a senior enough level to be close to the decision-makers.

People Resources

The CCN experience has shown that it is possible to bring clinicians, planners and representatives of government together to develop practical plans that increase access. The network's experience has highlighted the importance of involving clinicians from the front lines. If these individuals are not part of discussing issues and determining solutions, they will not buy into the process and the final outcomes. Developing an atmosphere of mutual respect with a focus on a common goal has enabled CCN to bring diverse groups of people together to

work towards common solutions.

Regional cardiac care coordinators play an important role advocating for patients and triaging cardiac cases. The expansion of CCN's responsibilities, especially in the area of database development, has increased the demands on the coordinators. An immediate challenge is to assess the most appropriate role of coordinators, determine how to capitalize on their skills in this period of rapid growth and expansion, and evaluate resource requirements. A second challenge is inherent in CCN's matrix-type accountability structure. Although the coordinators are located and report to someone at the cardiac hospitals, they are also accountable to the CEO of CCN for uniformly carrying out the network's provincial policies and procedures. Coordinators experience tensions balancing their internal job responsibilities with their CCN-related responsibilities. As well, some coordinators must balance CCN's principle of providing care to the sickest patients wherever they live with the policies of some cardiac centres that support providing care to their own patients first. CCN has attempted to address this issue and others by developing a participation agreement with designated centres that stipulates the responsibilities of both organizations. Although this has helped somewhat, the dual accountability relationship still continues to challenge the coordinators and the network.

Dedicated administrative support has enabled CCN to accomplish a great deal in the past 10 years. Although CCN depends a great deal on its volunteer experts, the Ministry's unwavering support of a core group of dedicated staff has been invaluable to CCN's success. As the network's activities increase, the challenge will be to ensure that there are sufficient staff to meet these growing demands.

Financial Resources

CCN's experience highlights the importance of independent Ministry funding to support the work of this particular type of network. CCN is a unique network in Ontario. Unlike most programmatic networks that have been established to improve the services in a particular region, CCN was created to take a provincial outlook on the cardiac services system and to advise the Ministry on system improvements. Ministry funding has ensured that all of CCN's members participate on a level playing field. Representatives from the larger cardiac centres do not have a greater say in CCN as they might have if the network were funded by its members. Constantly attempting to promote an equal voice for all members of CCN is necessary to sustain a network that is the voice for a provincial system of cardiac services.

Committee and Management Structures

CCN has learned the importance of developing a functional committee and management structure to support the work of

the network. Ongoing attempts have been made to have a committee structure that is as simple as possible while at the same time ensuring broad representation so that all key players have a voice. CCN has changed its committee structure a number of times since its inception. Although the number of committees has decreased from the early days of the network, committee membership has been broadened to reflect the expansion of the cardiac services system and the importance of including other stakeholders. Currently, some CCN members believe that an appropriate balance has been achieved in the network's committee structure, whereas others believe that the structure has become too unwieldy and cumbersome in the attempt to represent everyone.

There is also the view by some that CCN should invite greater public participation on its committees. The opinion is that public participation can be a positive experience as long as it is given proper attention. This includes investing resources to facilitate effective contributions from consumers, and a process that supports the selection of consumers with certain skills so they can contribute effectively in a technical environment.

The management structure also needs to be simple but functional so that staff efforts are targeted at the key activities of the network. With the expansion of activities, the management structure needs to be continually reassessed to ensure that it is still appropriate.

IS THE CCN MODEL FOR EVERYONE?

In its 10 years of existence, CCN has developed a solid reputation as an organization that promotes appropriate, timely and equitable access to cardiac care and the rational planning of specialized health services. It is recognized provincially, nationally and internationally as a catalyst for positive changes in the provision of adult cardiac care services in the province, and it has raised public accountability for the performance of the cardiac system. Indeed, the view exists that because of CCN, cardiac services in Ontario are held to a higher standard of public scrutiny and accountability than other services.

CCN has been regarded with admiration and more than a modicum of envy by those who work in other clinical areas and other jurisdictions. The network seems to influence Ministry policy and funding decisions and has adequate financial resources, a phenomenal amount of goodwill with expert volunteers, and an impressive portfolio of successes. Many formal and informal healthcare networks exist in Ontario. Typically, these networks have looked to CCN as a model to follow. But is the CCN model for everyone? Not surprisingly, the answer is neither a clear yes or no.

The term "network" is widely used to refer to a broad range of affiliations. Networks vary in scope, activities, structure, accountabilities, resources and origins. CCN is quite a unique network in Ontario healthcare due to its history, structural

supports and its operations. History has shown that it is difficult to transplant totally any model or system that has been rooted in particular conditions. For CCN, these include:

- The network was established by the Ministry in response to a crisis in cardiac surgery. Initially, its focus was very narrow and well defined – one high-volume procedure, coronary artery bypass graft surgery, accounted for more than 75% of all adult cardiac surgery. This procedure was provided in a limited number of institutions.
- CCN's focus was and continues to be a clinical condition that accounts for a high proportion of healthcare expenditures. Currently, cardiac disease costs the province \$5.5 billion per year (equal proportions of direct and indirect costs), and accounts for 20% of acute care hospital costs, 15% of home care, 10% of medical services and 17% of drug expenditures (Chan and Young 1999). These costs are expected to increase with the aging population and increasing amounts of cardiac illness despite a steady, ongoing decline in the rates of illness.
- CCN's accountability is to the Ministry for providing advice on the provincial cardiac system. The Minister of Health and Long-Term Care appoints the chair of CCN. The network submits an annual operating plan to the Ministry that outlines CCN's accomplishments in the past year, and its strategic directions and resource requirements for the upcoming year. The Ministry approves the plan and CCN's budget on an annual basis.
- CCN was and continues to be fully funded by the Ministry, with the expectation that the network will advise government on adult cardiac care services. The Ministry retains ultimate responsibility for decisions about funding, resource allocation and siting of services.

It is possible that the CCN model in toto could be transplanted to networks that focus on conditions that are easily defined, are associated with high costs both in terms of technologies and interventions, and would benefit from a broad provincial perspective. Having said that, there is no doubt that key components of the CCN model are applicable and important for the success of any network. These components include:

- A clear purpose for the network that helps to establish boundaries and provides a firm foundation for goal setting and activities.
- An approach that establishes clear priorities, sets realistic time frames and focuses on meeting goals. This will help convince members and partners that their investment of time, expertise and money is worthwhile.

- Clinical leadership and partnership, which is critical for networks that have a strong clinical component and focus.
- Information and data that help identify key activities, trends and areas for improvement.
- Funding that is used to support dedicated staff whose job it is to manage the activities of the network.
- A process by which the appropriate government ministry is kept apprised of the network's activities and achievements.

A FINAL WORD

In CCN's experience, a significant amount of time, effort and resources – both human and financial – have been invested in building the network and its supporting systems, and in conducting its ongoing work and one-time initiatives. It has also taken solid achievements to gain credibility with members, key players and the Ministry.

CCN is continuing to evolve and grow as a network. With 10 years under its belt, it is clear that CCN will continue to be challenged to meet the Ministry's expectations and the demands of growth, to select priorities and maintain critical partnerships. Having said that, the ongoing support of the network by many – especially the overwhelming commitment of CCN's volunteers and the exemplary and innovative support of the Ministry – is a fitting testimony to the importance of CCN as a forum that has brought and continues to bring partners together to improve the system of cardiac services. As for the key question whether CCN has made a difference to the cardiac services system in Ontario over the past 10 years, the answer is a resounding yes. \square

REFERENCES

- CCN. June 2000. *A Discussion Paper by the Consensus Panel on Cardiovascular Human Resources in Ontario: Final Report and Recommendations*. Submitted to the Ontario Ministry of Health and Long-Term Care.
- CCN. October 2000. *Target-Setting Working Group: Final Report and Recommendations*.
- Chan, Ben and Wendy Young. 1999. "Burden of Cardiac Disease." In C. David Naylor and Pamela M. Slaughter, eds., *Cardiovascular Health and Services in Ontario: An ICES Atlas*. Toronto: Institute for Clinical Evaluative Sciences, pp. 1-13.
- Naylor, C. David, Deanna M. Rothwell, Jack V. Tu, Peter Austin and the Steering Committee of the Cardiac Care Network of Ontario. 1999. "Outcomes of Coronary Artery Bypass Surgery in Ontario." In C. David Naylor and Pamela M. Slaughter, eds., *Cardiovascular Health and Services in Ontario: An ICES Atlas*. Toronto: Institute for Clinical Evaluative Sciences, pp. 189-97.
- Sykora, Kathy, Pamela Slaughter, Wendy Young, David Garlin, C. David Naylor and the Cardiac Care Network Steering Committee. 1999. "Waiting Lists for Cardiac Surgery." In C. David Naylor and Pamela M. Slaughter, eds., *Cardiovascular Health and Services in Ontario: An ICES Atlas*. Toronto: Institute for Clinical Evaluative Sciences, pp. 239-53.

ABOUT THE AUTHORS

Barry Monaghan, BComm, DHA, CHE, is president and CEO of West Park Healthcare Centre in Toronto and is completing seven years of service as chair of CCN.

Chris Morgan, MD, FRCPC, is deputy chief of cardiology at Sunnybrook & Women's College Health Sciences Centre in Toronto and vice-chair of CCN.

Bill Shragge, MD, FRCSC, FACS, is a cardiac surgeon, chief of staff at Hamilton Health Sciences Corporation and past vice-chair of CCN.

Lyll Higginson, MD, FRCPC, is chief of cardiology at the University of Ottawa Heart Institute and chair of CCN's Informatics Committee.

Mark Vimr, MScN, CHE, is CCN's chief executive officer and was previously cardiac program director at St. Michael's Hospital in Toronto.

Joann Trypuc, PhD, has been an independent health-care consultant for the past nine years. Her doctoral degree is in sociology.



BARRY MONAGHAN



CHRIS MORGAN



BILL SHRAGGE



LYLL HIGGINSON



MARK VIMR



JOANN TRYPUC

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Leadership and learning are indispensable to each other.¹

You should know about the Canadian Society of Physician Executives. Current developments in Canadian health system reform have created unique opportunities for physician managers to assume leadership roles in shaping the system(s) of the future. Clinicians are assuming leadership and managerial positions requiring new (certainly modified) attitudes and behaviours. Sometimes, "on the job" management experience is available. But, all too often, physicians assume such positions with limited management training and physician-centred professional development opportunities or resources for leading-edge health management practices are few. With this in mind this new society has been established.

The Canadian Society of Physician Executives exists:

- to support and develop physicians to be successful leaders in health management
- to support physicians in their roles as physician managers
- to provide a forum for educational and networking interaction between and among physician executives
- to work closely with the Physician Manager Institute in the development of educational programs

This is an opportunity for physicians to work with a society that has affiliate organizations worldwide, to participate in life-long learning with established university and institute programs and to share challenges with peers from coast to coast.

The driving force behind the organization is Dr. Chris Carruthers, Chief of Staff, The Ottawa Hospital. For more information you can email him at: ccmd@home.com. To learn from the web go to: www.cma.ca/cspe/

¹ from remarks prepared for delivery by John F. Kennedy, November 1963

FORUM FOR CEO'S MORE INFORMATION? EBELL@OHA.COM

SEPT 6-7,
2001