

Table 2: Approach to managing waiting lists for cardiac catheterization

- Comprehensive assessment of key baseline risk factors
- Thorough noninvasive provocative stress testing
- Optimization of medical therapy, including evaluation of clinical response
- Systematic monitoring of waiting list, with appropriate reclassification as required
- Audit, feedback and dissemination of waiting lists and times
- Seamless movement to percutaneous coronary revascularization at the time of angiography if appropriate or triage to surgical revascularization

in the evaluation of patients awaiting cardiac catheterization. Systematic monitoring that is open and disseminated, with audit and feedback driving timely and effective triage, is the preferred method for the engagement of high-quality professionals working among rationally distributed resources. Over 5 years ago, a Canadian Cardiovascular Society national consensus conference examined this issue and called urgently for a national registry to collect accurate prospective data on performance characteristics and waiting times.¹⁰ Both that time and some patients have since expired: the book is overdue.

Dr. Ezekowitz is CIHR/TORCH Strategic Training Fellow and Dr. Armstrong is Professor of Medicine (Cardiology), the Division of Cardiology, Department of Medicine, University of Alberta, Edmonton, Alta.

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References

1. Natarajan MK, Mehta SR, Holder DH, Goodhart DR, Gafni A, Shilton D, et al. The risks of waiting for cardiac catheterization: a prospective study. *CMAJ* 2002;167(11):1233-40.
2. FRagmin and Fast Revascularisation during InStability in Coronary Artery Disease Investigators. Invasive compared with non-invasive treatment in unstable coronary-artery disease: FRISC II prospective randomised multicentre study. *Lancet* 1999;354:708-15.
3. Fitchett D, Goodman S, Langer A. New advances in the management of acute coronary syndromes: 1. Matching treatment to risk. *CMAJ* 2001; 164(9):1309-16.
4. Knudtson ML. Waiting list issues. *Can J Cardiol* 1997;13(Suppl D):67D-72D.
5. Hadorn DC, the Steering Committee of the Western Canada Waiting List Project. Setting priorities for waiting lists: defining our terms. *CMAJ* 2000;163(7):857-60.
6. Sanmartin C, Shortt SE, Barer ML, Sheps S, Lewis S, McDonald PW. Waiting for medical services in Canada: lots of heat, but little light. *CMAJ* 2000;162(9):1305-10.
7. Alter DA, Basinski ASH, Cohen EA, Naylor CD. Fairness in the coronary angiography queue. *CMAJ* 1999;161(7):813-7.
8. Cannon CP, Weintraub WS, Demopoulos LA, Vicari R, Frey MJ, Lakkis N, et al. Comparison of early invasive and conservative strategies in patients with unstable coronary syndromes treated with the glycoprotein IIb/IIIa inhibitor tirofiban. *N Engl J Med* 2001;344:1879-87.
9. Moss AJ, Zareba W, Hall WJ, Klein H, Wilber DJ, Cannom DS, et al. Prophylactic implantation of a defibrillator in patients with myocardial infarction and reduced ejection fraction. *N Engl J Med* 2002;346(12):877-83.
10. Higginson LA, Naylor CD. Rates of cardiac catheterization, coronary angioplasty and coronary artery bypass surgery in Canada. *Can J Cardiol* 1997; 13(Suppl D):47D-52D.

Correspondence to: Dr. Paul W. Armstrong, 2-51 Medical Sciences Building, University of Alberta, Edmonton AB T6G 2H7; fax 780 492-9486; paul.armstrong@ualberta.ca

Organ and tissue donation in the intensive care unit

Graeme M. Rocker,
for the Canadian Critical Care Society Working Group on Organ and Tissue Donation

When patients will not survive (e.g., after severe head injuries), intensive care unit (ICU) teams face the challenge of conducting empathetic, honest and compassionate discussions about organ and tissue donation with grieving families. Sometimes we fail to approach all families and neglect to seek consent for organ donation in all eligible circumstances. In consequence, alternative ways to achieve improved rates of consent to organ and tissue donation within ICUs have been proposed. In the United States, for example, these initiatives include mandating representatives of transplant procurement organizations rather than ICU or hospital-based teams to inter-

act with families at the time of death in the ICU. In Canada, other initiatives have resulted in provincial legislation that requires ICU physicians to provide outside agencies with details of patients nearing death — details that would traditionally remain confidential. This particular requirement has proved to be the most contentious for critical care specialists.

The irony is that ICU physicians are as committed as any to the concept of successful organ and tissue donation, but we act and must act in the interests of our patient — the potential donor in the ICU — and his or her family. Transplant surgeons and transplant organizations have

concerns that understandably focus on other patients and on the increasingly lengthy transplantation waiting lists. These inherent differences are not irreconcilable. They simply underpin the need for our respective professional organizations to collaborate on all issues of organ and tissue donation and to do so in an atmosphere of understanding, mutual trust and respect.

To this end, the Canadian Critical Care Society (CCCS) has produced a position paper on organ and tissue donation that outlines how we should proceed with these issues. In January 2001, the CCCS created a working group selected on the grounds of clearly stated interest and expertise in organ and tissue donation. It comprised 2 ethicists, one health law expert, 2 members of the public (one representing a donor family and one, a recipient) and 8 ICU physicians from geographically diverse locations representing tertiary and community centres. The participants are listed at the end of this article. An executive summary of the position paper may be found on the Web site of the CCCS (<http://www.canadiancriticalcare.org>).

We strongly support collaborative initiatives to develop, implement and evaluate processes to increase organ and tissue donation within sound ethical and legal frameworks. We want the option of organ and tissue donation to be offered to all eligible families and to be considered as a standard component of quality end-of-life care in the ICU. We need to obtain accurate and meaningful data on current organ and tissue donation rates. We need to know how many patients become truly eligible organ donors (taking into consideration cultural diversity) and how many patients' families are approached and consent to organ donation. These data are much more pertinent and compelling than the number of organ donors per million population, and they allow for more appropriate comparisons within Canada and between Canada and other nations. The CCCS applauds attempts to improve organ and tissue donation rates through institutional quality improvement and educational endeavours.¹ We encourage a broad approach to address difficult societal and ethical issues such as conflict between a patient's previously expressed desire to become an organ donor and the subsequent wishes of family members. We point out in the position paper some flaws in current provincial legislation regarding mandatory reporting. We continue to recognize brain death as the sole criterion for cadaveric organ donation.² We do not currently support non-heart-beating donor (NHBD) protocols (currently accepted practice in the Netherlands and some North American centres) that are implemented after a cardiovascular death and require urgent instrumentation and manipulation of the body of the recently deceased.³ We question whose interest this serves.⁴ We do, however, call for far more detailed public and professional debate of issues such as NHBD protocols⁵ and of concepts such as extending mechanical ventilation specifically for the purpose of organ donation.⁶

We expect challenges to our position paper. This is as it

should be. We need healthy debate and effective collaborative national initiatives. We are delighted that such initiatives are underway and gaining momentum (e.g., the formation of the Canadian Council for Organ Donation and Transplantation). Meanwhile we recognize that organ transplant remains a gift and not a right. Until this changes — if society ever mandates such a change — our focus in the ICU remains on achieving outcomes of quality for lives preserved⁷ and, for patients who will not survive, the best possible death.⁸ Within the context of aiming for excellence in end-of-life care, we are committed to the collaborative goal of optimal organ and tissue donation rates.

Dr. Rocker is Associate Professor of Medicine, Dalhousie University, Halifax, NS

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References

1. Tsai E, Shemie SD, Cox PN, Furst S, McCarthy L, Hebert D. Organ donation in children: role of the pediatric intensive care unit. *Pediatr Crit Care Med* 2000;1:156-60.
2. Lazar NM, Shemie S, Webster GC, Dickens BM. Bioethics for clinicians: 24. Brain death. *CMAJ* 2001;164(6):833-6.
3. Campbell GM, Sutherland FR. Non-heart-beating organ donors as a source of kidneys for transplantation: a chart review. *CMAJ* 1999;160(11):1573-6.
4. Dossetor JB. Death provides renewed life for some, but ethical hazards for transplant teams. *CMAJ* 1999;160(11):1590-1.
5. Recommendations for nonheartbeating organ donation. A position paper by the Ethics Committee, American College of Critical Care Medicine, Society of Critical Care Medicine. *Crit Care Med* 2001;29(9):1826-31.
6. Browne A, Gillett G, Tweeddale M. The ethics of elective (non-therapeutic) ventilation. *Bioethics* 2000;14(1):42-57.
7. Dunstan GR. Hard questions in intensive care. *Anaesthesia* 1985;40:479-82.
8. Smith R. A good death. An important aim for health services and for us all. *BMJ* 2000;320(7228):129-30.

Correspondence to: Dr. Graeme M. Rocker, Rm. 4457, Halifax Infirmary, 1796 Summer St., Halifax NS B3H 3A7

Working group participants:

Bioethics: Dr. Kerry Bowman, Mount Sinai Hospital and the Joint Centre for Bioethics, University of Toronto, Ont.; Dr. Alister Browne, Langara College, Vancouver, BC; **Health law:** Dr. Jocelyn Downie, Director, Health Law Institute, Dalhousie University, Halifax, NS; **Families:** Lois Scott, family representative of an organ recipient, NB; Diane Craig, family representative of an organ donor, Ont.; **Canadian Critical Care Society (CCCS) participants:** Dr. Graeme Rocker (chair), Intensive Care Program, Queen Elizabeth II Health Sciences Centre, Halifax, NS; Dr. Paul Boiteau, CCCS President (2000–2002), Department of Critical Care Medicine, Calgary Health Region, National Coordinating Committee representative, Calgary, Alta.; Dr. Peter Dodek, Intensive Care Unit, St. Paul's Hospital, Vancouver, BC; Dr. Christopher Doig, Department of Critical Care Medicine, Calgary Health Region, Calgary, Alta.; Dr. Catherine Farrell, Pediatric ICU, Hôpital Sainte-Justine, Montreal, Que.; Dr. Giuseppe Pagliarello, the Ottawa Hospital Organ and Tissue Procurement Program, Ottawa, Ont.; Dr. Sam Shemie, Department of Critical Care Medicine, Hospital for Sick Children, Toronto, Ont., currently Division of Pediatric Critical Care, Montreal Children's Hospital, McGill University Health Centre, Montreal, Que.; Dr. Gordon Wood, Intensive Care Unit, Victoria General Hospital, Victoria, BC