

Diabetes Care in Nova Scotia

a newsletter of the Diabetes Care Program of Nova Scotia

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State of the Art

LAUGHTER IN MEDICINE

During the recent DCPNS Provincial Workshop held on April 21, 2006, Dr. Lynne Harrigan provided one of the most stimulating and well-received sessions. A passionate advocate for both provider and patient self-care, Dr. Harrigan immersed the audience in the value of laughter at home and in our work setting. She shared stories and pictures, engaged the audience in laughing exercises, cited facts, and tied laughter to the literature on healing and health. The session offered immediate stress relief as well as inspiration "to do things differently."

This state of the art article provides a high level overview of Dr. Harrigan's presentation. The messages are clear, the application relatively easy, and now the challenge is up to us to put the evidence into practice. For those of you who were in the audience, the images are many and they help to show the way...



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"Laughter is the best medicine." How often has that phrase been used to support the use of laughter at work and in our everyday lives? Conventional wisdom purports that laughter possesses "magical" properties that promote health and healing. Our society places a value on laughter, and we are encouraged to "laugh more often." While many would agree that laughter makes one feel better, is there any evidence to suggest that laughter can actually aid in recovery from a serious illness or improve working relationships in stressful environments?

Laughter is the physiologic response to humour. Although one's "sense of humour" depends on one's age, gender, ethnicity, and environment, laughter produces the same physiological and immunological responses in all humans. When one laughs, the sound that they choose (ha, ho, or hee) is repeated every 210 milliseconds. Laughter is both patterned and contagious!

So, what happens to the human physiology when one laughs? First, the actual production of laughter by the brain is very complex. To generate one burst of laughter, one must activate the right hemisphere, the left hemisphere, the frontal cortex, and the occipital cortex! In other words, the entire brain is activated. Negative emotions such as anger and sadness activate only one portion of the brain. Some biologists feel that laughter evolved as a "stress reliever" and that by activating the whole brain, the negative emotions could be overcome!

What happens physiologically? When one laughs, the heart rate and blood pressure initially increase. Once laughter is completed, the blood pressure falls. The diaphragm and the muscles of the face and upper arms contract. Breathing patterns become chaotic. The levels

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of cortisol and epinephrine, which are usually released in times of stress, actually decrease. Laughter is the equivalent of a biochemical catharsis! In fact, 100 laughs burn the same number of calories as 10 minutes on a rowing machine! This has been referred to as “internal jogging.”

The immunological changes with laughter are equally as impressive. Salivary IgA, natural killer cells, gamma interferon, helper T cells and B cells are all increased with laughter, providing a “boost” to the immune system.

Do these changes translate into better health? Unfortunately, in spite of the great interest in laughter, the scientific evidence to support its use as an adjunct to conventional treatments is somewhat lacking.

In 1964, Norman Cousins, the editor of the *Saturday Review*, developed ankylosing spondylitis. Other than pain relievers, no other treatment was available. He refused to accept that and used laughter (by watching Charlie Chaplain movies and episodes of *Candid Camera*) to treat his disease. He demonstrated an 60% reduction in the use of his pain medication by using laughter and established a “Humour Task Force” to promote the study of humour in medicine.¹ Since then, there has been some literature to support humour as a healing tool. One study demonstrated a decrease in the use of pain medication on an orthopedic service if patients were allowed to choose and watch a comedy.² A second retrospective study compared patients who had had a myocardial infarction to age matched controls. Patients with heart disease responded to everyday life situations less humorously than people without heart disease.³

Does humour promote better working relationships? Studies of physician-patient communication have demonstrated that the length of time spent with the patient and the emotional tone of the visit were most highly related to patient satisfaction. Physicians performed better if they talked to patients about subjects unrelated to the patient’s complaint and if they laughed with them.⁴ Physicians were less likely to be sued for malpractice if they spent more time with and laughed with their patients.

The nursing profession is aware of the need for humour in the workplace and actually produces a “*Journal of Nursing Jocularity*.” Laughter at the bedside is felt to serve several purposes. Since the nurse is viewed by the patient as the “person in control,” laughing and joking with the patient “sends a message” to the patient that they are “going to be

alright.” Laughter also provides stress relief to health care providers and allows them to continue to function in a highly charged environment. “

So, while there is some evidence to suggest that humour can aid with healing, there is overwhelming evidence to suggest that humour in our every day lives is essential to maintaining our own health. Unfortunately, humour is not promoted as a “core value” in many of our healthcare institutions. Remember that 4 year olds laugh 400 times per day and adults laugh only 17 times per day. It is incumbent upon us to promote laughter in our work environments.

We should encourage all our coworkers to look for humour in our every day lives. We should not be afraid to laugh, and we should attempt to recapture the world through the eyes of a 4 year old—our lives depend on it. Let’s start a humour revolution!▲

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News From the Care Program

This is the first time in the history of the DCPNS newsletter that we have purposely delayed our publication date. The spring issue of our newsletter is always distributed in April, but this year we consciously decided to wait until May so that we could capture some of the exciting work that resulted from our workshops—the first annual joint DCPNS and Cardiovascular Health Nova Scotia Workshop held on April 20th and then our own provincial workshop held on the evening of April 20th and through April 21st. *See pages 11-12 for summary comments.* We are pleased that we made this decision, as the focus on chronic disease management within the context of primary care percolates through this issue. Joanne Wentzel sets the stage for understanding primary health care and “connecting the dots.” We are then fortunate to be able to highlight three primary care projects (pages 7 to 10) currently underway under the guidance of Capital Health. You will see the focus on teams, access, and building community linkages. My own reflections from attending a recent health line symposium provide yet another look at how other services can facilitate and enhance chronic disease management (pages 12-13).

Our workshop was a huge success due in large part to the planning influences of the DCPNS Medical Advisors, Drs. Lynne Harrigan and Beth Cummings. Lynne had endeavored to recreate her talk titled *Humor in Medicine* (minus the pictures, antics, and facial expressions) for our feature article, while Beth provides summary comments on transitional issues for the *Pediatric Focus* article (page 5).

A BIG “thank you” to DCPNS staff for their logistical, technical, and administrative support during the workshops. This was a real team effort and one that required all hands on deck.

DCPNS Staff

The DCPNS welcomes Fran Martin to the program as she completes the community portion of her integrated dietetic internship (16 weeks). You may recall that Fran worked with us during the summer of 2005 as the DCPNS Special Projects Student. We look forward to her contributions and the new projects that she will lead.

Rankin MacDonald, 1st year Pharmacy Student, has completed his volunteer community project work with us. His work focused on celiac disease and type 1 diabetes. You will find an article on Rankin’s work related to this interesting topic in our July 2006 issue of the newsletter.

We are also fortunate to have Jennifer Payne, PhD, working with us on a part-time basis. Jennifer’s work as

an epidemiologist will help us recognize the full potential of the DCPNS Registry for our key stakeholder groups (Department of Health, District Health Authorities, Diabetes Centres [DC], and DC referring physicians), and explore linkages and partnerships with external sources.

Subcommittees

Care of the Elderly with Diabetes Residing in Long-Term Care Facilities

The draft sections of “Long-Term Care Guidelines for People With Diabetes Residing in Long-Term Care Facilities” are being reviewed internally. The next step will be determined based on the feedback.

Best Practice Committee

The draft Dyslipidemia Guidelines have been reviewed at the District level with the assistance of Best Practice Committee members. Feedback was received from six Districts. This feedback is now reflected in a third draft of the guidelines that is circulating to DCs for additional comment. The QEII Diabetes Management Centre is continuing to work on the dyslipidemia patient education module with a pilot session being planned for early June. The Best Practice Committee will soon start work on Exercise/Physical Activity Guidelines for DCs.

A survey to assess the uptake of the Hypertension Guidelines (released in February 2005) will be conducted during the summer months. This evaluation will focus on each of the recommendations and actions taken to address these in the DC setting.

Pregnancy and Diabetes Subcommittee

Three revised sections of the DCPNS *Pregnancy and Diabetes Management Guidelines Manual* are now posted on the DCPNS website and may be downloaded for previous purchasers of the manual. These sections include Screening, Insulin, and Management.

Nova Scotia

Diabetes Assistance Program (NSDAP) for Uninsured Nova Scotians with Diabetes

Please see the update by Lisa Tay, Project Manager, on pages 13-14.

Creatinine Clearance (Estimated using the Cockcroft-Gault Formula) Algorithm for Interpretation and Action

Please contact the DCPNS to obtain copies of this tool for sharing with physicians and other health professionals in your area/community. A PDF version of the algorithm and the FAQ sheet are available on the DCPNS website.

DCPNS Diabetes Centre Grants 2006/07

This was the first time that the DCPNS has offered grants to DC staff. We had a very positive response to the call for letters of intent (10 projects from 7 of the 9 DHAs). Nine were asked to submit a full three-page application and, of the 8 that submitted, all were granted funding. Projects include the planning, delivery, and evaluation of the following: hypertension initiatives in partnerships with others (2), a peer-to-peer support program, an inpatient staff education program, a partnership with Primary Health Care Nurse Practitioners, phone follow-up, a weight management program in rural Nova Scotia, and focus groups to identify patient interests/needs/barriers. Each of the projects was evaluated against our pre-set criteria—multidisciplinary in nature, fit with DCPNS-identified priority areas, and approval in principle from the District CEO and the DC Manager. DCPNS priority areas included: using local evidence to effect a change in programming/approach, increasing program efficiencies and effectiveness, and modeling chronic disease management through collaboration and integrated delivery models.

Delegated Medical Function (Insulin Dose Adjustment)

The revised version of DCPNS *Insulin Dose Adjustment Policies and Procedures Manual* has been adopted by Capital Health (January 2006). All 9 DHAs have now approved the manual and its policies. Copies have been provided to all DCs with a mailing planned to all DC Medical Advisors. Exam revisions are also complete. Starting June 1, 2006 all exams will be based on the revised version (2005) of the manual.

Forms Revision

The DCPNS focused time and resources (contract services) in a “blitz” situation to get all necessary forms revised and printed before the end of March 31, 2006. Forms have been sent to all DCs. Those requiring additional copies of specific forms should contact the DCPNS office.

Upcoming Videoconferencing

The DCPNS has been working with Dalhousie CME to plan and deliver a session on Diabetic Nephropathy to one of its physician groups (comprised of the following hospital/health centre sites: All Saints Springhill, Bayview Memorial Health Centre, Eastern Memorial, Guysborough Memorial, North Cumberland Memorial, Roseway Hospital, St. Mary's Memorial, and Strait Richmond Hospital). This session will take place on May 16th at 7:00 PM and will

be open to both physicians and Diabetes Centre staffs.

Diabetes Foot Care

We have just reviewed the lower extremity amputation (LEA) data (1995 to 2004) and will be including key observations in the draft document. Review by working group members is planned in the coming weeks.

Wait Lists and Triage

We will be conducting a phone survey in the coming months to determine how DCs are progressing with adopting the initial and follow-up criteria. We are very pleased to report that a number of DCs have already made a concerted effort to ensure all newly-diagnosed cases meet the initial referral criteria.

DCPNS Registry Enhancements

Testing of the newest version of the Registry continues with work focused on reports.

The phase I interface with Meditech is now complete. This allows the transfer of demographic data and reduces the need for double entry. We are about to start discussions related to phase II of the interface (lab data linkage).

The quality indicator report is now available to all DCs. An update and “how to” will follow for on-site DCPNS Registry users in the coming weeks.

NDSS District/Provincial Reports

Approval has been granted from all 9 DHAs to host the provincial report generated from the National Diabetes Surveillance System (NDSS) on the DCPNS website. Look for this report on the website by the middle of May. This report will eventually be accompanied by select slides for use in District-/DC-specific presentations.▲

Peggy Dunbar

Coordinator, DCPNS

New Resources



These resources are available from the DCPNS for loan across Nova Scotia. Please call (902) 473-3219 for borrowing information.

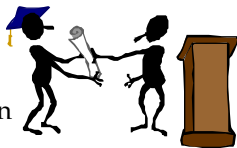
BOOKS

- *Diabetes Education Standards Recognition Program: A Quality Assessment Tool for Diabetes Education Centres* (2005).
- *Standards for Diabetes Education in Canada* (2005).
- *The How to of Patient Education* (2003).▲

Pediatric Focus

PEDIATRIC TO ADULT DIABETES CARE – ISSUES OF TRANSITION

This is a time of year when there is great excitement and anticipation in high schools around the province as graduation ceremonies and proms mark a transition from adolescence to young adulthood. For youth with diabetes, transition from pediatric to adult diabetes care is an added challenge in their busy and changing lives. As diabetes professionals, we need to have mechanisms in place to facilitate this process.



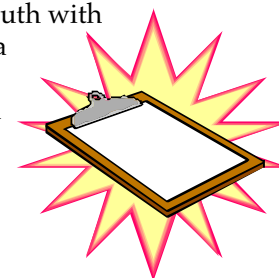
Transition is defined as “the purposeful, planned movement of adolescents and young adults (with chronic physical and medical conditions) from child-centred to adult-oriented health care systems.”¹ This process starts in early adolescence or before. **Transfer** of care is an event involving movement to a new health care setting or provider and is an essential component of transition, but is not in itself, sufficient.¹ In general, pediatric health care is family centred, while adult health care is more patient centred. Pediatric health care teams need to help youth be prepared for this change, and both adult and pediatric teams need to adapt to the developmental needs of individuals in this age group.

Effective transition is important as young adults with diabetes are often lost to follow-up^{2,3} at a time in their disease when the risk for early complications is increasing. Rates of participation in adult diabetes clinics have been reported to be as low as 40-50%.^{2,3} Also, mortality rates among young adults with diabetes are higher than those of youth without diabetes.² The literature related to transition is mostly opinion-based, but it has been shown that a program involving an introduction to the adult physician prior to transfer of care, with or without a specific young adult clinic, results in improved rates of clinic attendance 2 years later.²

Various models of transition exist. At the Hospital for Sick Children in Toronto, transition is facilitated in the clinic through team encounters that are developmentally appropriate, a workshop for parents and youth, and by ensuring that patients leave their last pediatric clinic visit with an appointment date in hand for the adult clinic.⁴ In Manitoba, the pediatric clinic uses a transition knowledge checklist. Young

adults have access to the MAESTRO project, a comprehensive coordinated case manager program that maintains contact with each young adult and assists them to access appropriate care.⁵ In Nova Scotia, youth with diabetes were involved in a participatory research project regarding their view of the transition experience.³ This study identified that participation in diabetes medical follow-up among respondents was poor at 41%. Youth reported that they felt “lost in the shuffle” and uncomfortable in the adult hospital environment. They offered suggestions for improvement including having a specific young adult clinic located outside of the hospital.

The DCPNS and the diabetes team at the IWK Health Centre have identified transition from pediatric to young adult diabetes care as a priority issue. We hope to work with Diabetes Centres across Nova Scotia to develop a provincial transition strategy to better serve the needs of youth with diabetes. We will be forming a working group and look forward to input from around the province. If you are interested in assisting with this project, please contact the DCPNS.▲



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Medical Advisor, DCPNS

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Research to Practice

PRIMARY HEALTH CARE - LOOKING FOR OPPORTUNITIES TO "CONNECT THE DOTS"

"Primary Health Care" is a term that even the most experienced health care provider may struggle to define or, even more importantly, question where they fit or how it relates to their job. Diabetes Centres (DCs) support and practice many of the principles that define primary health care (PHC) and, therefore, DCs should be looking for opportunities to connect with District & Provincial initiatives around PHC. This article will share information about PHC, discuss the difference between primary care and PHC, and challenge diabetes educators to find more opportunities to "connect the dots."

What is Primary Health Care?

A national initiative of the PHC transition fund brought stakeholders from across Canada together and used a lexicon approach to define PHC as:

- An individual's first contact with the health system characterized by a spectrum of comprehensive, coordinated and continuous health care services such as health promotion, diagnosis, treatment, and chronic disease management. PHC is delivered in many settings such as the workplace, home, schools, health care institutions, the family physician's office, homes for the aged, day care centers and community clinics. It is also available by telephone, health information services and the Internet. (From a meeting of National & Regional Initiatives of Health Canada's PHCTF, Ottawa, January 2005.)

You may have also noticed newspaper ads and short TV advertisements dedicated to making the public more aware of primary health care. The National PHC Awareness Strategy states that "PHC refers to basic, everyday health care accessed by Canadians." It highlights four key pillars or elements - Teams, Access, Information, and Healthy Living.

- Health care providers are encouraged to work in teams that include patients to improve the continuity of care, decrease duplication, and help ensure that patients have access to the appropriate professionals.

- Access is about ensuring that everyone has more opportunities to access the right services when and where they are needed.
- PHC recognizes the importance of improving the sharing of information between health care providers and finding more ways for the population to access reliable health information.
- The healthy living pillar focuses on prevention, management of chronic illness, encouraging self-care, and determinants of health (www.primaryhealthcare.ca).

Isn't Primary Care the Same as Primary Health Care?

PHC is often confused with primary care. Primary care deals mainly with the prevention and treatment of sickness—what we generally think of as front line care to patients and families, whether it be immunization, diagnosis and treatment of illness, or a question to a local community pharmacist. Primary care is an essential component of PHC, but PHC asks us to think broader and consider factors such as accessibility to essential services, empowering communities to take active roles in planning, using population health approaches, applying coordinated approaches to disease prevention and chronic disease management, and encourages collaboration & team development between different disciplines, departments, and agencies.

So What Does this Mean to Me?

PHC values and principles are reflected in the DCPNS mission, vision, values, and goals. DCs practice in team environments, play lead roles in chronic disease management, recognize the importance of information gathering and sharing, find creative ways for clients to access services, value health promotion and prevention, and encourage self-management. These are the many pieces of the puzzle, or dots that need to be connected. We need to look for opportunities within our work settings, communities, and Districts to further develop partnerships, collaborative teams, share information, learn from others, and understand our communities. PHC is not about reinventing the wheel; it is about enhancing what we already do and about looking for opportunities "connect the dots" for our patients, families, and communities.▲

Joanne Wentzel
Primary Health Care Project Coordinator
Annapolis Community Health Centre

**PRIMARY CARE
DIABETES CASE MANAGEMENT STUDY
(COMPASS PROJECT)**

In an effort to provide physicians and other health care providers with effective management strategies for diabetes, the Canadian Diabetes Association has developed evidence-based guidelines. However, the implementation of such strategies remains challenging, and studies in the family practice setting have shown poor adherence to evidence-based recommendations. Simple knowledge of the benefits from interventions does not automatically result in uptake.

The greatest opportunity to improve outcomes in patients with diabetes over the next decade will probably come not from discovering new treatments, but from learning how to best deliver existing effective therapies.

The complexity and chronic nature of diabetes present special challenges for family physicians whose clinical goal is to prevent or reduce diabetes-related complications.¹ The reality is that family physicians have 7 minutes to spend with each patient, which falls far below the amount of time required to deal with the complexities of diabetes. However, it has been demonstrated that management of glycemic control and screening for microvascular and macrovascular disease in family practice can be improved using specific strategies.²

One such strategy has been initiated in Nova Scotia under the direction of a steering committee comprised of representation from the Department of Health, the various Districts, DCPNS, Diabetes Centres (DCs), CDA, the Director of Primary Care at CDHA, and the project team. Dr. Ehud Ur, Head of the Division of Endocrinology at CDHA, is the principal investigator for this study.

The COMPASS project is a 2-year intervention study that began in February 2006. To date, over 400 participants are enrolled. This multicenter, randomized study involves 36 family physician practices in the South Shore, Cape Breton, and Halifax regions. The protocol design includes 2 arms, with 18 practices in each arm. One study arm receives a Diabetes Case Manager in their office 1 day/week, and the other arm is considered standard care, where the family physician continues to look after their patients as they have been, utilizing all services available to them.

After 1 year, in February 2007, the arms will cross over and the physicians in the Diabetes Case Manager arm will become standard care and the standard care arm will receive a Diabetes Case Manager.

The patients that are eligible to be a part of the study must have a diagnosis of type 1 or type 2 diabetes mellitus and be 17 years of age or older.

This study involves nurses and dietitians, with specialties in diabetes and case management, working in family physician offices assessing and managing patients with diabetes. The Case Manager performs an assessment of the diabetes patient using a database specifically designed for this study. Within this database, are the 2003 Clinical Practice Guidelines from CDA.³ This allows for a printout of specific recommendations for this patient based on the information entered into the database. This information is shared with the family physician at the visit, and a collaborative plan is made to implement the required adjustments or referrals based on the guideline algorithm from the database. For example, if diabetes education is required, the Diabetes Case Managers will make a referral to the local DC.

The role of the Diabetes Case Managers is to facilitate links to other diabetes health care professionals, strengthen links between tertiary diabetes teams and community family physicians, and promote knowledge transfer and more effective time management for the family physician. The clinical, financial, functional, and satisfaction outcomes will be tracked.

The Diabetes Case Managers in the various areas are Kathy Ross and Norma Campbell (Halifax region), Michele Barnes (South Shore region), and Lorianne MacLean (Cape Breton region). They would be happy to answer any questions you may have about the project and can be reached at (902) 473-2160 or toll-free at 1-877- 775-8800. You may also contact Jenn Tuttle, Project Manager, at (902) 473-3681 or Dr. Ehud Ur, Principal Investigator, at (902) 473-3728.▲

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It is with great enthusiasm that we introduce our new Capital Health program called *Community Cardiovascular Hearts in Motion (CCHIM)*. This is a QEII Health Sciences Centre initiative with funding from Manulife Financial, AstraZeneca, and Shoppers Drug Mart. It is designed as a pilot program and research study to last 3 years.

Our goal is to empower patients to improve their vascular health and to validate the concept that taking a traditionally hospital-based cardiac rehab program and adapting it for a community setting will lead to similar improvements and vascular health outcomes. The referral criteria include and expand beyond coronary artery disease to show that patients with peripheral vascular and cerebrovascular disease, as well as high-risk primary patients, will feel the same benefits. It is a model that lends to improved access, reduction in vascular risk factors, and evidence for sustainability and future expansion.

Our team includes a medical director, Dr. Nicholas Giacomantonio; a manager, Wanda Firth; family physicians; and pharmacists. In addition, there is a program patient team consisting of nurses, Cathy Peck and Darlene Cooley-Warnell; physiotherapists, Sarah Youden and Joyce MacCormack; and a dietitian, Janet Plowman.

We have selected three sites based on population needs within Capital Health and are evaluating not only the participants at these locations, but the actual site. These sites include a sports facility, the Dartmouth Sportsplex; a community health centre, the new Cobequid Community Health Centre; and a completely novel site, the Spryfield Shoppers Drug Mart.

This is a 12-week program that requires participants to attend one or two of the one-hour exercise classes weekly and commit to the weekly one-hour education session. There is no fee for this program.

Consultations with the team are also part of the program. At the end of our 3-year period, we will have included a total of 1000 research participants in this program.

The CCHIM program components include:

- Individual Assessment and Risk Stratification by a multidisciplinary team which includes the use of established tools for risk factor scoring, validated research-based risk stratification, stress tests, blood work, and much more, as part of a comprehensive patient interview and intake assessment.
- Supervised group exercise program with individual exercise prescription.
- Nutrition assessment and personal nutrition plan.
- Lifestyle change strategies with goal setting approach and confidence measures.
- Cardiovascular risk factor modification, with consultation as needed.
- Home exercise plan.
- Medication review.
- Self-monitoring with the CCHIM passport for tracking vascular risk factors and lifestyle health goals.
- Research protocol for outcome measures and evaluation, encompassing a wide variety of clinical, behavioural, educational, and quality of life outcomes.
- Education sessions designed to improve vascular risk factors and lead to a healthy lifestyle.

The program includes a follow-up appointment at 6 months and 1 year. We strive to implement a self-management approach throughout the program and also plan to evaluate the benefits of providing linkages to community resources.

Our Dartmouth and Cobequid sites are now open and running with a full patient component. The Spryfield site is undergoing renovations for our program and will be ready for patients in June 2006.

All sites are ready to accept new referrals. Patients with diabetes and at least one other major modifiable cardiovascular risk factor (smoking, hypertension, or dyslipidemia) meet the criteria for the CCHIM program. We welcome referrals directly from Diabetes Centre (DC) health teams. Please fax your referral to us at (902) 473-3338. The team will review the referral to determine if patients are eligible. Our team will contact family doctors if they

are not already aware of the referral, and they will be informed if the patient has enrolled. We will also let physicians/DC health teams know if the patient did not meet the entry criteria. For more details on inclusion and exclusion criteria, please contact us. This information is listed on our referral form.

The family doctor, as the manager of the patient's care, and specialists will receive regular reports from the program team including test results, and program clinical summary letters. They will also be contacted as needed with patient care issues.

Please contact us at (902) 473-3744 if you would like copies of our brochure and referral forms. Our passion for active, healthy lifestyles is contagious. Join the Movement!▲

Wanda Firth
Manager, Community Cardiovascular
Hearts in Motion (CCHIM)



There is strong evidence linking improved risk factors among populations to improved health outcomes, and both epidemiological and community research have illustrated that the bulk of non-communicable diseases such as CVD, are preventable, or at least their occurrence can be postponed.

The goal of the ANCHOR study is to improve cardiovascular disease (CVD) risk in a primary care adult population with the following primary objectives:

1. To improve management of global cardiovascular risk of patients within two primary care practices; thereby improving their overall cardiac health.
2. To increase patient compliance with pharmaceutical and lifestyle interventions aimed at decreasing global cardiovascular risk.

Secondary objectives of the study are:

1. To examine the utility of a process to improve the management of global cardiovascular risk of patients within two primary care practices.

2. To explore the utility of a process that links primary care practices with existing community resources in order to better manage cardiac risk factors among individuals within those primary care practices.
3. To determine the economic impact of a global risk assessment and management process within a primary care setting.

This is a pre-intervention and post-intervention longitudinal, prospective pilot study to evaluate study participants' achievement of CVD risk factor reduction. The unit of analyses will consist of individual patients, 30 years of age or older, already registered within such practices. Study endpoints include:

1. Achievement of targeted mean reductions in overall global risk within patient risk strata.
2. Proportion of patients achieving their targeted mean reduction in global risk within risk strata.

Two large primary care practices are participating in the initiative. The Duffus Health Centre within Capital Health and the Sydney Family Practice Centre situated within the Cape Breton Health District. Approximately 750 patients will be recruited at each site.

Study Intervention

The intervention will be led by a study coordinator in each primary care setting and consists of a recruitment strategy and a global risk factor assessment.

- The assessment includes health history (personal and family); lifestyle inventory (smoking history, physical activity, eating practices, mental/social factors); evaluation of readiness to change; and clinical measures that include body composition (height, weight, BMI and fat %); blood pressure; fasting cholesterol (total, HDL-C, LDL-C); and triglycerides.
- A risk score based on the Framingham Score will be calculated, and the patients will be enrolled into a specific intervention based on their individual 10-year risk for coronary heart disease (CHD).
- The intervention and support will include behaviour change counseling; risk factor

management strategies based on the 5A's framework (assess, advise, agree, assist, and arrange follow-up); and the readiness to change model.

- Supports will be provided to study participants in making behaviour changes. These will include goal setting; individual counseling and follow-up by ANCHOR health care team members (including dietitians, nurses, exercise specialists, pharmacists, and mental health support where appropriate); behaviour change tools; print resources; and group education sessions. As well, an inventory of, and links to, community programs to support lifestyle change will be provided. Medication reviews and physician/program referrals will also be completed as required.

Research Methodology

The research will include a combination of quantitative and qualitative data to judge the effectiveness of the risk reduction interventions and to describe these interventions as they are implemented. The effectiveness of the approach will be examined using pre- and post-intervention measures of key outcome variables. In addition, process evaluation will monitor and assess the implementation of the interventions. The study will include specific baseline measurements, interim assessments of process measures, outcomes, and follow-up. Examples of process measures include: percent of participants who report that the Practice's multidisciplinary team was effective; number and type of health care professionals included as part of the health care team; and number and types of health promotion programs developed and implemented. Examples of outcome measures include CHD risk reduction; glycemic control for diabetes; blood pressure control for hypertension; increased drug compliance; increased motivation; and confidence for lifestyle change, etc.

Steering Committee

A steering committee will guide the project and is comprised of the principal investigators and representatives from Pfizer Canada, Capital District Health Authority, Cape Breton District Health Authority, the Nova Scotia Department of Health, and the Department of Health Promotion and Protection. Community stakeholders include a community pharmacist, physician and nurse from each study site, and the CEO of the Heart and Stroke Foundation of Nova Scotia. The initiative will be conducted over a 3-year period.

Sustainability and Dissemination

The project will involve collaboration and integration with primary health care renewal efforts and community resources to build on existing infrastructure, thereby help to facilitate sustainability. Capacity building within primary care settings and mobilization of existing resources will also help to ensure a sustainable resource. A comprehensive database has been developed to capture what current programs and services the patients are utilizing; providing a mechanism to modify the intervention provided by the ANCHOR health care team when required. This would include offering additional support for the patients who are more difficult to treat, as well as assessing the appropriateness of referring the patient to an ANCHOR health care team member (e.g., dietitian) if they are currently utilizing other services and programs. Continuity of care between primary and secondary/tertiary care is established through the research coordinator.

Steering committee members and other partners will ensure the project results and products are shared with their organizations and networks, and also more widely across the province. Project findings will be disseminated throughout the province and will be published in appropriate peer-reviewed publications to share more broadly the lessons learned.

For more information on the ANCHOR Project, please contact Claudine Szpilfogel at (902) 456-7678 or by e-mail at Claudine@researchpowerinc.com.▲

Claudine Szpilfogel
ANCHOR Project Manager



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Congratulations to the Canadian
Diabetes Association on a very
successful Diabetes Expo!

Halifax *Live Smart Diabetes Expo*, April 29, 2006

- Sold out (over 500 people in attendance)!
- Fantastic speakers!
- Supportive diabetes educators!
- Excellent organization!
- Lots of volunteers!
- Interesting and supportive exhibitors!
- Great venue!

Well Done! We look forward
to the next time...



Educator Sharing

WORKSHOPS AND MORE WORKSHOPS....

April has come and gone, and what a whirlwind it was.

Joint Diabetes Care Program of Nova Scotia (DCPNS) and Cardiovascular Health Nova Scotia (CVHNS) Workshop

On April 20, 2006, we co-hosted the first annual joint DCPNS and CVHNS workshop titled *Chronic Care: Maximizing the Concept of Self-Management*. Over 180 participants gathered at Pier 21 in Halifax to learn first-hand about chronic care and approaches to chronic disease management. Our audience represented the many disciplines and decision-makers involved in providing services and programs to people living with chronic disease.

This workshop was opened, and registrants welcomed, by Paula English, Director, Primary Health Care, Department of Health (DoH), and Lynne Edwards, Director, Acute and Tertiary Care, DoH. Two keynote speakers followed and provided the plenary sessions for the day.

Laurie Gould shared experiences from Fraser Health, BC. We were grounded in reality as Laurie spoke about "Navigating the Perfect Storm" (growing numbers of people with chronic diseases and multiple co-morbidities coupled with looming workforce shortages). We explored the present system, its gaps, and how BC has responded with embracing and implementing "The Expanded Chronic Care Model." A careful explanation of each of the six key elements of the model introduced the audience to what should be found in each. Laurie shared the collaborative approach that works well to facilitate system change. This approach uses a rapid-change learning model to identify an appropriate goal, measure the outcomes/change, and use these measures to inform system change. Laurie was the perfect speaker to talk about successfully navigating the perfect storm.

Patrick McGowan, a leading national and international expert on the health education of persons experiencing chronic health conditions, introduced workshop participants to the concepts of self-management support (to increase one's skills and

confidence in managing health problems). As a key element of the chronic care model, self-management support is "a patient-centered, collaborative approach to care that promotes patient activation, education, and empowerment." This approach is one that should be integrated with traditional patient education. Patrick shared programs that are presently available in other parts of Canada – peer-to-peer community-based programs delivered by Master Trainers, self-management training for physicians and health care professionals, integrated patient self-management into telehealth services, etc. An afternoon of small group work allowed the audience to apply and model some of the structured approaches found in self-management – facilitating problem solving and goal setting as well as establishing meaningful action plans.

The workshop evaluations were overwhelmingly positive with 98% of respondents rating the workshop as good to excellent. All of respondents enjoyed having the opportunity to interact with others from various chronic disease areas. A number of suggestions were offered on how this opportunity could be further enhanced in the future.

DCPNS Provincial Workshop

Starting the evening of April 20th and continuing through April 21st, the DCPNS hosted its provincial workshop at the Lord Nelson Hotel, Halifax, titled *Controversies in Diabetes Management*. What a fabulous venue and wonderful program. Following our plenary session, "New and Emerging Therapies: A Focus on Insulin Analogues," six Diabetes Centre Medical Advisors rose to the occasion as they put on their debator hats. Through well-executed presentations, all demonstrated knowledge, sensitivity, tact, and humour—what a great way to get at the facts.

Our workshop this year was somewhat structured to focus interest and energies on critical appraisal. This started with the debates and continued through the sessions on "Statins in Diabetes," "Facilitating Successful Transition," and "Primary Care/Primary Health Care/Health Promotion: What's the Difference and Where Do We Fit?" The introduction of humour was a great equalizer—from the debates to Dr. Harrigan's presentation, "Humor in Medicine." The informal feedback has been overwhelmingly positive (we are still in the process of tallying these program evaluations).

A sincere thank you to our industry partners who helped sponsor these two great events—these programs would not have been possible without your continued encouragement and support. Thank you!



- Joint DCPNS/CVHNS Workshop sponsors:
Gold: Sanofi-Aventis
Pfizer
- DCPNS Provincial Workshop sponsors:
Gold: Novo Nordisk
Sanofi-Aventis
Pfizer
Silver: Lifescan
Bronze: Eli Lilly Canada Inc.
GlaxoSmithKline Inc.
Medtronic MiniMed (Atlantic)
Novartis▲

Peggy Dunbar
Coordinator, DCPNS

Reference Tools

At the 2006 DCPNS workshop, "Controversies in Diabetes Management," key resources were highlighted during the presentation titled *Statins and Diabetes* as presented by the Dalhousie CME Academic Detailing Service.

The following reference pieces are available in Adobe Acrobat from the website noted below:

- Statins and Cardiovascular Disease
- Framingham Risk calculator
- Summary of Outcomes from Statin Studies

http://cme.medicine.dal.ca/ad_resources.htm

One Year Record Book - Diabetes Management Works (by Nancy Clifford)

This book retails for \$17.95. Professionals receive a 30% discount on orders of 5 books or more. Partial proceeds help support CDA in diabetes research.

Please visit www.diabetesmanagementworks.ca for more information.

HEALTH LINES...MAKING THE LINK WITH CHRONIC DISEASE MANAGEMENT

Chronic disease management requires that we expand our options and take advantage of opportunities to support and facilitate self-management. We will need to extend our reach, mobilize our consumer base, and enhance self-management. It will take more than a single discipline, the creation of teams, and/or system change to help address the growing questions and concerns of our aging and informed Canadian population. To quote a colleague, "With the looming labour shortage of health care providers, our one untapped resource is the consumer. We need to find ways to support and mobilize our population to better understand health and community systems, to use these systems in the best way possible, to assume the role of team leader, and to participate in key decision-making."

Over the past number of years, a growing number of provinces and territories have moved into the era of health lines—health lines in support of primary health care and chronic disease management. Some provinces have a 20-year history, with others recently coming on board. Health lines (telephone supports) take many names and many shapes—BC NurseLine and BC Health Guide, Manitoba Health Links-Info Sante, Telehealth, etc. Health lines are seen to be effective as part of a multifaceted intervention integrated within primary health care and existing health services.

At a recent symposium held in Victoria, BC, members of a multi-jurisdictional steering committee (the four western provinces and three territories), shared the learnings and accomplishments of their 5-year collaborative. With funding from Health Canada's Primary Care Transition Fund, this group worked to develop common models and best practices, conduct research, share knowledge and expertise, and map out future directions for health lines.

The symposium brought together health line managers, senior decision makers, chronic disease management managers and practitioners, telehealth and telemedicine coordinators/managers, and individuals working in primary health care.¹ Consultants shared their work on staffing of health lines and staff education (the need for competency-based education with standardized, formally approved protocols and procedures); evaluation of health line efficiencies; use of core, home, and satellite offices to deliver services; and software to assist with scheduling. Others shared common approaches to marketing and promotion as well as methods of evaluation (how to demonstrate value, value added, cost avoidance, appropriate utilization/use of the health

service resources, and health outcomes). These are all prime areas for collaboration among health lines.

Others shared approaches and progress with projects focused on chronic disease management. Fraser Health, BC, has developed two self-management support models—a call centre model for nurses and a virtual model for pharmacists. In both, telehealth practitioners provide self-management support to patients with diabetes or congestive heart failure. Grounded in BC's Expanded Chronic Care Model, these practitioners teach self-management skills (problem solving, goal setting, and developing personnel action plans) to increase the skills and confidence of patients to make good decisions related to their health. These models include coaching and the use of outbound calls (follow-up calls) with reporting back to the primary care team. With the virtual pharmacist, drug-therapy decision-support is provided to a number of primary care teams/settings.

Manitoba's chronic disease management project also focuses on congestive heart failure but uses follow-up with telehealth nurses, home telemonitoring (patients report standard measures such as weight and medication adherence through an automated phone system), and partnerships to improve health outcomes and decrease emergency room visits.

Alberta is building on its current provincial infrastructure and regional service delivery model to provide 24/7 coverage for individuals with diabetes calling about their disease or a common health concern such as the flu.

In each of these chronic disease management examples, leaders acknowledge that these are early days and that the process is dynamic and evolving. This should be considered the "innovative stage" where others should be encouraged to see their fit and the potential for future areas of work. This would include the use of in and outbound calls and targeted interventions for specific populations. The health line infrastructure could be leveraged to take on new roles with chronic disease initiatives.

There was much food for thought introduced during this two-day symposium—great opportunities to learn and help shape programs and interventions and to once again position this service as adjunctive to existing programs, services, and health care providers.▲

Peggy Dunbar
Coordinator, DCPNS

Reference:

1. National Health Line Symposium - *Making the Right Connections* - booklet. Victoria, BC. April '06.

UPDATE ON THE NOVA SCOTIA DIABETES ASSISTANCE PROGRAM

The Nova Scotia Diabetes Assistance Program (NSDAP) has been up and running since January 1, 2006. Over 1,000 eligible Nova Scotians have successfully registered in the program and are beginning to receive benefits. Although there have been a few snags along the way with receipts, claims, and reimbursement, these have been addressed. For example, we are now aware that all submitted receipts must include both the name of the prescribing physician and the prescription number in order to be eligible for reimbursement.

The most exciting piece of news is related to automation! The Department of Health has worked tirelessly to automate the program as quickly as possible. Automation officially began May 1st, although it may take one to two months for all pharmacies in the province to be connected.

Automation means that registrants will no longer have to manually submit receipts to Pharmacare. All pharmacies and the CDA supply centers will be connected electronically to the NSDAP registry at Pharmacare. Every current registrant of the program will receive a letter from Pharmacare which describes the changes to the program as well as the registrant's new NSDAP registration card. The registration card should be shown to the pharmacy or CDA supply center staff person each time the registrant purchases diabetes medications or supplies covered under the program.

Automation does not alter the program design; the deductible must still be paid in full before the 20% co-pay applies. Please remember that for all registrants whose annual adjusted family income is less than \$15,000, the deductible is zero. For an annual adjusted family income of 30,000, the deductible is only \$240. Once the deductible has been reached, registrants will pay only the 20% co-pay to the pharmacy or CDA supply center.

Automation will not be instantaneous. Before province-wide automation is possible, all pharmacies must have a certain software upgrade to communicate electronically with Pharmacare about the NSDAP. Program registrants can check with their local pharmacy and CDA supply center to find out when automation will take place in that location.

Self-Care Materials

The self-care materials are an integral aspect of the program, as they are designed to promote self care—the confidence of persons with diabetes to direct the

management of their condition. The series of four materials has been printed and will be mailed to program registrants in their first year of the program.

DCPNS would again like to thank the people who reviewed the materials and provided valuable feedback on their key messages.

Program Evaluation

Evaluation materials have been completed and now await final ethics approval. Research assistants have been hired, trained, and are waiting to start their work. A large proportion of registrants have expressed interest in being contacted about the study.

As a result of the evaluation, the self-care materials cannot be widely distributed. Once the evaluation is past the first interview stage, the materials will be available to others for distribution and use. So for now, they are embargoed; but they will be worth the wait!

Common Questions and Answers

Q: *Can my client submit receipts and receive reimbursement for the supplies he or she buys from the CDA supply center?*

A: Yes. CDA supply centers are equivalent to pharmacies and your clients/patients certainly can buy supplies there. Your clients just have to be sure that the supplies are on Formulary (in other words, covered under the program) and that they have a prescription for the supplies.

Q: *If my client/patient has diabetes and is registered in the Community Services Pharmacare Program, will he or she have to switch to the NSDAP?*

A: No. The NSDAP is not a replacement for Community Services Pharmacare. Since Community Services coverage is more comprehensive (all medications on the Formulary rather than just anti-hyperglycemic medications), it is in your client's best interest to stay within that program for as long as he or she is eligible to do so.

For specific information about registration and claims, contact Pharmacare at 429-6565 (metro Halifax) or 1-800-305-5026 (toll free). General information and all forms are available on the DAP web page at (www.gov.ns.ca/health/pharmacare/dap).

If you have any questions or comments about the program, please feel free to contact me at any time.▲

Lisa Tay, Project Manager
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Cell (902) 233-3978

Make a Difference...Make a Move!

Concerned about how active Nova Scotians are ... or aren't? Physical inactivity levels and obesity rates have become a major health problem in Canada; especially, in the Atlantic Provinces. Almost half of all Nova Scotians are inactive, and this is having serious implications on the health of our population.

Are Nova Scotia health care providers effectively counselling their inactive patients to be more active for health benefits? The evidence says a resounding "NO!" Although health care providers *can* make a difference, only a small percentage of them actually counsel their patients about physical activity. Most providers indicate they don't have time to do lifestyle counselling with their patients and those who do feel that they would benefit from training to be more effective.

The GOOD News

- √ There is a way for providers to fit physical activity counselling into their busy schedule. It takes about five minutes using the Provider-based Assessment and Counselling for Exercise (PACE-CAN) program – five minutes to help patients *Make a Move!*
- √ The Heart and Stroke Foundation of Nova Scotia in partnership with Cancer Care Nova Scotia and Nova Scotia Health Promotion are now offering *Make a Move!* workshops to health care providers throughout the province. Those who participate in this 3-hour interactive workshop will:
 - Be taught effective physical activity counselling strategies, from minimal intervention to motivational interviewing, and how to incorporate them into their busy practice setting.
 - Learn how to use the PACE-CAN program and get free, unlimited access to the PACE-CAN online training module and electronic counselling materials.
 - Receive a "tool kit" of resources to help them with their physical activity counselling.
- √ Since these workshops are new to Nova Scotia health care providers, they are being offered at a significantly subsidized rate until June 2006.
- √ To date, 4 workshops have been successfully conducted in the Capital Health District and received very positive feedback from participants.

For more information or to participate in a *Make a Move!* workshop, please contact Suzanne Ferrier, Project Coordinator, at 423-7530 (ext. 316) or email: sferrier@heartandstroke.ns.ca.▲

News From Around the Province



New Faces

Welcome to:

- **Janet Lowe, RN.** Janet joins the staff of the Hants Community Hospital Diabetes Centre on a permanent part-time basis.
- **Angela Childs, Pdt.** Angela joins the staff of the Aberdeen Hospital Diabetes Centre.

What's New at the Canadian Diabetes Association

Live Smart Diabetes Expo:

The Canadian Diabetes Association (CDA) would like to thank all the diabetes educators and other health professionals who were involved in making our 2006 Diabetes Expo such a tremendous success. The promotion of the Expo on an on-going basis by Diabetes Centres over the past few months contributed to the Diabetes Expo being sold out several weeks prior to the event. We would like to especially thank the many diabetes educators who volunteered to be a part of our Expo Planning Committee, delivered breakout session, and manned the "Ask the Expert" Booths. The Live Smart Diabetes Expo allows people living with diabetes the opportunity to learn more about diabetes and have access to a wide array of health professionals under one roof. We are hoping to make the Live Smart Diabetes Expo an annual event. Please join us for next year's Expo on April 28th 2007 in Sydney!

Join Team Diabetes...Changing lives. One step at a time!

Sign up now for the experience of a lifetime. Team members raise funds and awareness to help those living with diabetes every day. Team members will train to walk or run in an international race, travel to an exciting location, and create lasting memories. See The World, Fulfill Your Dreams, and Save Lives! Sign up now and start fund-raising and training right away! Teams will be going to Dublin, NYC, Honolulu,

Rome, and Reykjavik! To find out more contact, Leslie MacPhee at 453-4232 or leslie.macphee@diabetes.ca, or visit www.teamdiabetes.ca.

Camp Director:

The CDA - Nova Scotia Region is pleased to welcome Elizabeth Cameron as Camp Director for Camps Lion Maxwell and Morton and the Leadership Training Program 2006. Elizabeth has been involved with the CDA- Nova Scotia Region Camping program for many years, first as a camper and than as a staff counselor.

Health Professionals Required for Summer Camps:

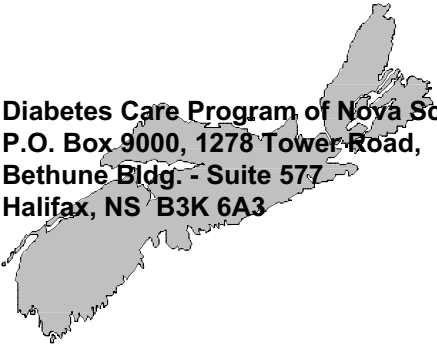
The CDA still needs health professionals for our summer camps. This is a great "hands on" learning experience, as well as an opportunity to help children with diabetes have a special week at camp. If you would like more information, please contact Elizabeth Cameron at (902) 454-4232, or toll free at 1-800 326-7712, ext 226.▲

News From the
Company
Representatives**

Steven Shears and Colin MacNeil of Novo Nordisk are very excited to inform you that Levemir®, insulin detemir has been available in Canada since January 2006. Levemir® is a long-acting basal insulin analogue with a duration of action of up to 23 hours with a flat and predictable action profile. Levemir® is available as Penfill® (5 x 3 ml) and is stable at room temperature for 6 weeks. Levemir® is specifically designed to be used with all of Novo Nordisk® insulin delivery devices, including the new Novolin-Pen® 4 and NovoFine® 32G needles.

For more information, please contact Steven or Colin at 1-800-465-4334, ext. 4507 or 4506.▲

***This information has been brought to our attention to share with educators around the province. Endorsement is not implied by appearance in the newsletter.*



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