20 years of the Cardiac Care Network in Ontario: Past, Present and Future
DISCLOSURE

- I do not have any current relationships with members of the pharmaceutical or commercial industries.
Objectives

1. Provide a brief overview of the history and background of the Cardiac Care Network
2. Profile current operations and activities
3. Contemplate the future of the Cardiac Care Network
4. Discussion
The Past
TORONTO STAR reports Mr. Charles Coleman suffered heart attack and dies December 1988 (cardiac surgery had been postponed 11 times).
Background

- In response to cardiac surgery crisis the Ministry of Health responded by:
  - Launching investigation into cardiac surgery made by Order in Council (January 12, 1989).
  - Funding the Metropolitan Toronto Triage and Registry Program
  - Supporting the Urgency Rating Consensus Panel to determine and standardize a patient’s urgency for surgery and define recommended maximum wait times
Key Recommendations of the Report:

- Expand the Metro Triage Program provincially
- Establish a provincial forum of cardiac care providers
- Gather standardized data on all patients awaiting cardiac surgery using an objective ranking system
- Appoint a person within the hospital cardiac program (nurse clinician) to communicate with the patient and facilitate access, referrals, data collection and wait list management
- Provincial Working Group on Cardiovascular Services (Keon Committee) was appointed to develop a plan for a comprehensive provincial cardiac program
- Provincial Adult Cardiac Care Network established 1990
Provincial Advisory Group for Cardiovascular Services (1990)

- Dr. Wilbert J. Keon (University of Ottawa Heart Institute)
- Ms. Kathryn E. Chesnick (Kingston General Hospital)
- Ms. Lois E. Dwan (The Toronto Hospital)
- Ms. Rosemary Leach (Heart and Stroke Foundation of Ontario)
- Ms. Lee Noble (The Toronto Hospital)
- Dr. Andrew Pipe (University of Ottawa Heart Institute)
- Mr. Graham Stein (Service Corp. Int’L Canada Ltd.)
- Dr. Alnoor Abdulla (Sudbury Memorial Hospital)
- Mr. Peter H. Desbarats (Dean, Graduate School of Journalism University of Western Ontario)
- Dr. Douglas C. Kittle (Haldimand-Norfolk Regional Health Dept.)
- Dr. F Neil McKenzie (University Hospital)
- Dr. William E. Noonan (Hamilton Civic Hospitals)
- Dr. Tomas A. Salerno (University of Toronto)
- Mr. Gordon Kumagai (MOHLTC)
- Dr. Ronald Baigrie (Sunnybrook Health Science Centre)
- Mr. Robert I. Duddy (Hiram Walker & Sons Ltd.)
- Ms. Judy Kojlak (Victoria Hospital)
- Dr. C. David Naylor (Sunnybrook Health Science Centre)
- Mr. Patrick O'Sullivan (Heart Health)
- Dr. Michael J. Sole (The Toronto Hospital)
Provincial Advisory Group: Original Mandate

Establish short and long term goals in 7 key areas:

1. Provincial registry and triage program
2. Standard guidelines and definitions
3. Surgical personnel requirements
4. Communication
5. Appropriate performance targets
6. Educational programs
7. Prevention
Cardiac Care Network of Ontario

- Established in 1995 (evolved from PACCN)
- Incorporated July 14, 2003
  - Separate legal personality
  - Limited liability
  - Not for profit
- Members of network are hospitals (adult) that provide one of the following: cardiac catheterization, PCI, cardiac surgery
- Two levels of membership, depending on services provided
- Voting rights for members – Annual General Meeting
- Participation Agreements held between CCN and Members
Cardiac Care Network and the MOHLTC

- MOHLTC funds CCN
- Accountability Agreement renewed each year
- CCN role defined as Advisor to MOHLTC
- “Agency” – refers to provincial government organization
  - Established by the government but is not part of a ministry
  - Accountable to the government
  - To which the government has assigned, delegated the authority and responsibility which otherwise has authority and responsibility to perform a public function or service
The Present
Advanced Cardiac Procedures

- Cardiac Surgery
- Percutaneous Coronary Intervention
- Diagnostic Cardiac Cath
- Electrophysiology Services (incl. ablation)
- ICDs
- Transcatheter Aortic Valve Procedures
- Primary PCI
<table>
<thead>
<tr>
<th><strong>CCN Member Hospital in Ontario</strong></th>
<th>Cath</th>
<th>PCI</th>
<th>OHS</th>
<th>EP</th>
</tr>
</thead>
<tbody>
<tr>
<td>William Osler Health Centre</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamilton Health Sciences</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
</tr>
<tr>
<td>Kingston General Hospital</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>St. Mary's General Hospital</td>
<td>☑</td>
<td></td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>London Health Sciences Centre</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Trillium Health Network</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Southlake Regional Health Centre</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>University of Ottawa Heart Institute</td>
<td>☑</td>
<td>☑</td>
<td>♀</td>
<td></td>
</tr>
<tr>
<td>Peterborough Regional Health Centre</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sault Area Hospital</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hôpital Régional de Sudbury Regional Hospital</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rouge Valley Health System (Centenary)</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toronto East General Hospital</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Michael's Hospital</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>University Health Network</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>Sunnybrook Health Sciences Centre</td>
<td>☑</td>
<td>☑</td>
<td>♀</td>
<td></td>
</tr>
<tr>
<td>Thunder Bay Regional Health Sciences Centre</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hôtel-Dieu Grace Hospital</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Adult Cardiac Services Procedure Volumes in Ontario (Fiscal Years 2007/08, 2008/09 & 2009/10)

<table>
<thead>
<tr>
<th>Procedure</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiac Cath</td>
<td>56,863</td>
<td>58,517</td>
<td>60,134</td>
</tr>
<tr>
<td>PCI</td>
<td>18,667</td>
<td>19,844</td>
<td>21,108</td>
</tr>
<tr>
<td>% of PCI cases using DES</td>
<td>39.20%</td>
<td>40.70%</td>
<td>43.89%</td>
</tr>
<tr>
<td>OHS (total)</td>
<td>11,273</td>
<td>11,015</td>
<td>11,018</td>
</tr>
<tr>
<td>Isolated CABG</td>
<td>7,369</td>
<td>6,729</td>
<td>6,587</td>
</tr>
<tr>
<td>EP - diagnostic</td>
<td>3,407</td>
<td>3,084</td>
<td>3,659</td>
</tr>
<tr>
<td>EP - ablation</td>
<td>2,678</td>
<td>2,873</td>
<td>3,023</td>
</tr>
<tr>
<td>ICD</td>
<td>3,027</td>
<td>2,782</td>
<td>3,110</td>
</tr>
<tr>
<td>TOTAL</td>
<td>103,284</td>
<td>104,844</td>
<td>108,639</td>
</tr>
</tbody>
</table>
CCN Cardiac Registry System

1. Referral received for:
   - Cath/PCI
   - Cardiac Surgery
   - EP
   - ICD

2. Referral triaged/processed by RCCC
   - Off-listing and Procedure details

3. Data received from hospital by central host

4. Daily data extract from central host to CCN

5. CCN provides daily data transfer and report access to hospitals
Data Definitions – Work in Progress

CCN CARDIACCESS
DATA DEFINITION REVIEW

FINAL REPORT AND RECOMMENDATIONS

October 2005

The Cardiac Care Network of Ontario
221 Yonge St., Suite 201
Toronto, Ontario, M2P 2A9

CCN Software Application
Data Definitions & Data Dictionary
Revised April 2010
Top 10 Priorities

1. Enhance CCN operational platform
2. Review/revise data sharing agreements
3. Complete project – VRPO
4. Focus on cardiac services funding and infrastructure
5. Upgrade software application to Version 3.0
6. Improve data quality, update data definitions
7. Validate URS/RMWT for cardiac surgery
8. Review deaths on waitlist
9. Build partnerships
10. Advance beyond wait times
Governance

2000
- Board of Directors
- Executive Committee
- Clinical Services Committee
- Informatics Committee
- RCCC Committee

2010
- Board of Directors
- Executive Committee
- Research & Publications Committee
- RCCC Committee
- Hospital Administrators
- Clinical Subspecialty Working Groups
- Ad hoc panels as required
CCN Working Groups/Committees (2010)
Other Organizations

- Canadian Cardiovascular Society
- Institute Clinical Evaluative Sciences
- Programs for Assessment of Technology in Health
- Ontario Health Technology Advisory Committee
- Ontario Health Quality Council
- Canadian Institute Health Information
- Canadian Association Cardiac Rehabilitation
- Heart & Stroke Foundation of Ontario
- Ontario Stroke Network
- Inter-provincial organizations
The Future
Has CCN Made a Difference?

- Improved patient access to cardiac services
- Standardized processes established for referral and triage
- Formalized a joint approach to implementing a system of cardiac services in Ontario
- Enhanced decision making and advice by way of evidence, consensus driven methods and Expert Panels
- Created a provincial cardiac registry with selective public reporting
- Facilitated an “Early Warning System” to identify potential problems and issues within the cardiac services system
- Recognized nationally and internationally for efforts
Can CCN Continue to Make a Difference?

- Evolve from procedure focus to patient focus
- Incorporate key metrics related to heart failure, post AMI care
- Focus on patient outcomes
- Report in real time...or close to real time
- Expand membership to include referral and repatriation hospitals
- Emphasize system integration
- Expand public reporting
- Determine the role of CCN in cardiac services planning (e.g., MOHLTC, LHIN)
- Identify and address areas for system wide quality improvements
- Leverage technology (electronic referral, web-based systems)
What About the Critics?

- “CCN is a front for clinicians who just want to do more procedures.”
- “CCN is just a group of cardiac surgeons with vested interests.”
- “We don’t need the CCN, we have the Heart and Stroke Foundation.”
- “I question whether [cardiovascular] chronic disease management is any of their business.”
- “There are no issues with cardiac services in Ontario therefore we no longer need the CCN.”
What do you think?
Evolution of Technology

1980

1990

2000

2009

CARDIAC CARE NETWORK
Evolution of Cardiac Care Network of Ontario
The next 10 years...

1990 → 2000 → 2010 → ?
Contact Information

Jim Pagiamtzis
Director Operations and Stakeholder Relations
jpagiamtzis@ccn.on.ca
416-512-7472