



Centre universitaire de santé McGill
McGill University Health Centre

TAU

Annual Report

April 2004 - April 2005

Technology Assessment Unit (TAU)
McGill University Health Centre - Royal Victoria Hospital
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Mission Statement

To advise the hospital in difficult resource allocation decisions, using an approach based on sound, scientific technology assessments, and a transparent, fair decision-making process. Consistent with its role within a University Health Centre, it will publish its research when appropriate, and contribute to the training of personnel in the field of health technology assessment.

TAU Committee

Juliana Arnoldo
Multidisciplinary Council

André Bonnici
P&T Committee

Pierre Ernst MD
Clinical Epidemiology

John Johnston
Patients' Committee

Marilyn Kaplow
Quality Management

Gary Pেকেles MD
Paediatrics

Gary Stoopler
Administration

Jeffrey Barkun MD
Surgery

James Brophy MD PhD
Director - TAU

James Hanley (sabbatical)
Clinical Epidemiology

Maurice McGregor MD
Chair - TAU

Judith Ritchie PhD
Council of Nurses

Donatella Tampieri MD
Council of Physicians, Dentists & Pharmacists

Dr. Fred Salevsky left our committee in 2004. We would like to gratefully acknowledge his expert assistance and generous support during his involvement in the TAU Committee. Dr. Donatella Tampieri has kindly accepted to be the representative of the Council of Physicians, Dentists & Pharmacists and Dr. Pierre Ernst has kindly accepted to replace Dr. James Hanley while he is on sabbatical for one year.

Staff

The TAU currently has one full-time research assistant/epidemiologist, two part-time research scientists, one health economist (consultant) and one administrative/research assistant on staff.

Name	Position
Dr James Brophy	Director
Vania Costa	Research Assistant
Dr Nandini Dendukuri	Research Scientist
Dr Lonny Erickson	Research Scientist
Dr Maurice McGregor	Consultant
Lorraine Mines	Administrative Assistant
Dr John Penrod	Health economist (consultant)

TAU Reports (April 2004-April 2005)

NOTE: Projects are researched and drafts prepared by members of TAU, referred to below as "the authors". They are assisted by expert consultants appointed for each project. Draft reports are then circulated, reviewed, amended and finally approved by the full Committee who become the authors of the final report. In the past year of the following six reports have been approved:

STEM CELLS

<i>Requestor:</i>	Mr. Gary Stoopler , Administrative Director, Medicine, Surgery and Women's Health
<i>Title:</i>	Transplantation of Allogeneic Hematopoietic Stem Cells from Unrelated Donors in Adult Patients at the MUHC
<i>Publication date:</i>	April 2005
<i>Author(s):</i>	Vania Costa MSc - Research Assistant/Epidemiologist - TAU James Brophy MD PhD - Cardiology and Clinical Epidemiology Maurice McGregor MD - Cardiology.
<i>Consultants:</i>	Ahmed Galal MD, Pierre Laneuville MD, David Mitchell MD
<i>Background:</i>	This technology assessment was carried out to evaluate the use of umbilical cord blood as an alternative source for hematopoietic stem cell transplantation.
<i>Recommendation(s):</i>	<u>Recommendation 1.</u> The MUHC should urgently seek designated funding to enable it to offer this technology to appropriate patients and to support a transplant centre of sufficient quality to maintain good clinical outcomes and to assure the accreditation on which the future supply of donor cells will depend <u>Recommendation 2.</u> While maintaining approximately the same total number of stem cell transplants per year, the modest budget increase that would result from carrying out approximately 10 cord blood procedures per year should be accepted. <u>Recommendation 3.</u> All stem cell transplants carried out at the MUHC should take place in one designated centre.

Recommendation 4. It is recommended that no significant increase in stem cell transplantation be authorized in the absence of additional funding.

PROBIOTICS

Requestor: Dr. Françoise Chagnon, Director of Professional Services.
Title: **The Use of Probiotics in the Prevention and Treatment of *Clostridium Difficile* Diarrhea.**
Publication date: March 2005
Author(s): Nandini Dendukuri PhD – Research Scientist - TAU
 Vania Costa MSc - Research Assistant/Epidemiologist - TAU
 James Brophy MD PhD - Cardiology and Clinical Epidemiology
 Maurice McGregor MD - Cardiology
Consultants: Sandra Dial, MD
Background: This technology assessment was carried out to evaluate the evidence in favour of the use of probiotics for prevention and treatment of *C Difficile* diarrhea [CDAD] in adults.
Recommendation(s): **It is recommended that the MUHC does not adopt the use of probiotics for the prevention or treatment of CDAD at the present time. The literature should be re-evaluated as more evidence becomes available.**

MATRIX COILS

Requestor: Dr. Ewa Sidorowicz, Assistant Director , Professional Services
Title: **The Use of Matrix Coils in the Treatment of Cerebro-vascular Aneurysms.**
Publication date: June 2004
Author(s): Vania Costa MSc - Research Assistant/Epidemiologist - TAU
 James Brophy MD PhD - Cardiology and Clinical Epidemiology
Consultants: Donatella Tampieri MD, John Penrod PhD
Background: The objective of this report is to compare the use of the Matrix Detachable Coil with the Guglielmi Detachable Coil (GDC), which up to now has been the standard treatment used in the MUHC, in regard to its long-term efficacy and costs.
Recommendation(s): **The TAU considers that although unpublished reports are promising, up to this time, additional health benefits with the Matrix coils have not been demonstrated. The TAU has previously considered such issues and has come to the conclusion that leadership in an academic hospital is not best demonstrated by adopting the use of “leading edge” technologies before the benefits have been clearly established. Leadership is better demonstrated by refusing to adopt such technologies as the accepted standard of care and by encouraging research to clarify the issue.**
Consequently, despite the relatively low budget impact, the TAU does not recommend the purchase of the Matrix coils for routine patient care at this time. In addition, the TAU strongly encourages further research with this technology and notes that due to the low budget impact of the Matrix coil and its presumed safety, the burden of proof required to demonstrate its clinical superiority need not be extensive. Finally, as with all health technology assessments (HTAs), this position will need to be re-evaluated as more evidence becomes available.

GASTRIC BANDING

Requestor: Dr. Françoise Chagnon, Director of Professional Services
Title: **The Gastric Banding Procedure: An Evaluation**
Publication date: April 2004
Author(s): Jun Chen MB MSc - Research Assistant/Epidemiologist – TAU
 Maurice McGregor MD - Cardiology
Consultants: L.D. McLean MD, N. Christou MD
Background: This report has been prepared in response to a request by the Director of Professional Services of the MUHC to carry out an evaluation of the Laparoscopic Adjustable Gastric Banding (LAGB) procedure for morbid obesity, giving particular attention to its efficacy and safety, the quality of

the evidence on which these evaluations are based, the costs, and how the cost compares with that of the most used alternative procedure.

Recommendation(s): In view of the fact that an effective alternative procedure exists, the TAU Committee recommends that until the LAGB procedure has been approved by Québec it should not be routinely carried out at the MUHC. It should only be carried out in exceptional circumstances, when in the opinion of the Surgeon it would carry a significantly lower risk than the LR-en-Y procedure.

TAU Current Projects

1. Spinal Surgery Monitoring
2. VAC (Vacuum Assisted Closure)
3. Cerebral Microdialysis

Establishing a Joint CHUM / MUHC TAU

TAU has negotiated throughout the past year with the designated representatives of the CEO from the Centre Hospitalier du Montréal (CHUM) and the McGill University Health Centre (MUHC) to arrive at an agreement in principle for a joint TAU. This joint unit will respect the goals of “complémentarité” that the Quebec government desires between the two university hospital centers. In principle, this joint unit which will be situated at the MUHC will begin operation in the next fiscal year. This will require expansion both of our physical location as well as our personnel. The draft of this agreement is available upon request from Normand Rinfret.

Evaluation of the impact of TAU reports

In the 2004 annual report, we reported the financial impact, as assessed by independent evaluators, of our first 11 projects at between 2-3 million dollars. Follow-up with the requestors of both previous and 2004-05 reports indicates that the hospital has continued to follow all TAU recommendations with one exception. Discussions with the chief of cardiology, Dr. Genest, suggests that while the TAU report on biventricular pacing has had a substantial impact, adhesion to our recommendations has not been perfect. Nevertheless, the saving estimated in the 2004 report are generally felt to be recurrent.

TAU Scientific Activities

As TAU gains maturity, it is being increasingly recognized as an innovative and effective model for health technology assessment. This recognition has taken several avenues.

1. Our reports are now indexed in the international database for the Center for Reviews and Dissemination managed by York University, UK
(<http://www.york.ac.uk/inst/crd/crddatabases.htm>)
2. Invitation (Dr. McGregor) by DACEHTA, The Danish Center for Evaluation and HTA, to visit Copenhagen and Aarhus, Denmark, Oct. 2004.
3. Invitation (Dr. McGregor) to evaluate the Nijmegen Center for Evidence Based Practice, Nijmegen, The Netherlands.
4. Invitation (Dr. McGregor) to present the TAU experience and to teach at the Executive Training for Research Application [EXTRA] program for Health Executives, Banf. Aug 26, 2004
5. Interaction with the Quebec Health Technology Assessment Agency (AETMIS) to assist other Quebec institutions establish their own local units
6. Invitation (Dr. McGregor) to present the TAU experience and discuss HTA with the Capital Health Joint HTA Planning Session, May, 2004, Edmonton
7. Accepting two international doctoral students for 6 month training program in health technology assessment (August-December 2005)
8. Two recent successes in obtaining peer review funding from the Canadian Coordinating Office for Health Technology Assessment (CCOHTA) for research in health technology assessment.
9. Numerous scientific publications (see next section for details)

TAU Scientific Publications

Abstracts.

1. McGregor M, Costa V, Dendukuri N, Erickson L, Chen J, Mines L, Brophy JM. Technology Assessment Unit, McGill University Health Centre. Can Health Services Research Foundation 7th Annual Invitational Workshop - Leveraging Knowledge: Tools & Strategies for Action. Montreal March 3, 2005.

2. Mittmann N, Seung SJ, Brown A, Coyle D, Brophy JM, Title L, Cohen E. Economic evaluation of coated stents. Canadian Cardiovascular Society Annual Meeting October 2004. Calgary Alberta.
3. McGregor M., Brophy J. Health Technology Assessment (HTA). A Central or Peripheral Activity? Health Technology Assessment International. June 2, 2004. Kraków Poland.
4. McGregor M.. How can we get Technology assessments to influence health policy and clinical policy? The Annual Meeting of Danish Center of Evaluation and HTA Oct 6, 2004. Aarhus, Denmark
5. McGregor M.. For greater impact we should develop more HTAs closer to the end-user. Joint HTA planning session. Capital Health, Edmonton, May 2004..

Peer Review Publications.

1. McGregor M., Jun Chen. Should the Implantable Cardiac Defibrillator be used for primary prevention of sudden death? A review of issues relevant to hospital decisionmaking. Canadian Journal of Cardiology 2004;20:1199-204.
2. Brophy JM, Erickson L. Cost-effectiveness of drug-eluting coronary stents in Quebec. International Journal of Health Technology. Scheduled Summer 2005.
3. Brophy JM, Joseph, L. Medical Decision Making with Incomplete Evidence – Choosing a Platelet Glycoprotein IIb/IIIa Receptor Inhibitor for Percutaneous Coronary Interventions . Medical Decision Making 2005;25:222-8.
4. McGregor M, Brophy JM. End-user involvement in HTA development. A way to increase impact. Int J Health Tech Assessment. In Press..

ACKNOWLEDGMENT

"(I)t does not make sense to ask whether a particular rationing decision is right... .., one asks whether the decision was made in the right way". A good process "promotes the consistency, and thus the fairness, of treatment; it makes rationing more visible; it reduces the burden on individual physicians; and it enhances the accountability of doctors and the medical profession" [Hoffmaster. Can J Cardiol 2000;16:1313]

The TAU is a unique example of an attempt to adjust the services we offer to conform to the resources available in a logical, fair, and consistent fashion. While some of our decisions have not supported the acquisition of a technology, and have thus "saved money", others have supported new developments because they have identified the benefits, and found them to be sufficient to justify the increased expenditure. Our sincere thanks are due to the many members of the MUHC who have assisted with data collection, to those who have served as Consultants, and to the members of the Committee who have dedicated many hours to the consideration of these problems.

Maurice McGregor.