



ACHORD

Alliance for Canadian Health
Outcomes Research in Diabetes

A New Website and Image for ACHORD

Inside this issue:

Report from the Chair	2
Project Highlights	2
Recent Literature	3
Meet the Staff	3
Events and Contacts	4

ACHORD is proud to announce the launch of our new website, www.achord.ca. The website is designed to promote dissemination of ACHORD's research and training activities, as well as to enhance communication amongst ACHORD members. The website contains information on ACHORD's investigators, staff, goals, research projects, publications and funding sources. The latest ACHORD updates and announcements can also be found on the site. In addition, the website provides valuable links to other research related sites and houses current and past versions of the ACHORD newsletter.

Along with the website, ACHORD has a new image. The new logo was developed with the concept of 'Canadian research which affects people' in mind. This resulted in the creation of a stylized person imbedded in the maple leaf surrounded by 2 smaller leaves, representing the Canadian population.

ACHORD is excited to be on the World Wide Web and hopes that our new website and image will promote awareness of the diabetes health outcomes research being conducted.

ACHORD: Seen and Heard

Publications:

Toth EL, Majumdar SR, Guirguis LM, Lewanczuk RZ, Lee TK, Johnson JA. Compliance with Clinical Practice Guidelines for Type 2 Diabetes in Rural Patients: Treatment Gaps and Opportunities for Improvement. *Pharmacotherapy* 2003;23:659-665.

Mitchell CG, Simpson SH, Johnson JA. The cost of diabetes testing strips in Saskatchewan, 1996: A retrospective database analysis. *Canadian Journal of Diabetes* 2003; 27:149-153.

Simpson SH, Jacobs P, Corabian P, Johnson JA. The cost of major co-morbidities in a cohort of Saskatchewan residents with diabetes, 1996. *CMAJ* 2003;168:1661-1667.

Presentations:

Johnson JA. Health-Related Quality of Life and Fear of Hypoglycemia in Islet Transplantation. United Kingdom Islet Transplant Consortium, Diabetes UK, London, September 15, 2003.

Eurich DT, Majumdar SR, Tsuyuki RT, Johnson JA. ACE Inhibitor Therapy for Primary Prevention of Cardiovascular Morbidity and Mortality in Patients with Type 2 Diabetes. CDA/CSEM (Canadian Diabetes Association Professional Conference & Annual Meeting, Ottawa, ON, Oct. 15 - 18, 2003). [*Canadian Journal of Diabetes* forthcoming].

Maddigan S, Johnson JA. Determinants of Perceived Need and Intention to Adopt Healthier Lifestyle Choices in Individuals with Diabetes. CDA/CSEM (Canadian Diabetes Association Professional Conference & Annual Meeting, Ottawa, ON, Oct. 15 - 18, 2003). [*Canadian Journal of Diabetes* forthcoming].

Supina A, Majumdar SR, Guirguis L, Lewanczuk R, Lee TK, Toth E, Johnson JA. Treatment Gaps in Hypertension in Type 2 Diabetes in Northern Alberta: Data from the DOVE Study. CDA/CSEM (Canadian Diabetes Association Professional Conference & Annual Meeting, Ottawa, ON, Oct. 15 - 18, 2003). [*Canadian Journal of Diabetes* forthcoming].

Brown L, Johnson JA, Majumdar S, Tsuyuki R, McAlister F. Suboptimal Management of Cardiovascular Risk in Diabetic Patients with Atherosclerotic Disease. CDA/CSEM (Canadian Diabetes Association Professional Conference & Annual Meeting, Ottawa, ON, Oct. 15 - 18, 2003). [*Canadian Journal of Diabetes* forthcoming].

Klinke JA, Johnson JA, Guirguis LM, Toth EL, Lee TK, Lewanczuk RZ, Majumdar SR. Underuse of aspirin therapy in patients with type-2 diabetes mellitus. Canadian Diabetes Association, Ottawa ON, October 15-18, 2003. [*Canadian Journal of Diabetes* forthcoming].

Report from the Chair



September brings us another academic year. In this coming year, the ACHORD research program will continue to grow. Our big news recently has been the launch of our new website. This will be a great mechanism for further dissemination of our research and training activities in diabetes health outcomes. I am also pleased to report that we were recently awarded one of the research grants we applied for from CIHR – to assess the epidemiology of depression in people with diabetes, and are awaiting the results of the second grant, to support our work on estimating the cost-effectiveness of community-based diabetes prevention programs. In the past few months we have been working on the quality indicators set for diabetes project, holding a teleconference for consensus building on the appropriate indicator set. Our next steps will be to define measures and targets for these indicators. We hope to complete this process before the end of this year.

The ACHORD research training program continues to grow. Dean Eurich, who recently completed his MSc in Pharmacy with ACHORD, has continued on and is now beginning his PhD in Public Health Sciences. Nan Luo, who is profiled in this issue of the newsletter, recently joined the group as a post-doctoral fellow.

We are now busy preparing for presentations at the upcoming CDA/CSEM meeting in Ottawa, October 15-18. We were fortunate to have 4 abstracts accepted at this meeting, giving us a chance to share our research work with a large Canadian audience.

Finally, I want to congratulate two of our colleagues in the ACHORD group, Drs. Sumit Majumdar and Scot Simpson, who both had new additions to their families last month.

Project Highlights: DOVE Follow-up Diabetes Outreach Van Enhancement Study

The Diabetes Outreach Van Enhancement (DOVE) study was designed to improve the care of patients with type 2 diabetes in Northern Alberta through a diabetes outreach service. It was conducted in two health authority regions - Keeweenok Lakes and Peace Regional Health Authorities (RHA). The DOVE study was originally designed as a crossover study. In the first phase, the diabetes outreach service was provided to the Peace RHA, with Keeweenok Lakes RHA serving as the control. In the second phase of the DOVE study, Keeweenok Lakes RHA received the diabetes outreach service. The diabetes outreach service completed a total of 6 visits within each region beginning in the summer of 2000. The main results, which are to be published in an upcoming issue of *Diabetes Care*, showed that the outreach program resulted in improvements in blood pressure control, as well as increased patient satisfaction with their care.

In an extension of the original DOVE study, the DOVE Follow-Up Study started in early

January 2002. The goal of the DOVE Follow-up study was to extend the follow-up visits within the Keeweenok and Peace RHA for all patients enrolled in the original DOVE Study. The main objectives of the follow-up study were to determine if the benefits observed in the first phase of the DOVE study involving Peace RHA were sustained after the diabetes outreach service had been completed. The second objective was to determine whether the initial results observed in the Peace RHA could be replicated in the Keeweenok Lakes RHA (that is, in the crossover phase).

Based on the numbers achieved in the first phase of the DOVE study, there were 353 potential candidates available for the final follow-up. Upon completion of the DOVE Follow-Up Study in the summer of 2002, 85% of all available study participants had completed the final follow-up visit. Results of the DOVE Follow-Up Study are expected to be available in early 2004.

The DOVE Follow-up study will assess the reproducibility and persistence of the outreach intervention in Northern Alberta

Recent Literature: The Diabetes Prevention Program Research Group. Within-trial cost-effectiveness of lifestyle intervention or metformin for the primary prevention of type 2 diabetes. *Diabetes Care* 2003;26:2518-1523.

What was the study about?

The Diabetes Prevention Program (DPP) evaluated the efficacy of a lifestyle modification program or metformin therapy in preventing or delaying the onset of type 2 diabetes, relative to standard care, for people with impaired glucose tolerance. During the study, the lifestyle modification program led to a 58% reduction in new cases of diabetes; metformin led to a 31% reduction. This current study compares the cost-effectiveness of these two interventions compared to the standard care (or placebo) arm of the study.

What were the results?

As implemented in the DPP and from a societal perspective, the lifestyle and metformin cost \$51,600 and \$99,200 (USD) per QALY gained. The authors also estimated the costs of implementing the interventions in routine clinical practice; from a societal perspective, the lifestyle and metformin interventions cost \$27,100 and \$35,000, respectively, per

QALY gained. From the health system perspective, costs per QALY gained tended to be lower (i.e., more economically attractive).

What are the implications of this study?

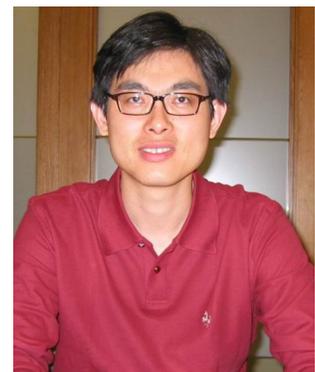
The results of this analysis suggest that the cost-effectiveness of both interventions is comparable to many other health care interventions. The lifestyle intervention is clearly more cost-effective than the metformin intervention. For those unwilling or unable to meet the requirements of the lifestyle changes, metformin therapy is a reasonable alternative. Because this analysis is based only on the within trial follow-up (i.e., an average of 3 years), the longer-term benefits of diabetes prevention are not fully achieved; if long-term effects are considered, the cost per QALY gained would be reduced further. It is not clear, however, how effective these diabetes prevention strategies would be in the general community.

The DPP intervention appears to be cost-effective in the short term. It is not clear however, what the long term benefits in the general community will be.

Meet the Staff: Nan Luo, PhD

Nan Luo received his Bachelor of Science in pharmacy and Master of Science in pharmaceutical administration from Shenyang Pharmaceutical University (China) in 1996 and 1999, respectively. He is also soon to receive his PhD in pharmacy from the National University of Singapore. Nan's PhD project focused on cross-cultural validation of health-related quality of life instruments in Singapore, a multi-ethnic and multi-cultural South-East Asian country. He adapted the EuroQol Group's EQ-5D into Singaporean English and Chinese versions. Nan also validated these and other instruments (e.g. the

Short Form 36 Health Survey and the Health Utilities Index) in various therapeutic areas including rheumatic diseases, cancers, Parkinson's disease, anxiety disorders and schizophrenia. Nan joined ACHORD as a postdoctoral research fellow in August 2003. Nan's current research interests are health-related quality of life assessment and its application in the economic evaluation of healthcare interventions. He will be working on a new ACHORD project, epidemiological and economic burden of illness studies of diabetes using administrative data from Saskatchewan Health (1991 to 2001).





INSTITUTE of HEALTH ECONOMICS

Address:

#1200, 10405 Jasper Avenue
Edmonton, Alberta
Canada T5J 3N4

Phone: (780) 448-4881

Fax: (780) 448-0018

E-mail: jlwyk@ihe.ca

Websites: <http://www.achord.ca>

<http://www.ihe.ca>



ACHORD

Alliance for Canadian Health
Outcomes Research in Diabetes

ACHORD Chair

Dr. Jeffrey Johnson

*University of Alberta
and*

Institute of Health Economics

ACHORD Staff

Ms. Samantha Bowker

Mr. Dean Eurich

Ms. Maria Kotovych

Ms. Jackie Lewyk

Mr. Nan Luo

Ms. Sheri Maddigan

Dr. Scot Simpson

Ms. Betsy Thomas

Why this Newsletter?

The purpose of the ACHORD Newsletter is to keep you updated on the activities of the ACHORD group and to provide reviews of recent, relevant diabetes literature. The newsletter is published three times a year.

You can expect to see the following in every issue:

- *Report from the Chair*
- *Meet the Staff*
- *ACHORD Project Highlights*
- *ACHORD Seen and Heard*
- *Review of Recent Literature*

If you have any questions about the newsletter, please call Jeffrey Johnson or any of the ACHORD staff at the Institute of Health Economics at (780) 448-4881.

Diabetes Events

CDA/CSEM Professional Conference and
Annual Meeting, Ottawa, Ontario
October 15-18, 2003

ACHORD Events

ACHORD Investigator's Meeting
Edmonton, Alberta, TBA, 2003