DIABETES, OBESITY AND NUTRITION
STRATEGIC CLINICAL NETWORK

Volume 5, Issue 1 July 2016

Development of an AHS Malnutrition Strategy
Submitted by Carlota Basualdo

Malnutrition continues to be a serious problem across Alberta, especially with our increasing population of older adults. As a condition, malnutrition involves a loss of fat and/or muscle stores and results in loss of function, delayed recovery and poor quality of life.

In the spring of 2013, the Canadian Malnutrition Task Force led a study of 18 Canadian Hospitals, including Foothills Medical Centre, the Royal Alexandra Hospital and the Sturgeon Community Hospital. Of the 1,000+ adult patients included, 45% who were admitted to medical and surgical units were malnourished. Most hospitals also lacked systematic screening for nutrition risk at admission which resulted in many patients not being identified as malnourished. Malnourished patients stayed in hospital 2 days longer than well nourished patients and were more likely to be readmitted.

Other research has shown that a patient's nutritional status and health outcomes improve when all health care team members, along with the patient’s family, work together to prevent barriers to food intake and improve the meal experience.

AHS Nutrition and Food Services, in conjunction with the Diabetes, Obesity and Nutrition SCN, are developing a Malnutrition Strategy for AHS, based on four pillars (see right).

This coming year we will begin with a focus on Awareness, with the aim to increase understanding about malnutrition, how it is identified, and how we can all play a role in addressing it. The initial focus will be patients in hospital and continuing care, with future expansion to those in the community.

Future work will also strive to improve detection of malnutrition through the spread of validated nutrition risk screening tools for both adult and pediatric patients on admission.

We need to work together because “meals matter”. Food, like medicine and other therapies, is essential for healing. Support needs to be individualized to meet patient's needs and continue after discharge.

Watch for more information about malnutrition in the coming months. If you have questions or would like to share your ideas, please e-mail NFSFeedback@ahs.ca.

Also in this Issue
- Diabetes Foot Care Pathway Update
- Inpatient Diabetes Management Update
- Research Updates and Highlights
For past newsletters, please visit www.ahs.ca/donscn

3rd Canadian Weight Bias Summit
Submitted by Ximena Ramos

Weight bias and discrimination is a widespread and prevalent phenomena, which directly affects the emotional and physical health of individuals living with obesity. Similar to discrimination based on race, gender or sexual orientation, weight bias poses an important barrier in recognition of obesity as a medical condition.

On May 26-27, 2016, the Canadian Obesity Network hosted the 3rd Canadian Weight Bias Summit, which brought together a variety of stakeholders, including individuals living with obesity, researchers, health professionals, policy makers, and industry and non-profit sector partners, to develop consensus on key weight bias reduction messages and strategies.

Supported by the DON SCN, among others, topics addressed at the Summit including narratives from people living with obesity; how inclusive language, accommodations, and policies can reduce weight bias; and existing weight bias reduction interventions, approaches and resources.

Key takeaways for the health, education, and public policy sectors included: defining and promoting a better understanding of obesity as a chronic disease to appropriate audiences; and using the power of storytelling to engage and communicate about the impact of weight bias.

A final report and a detailed action plan will be developed and distributed through the Canadian Obesity Network. Stay tuned for further details!
The Diabetes Foot Care Pathway project team has been busy meeting with pilot site primary care clinicians who have been using the pathway tools to gather feedback on their content and ease of use. Feedback has also been sought from the nurses who have been using the pathway tools in Brooks, Bassano, and Oyen. The next steps will be to improve the tools and meet with patients to get advice on improving the patient handout. We anticipate the tools will be ready for the next phase of sites to implement the pathway and develop High Risk Foot Teams in fall of 2016.

The results from the pilot data so far show that several patients who are at high risk of developing an ulcer have been referred to the High Risk Foot Teams, who are providing education for self-management, including the importance of proper foot care and footwear. Patients who met criteria have benefitted from therapeutic footwear through the Alberta Aids to Daily Living Program. Other patients in the pilot have benefitted from prompt referral to the High Risk Foot Teams who provided interventions to heal their ulcers as well as coordinate their care with other specialists.

The Alexis First Nation’s Diabetes Wellness Fair

On April 7, 2016, the DON SCN along with Michele Suitor, Nurse Practitioner from the WestView High Risk Foot Team, and Ashley Croswell, Foot Care Nurse from WestView Primary Care, attended the Alexis First Nation’s Diabetes Wellness Fair. The Alexis First Nation is part of the WestView pilot. Many people with diabetes visited the DON SCN table and received information on how to take care of their feet and some received foot assessments. The event was a great success with the local clinicians being very committed to improving diabetes care now and in the future.

New Guidelines Available

In February 2016, the Journal of Vascular Surgery featured The management of diabetic foot: A clinical practice guideline by the Society for Vascular Surgery in collaboration with the American Podiatric Medical Association and the Society for Vascular Medicine. These comprehensive guidelines cover recommendations for prevention of diabetic foot ulceration, off-loading, diagnosis of osteomyelitis, wound care, and peripheral arterial disease. The standards of care developed as part of the Diabetes Foot Care clinical pathway align with these new guidelines which will act as an excellent resource for future High Risk Foot Teams to be established with the spread of the pathway across the province.

The Canadian Association of Wound Care (CAWC) Advocacy Campaign

This past April, the CAWC released a document titled “Working for Change: The CAWC’s Advocacy Campaign for the Prevention of Diabetic Foot Complications” which highlights suggested changes to health care policy and outlines cost-effective methods for improving foot care for people with diabetes and, ultimately, reducing the number of preventable amputations. To read more about the campaign and action for change please click here.

Planning is underway for a symposium in spring 2017 to create awareness of the Diabetes Foot Care Clinical Pathway and provide an educational opportunity to primary care providers on how to use the pathway tools, how to do diabetes foot assessments and management recommendations.

Further updates about the symposium will be made as they are available. For more information, please contact DiabetesObesityNutrition.SCN@ahs.ca
Safety Management of Insulin Pump Therapy in Hospital

The safe management of insulin pump therapy (IPT) in hospitals is an integral aspect of the DON SCN’s Provincial Diabetes Inpatient Management Initiative. To support the self-management of IPT in hospital when appropriate, new Provincial Guidelines have been created, along with provincial forms, and directions for different clinical scenarios. Click here to access the guidelines or visit the Inpatient Diabetes Management project website here: http://www.ahs.ca/scns/Page10970.aspx

The guidelines were introduced during a webinar presented by Dr. Julie McKeen (Endocrinologist in Calgary Zone and Physician Lead on the Provincial Diabetes Inpatient Management Initiative) and Isabelle Emery (Patient Advisor, DON SCN) hosted on April 28th, 2016. The recording of the webinar can be accessed here.

Provincial Policy and Protocols

Thank you to our Multidisciplinary Working Group, representing all five Zones, for their valuable input in building a policy and accompanying protocols for hypoglycemia management and hyperglycemia management, to support adult patients with diabetes requiring glycemic management in hospital.

Implementation and Sustainability of Basal Bolus Insulin Therapy (BBIT) and Improved Glycemic Management

BBIT is a way of ordering multiple daily injections of subcutaneous (sc) insulin that better replicates how our body naturally produces insulin. BBIT allows clinicians to customize insulin regimens based on the unique needs of each patient. BBIT is a proactive approach to managing diabetes within the hospital and aims to anticipate patient's insulin needs.

It also minimizes the fluctuations in blood glucose levels, reduces episodes of both hyperglycemia and hypoglycemia, and supports keeping the hospitalized patient's blood sugars within the target range of 5-10 mmol/L.

BBIT has been shown to be an effective way to manage patients' diabetes during their hospital stay, and is similar to how many patients manage their diabetes in the community.

Sliding Scale Insulin (SSI) continues to be commonly used in the treatment of diabetes within the inpatient setting. Unfortunately the use of the “sliding scale” regime treats hyperglycemia after it has occurred. It is not individualized to the patient and can result in large blood glucose fluctuation throughout the day. These fluctuations make the patient feel unwell, and increase morbidity, mortality and length of stay. SSI does not align with current practice guideline.

Audit DATA to support the update and sustainability of BBIT

An audit tool consisting of several indicators has been created to support early adopter sites in the uptake and sustainability of the clinical practice change to basal bolus insulin therapy. Pictured below is a sample of a few of the indicators populated in Tableau for frontline clinicians to access and utilize with their teams.

Partnering with Calgary Zone Hospitalist Program

Thank you to the multidisciplinary site champions, connected to the Hospitalist program, across four sites in Calgary, for a great Train the Trainer day on April 8th, 2016 at the South Health Campus auditorium (pictured above right). The DON SCN provincial team is excited to be supporting the Calgary Zone Hospitalist group in their Glycemic Optimization initiative.
AICE Grant
Submitted by Dr. Cathy Chan, DON SCN Scientific Director

A research team led by the DON SCN has partnered with Orpyx Medical Technologies Inc. and Exciton Technologies Inc. to acquire Accelerating Innovations into CarE (AICE) funding from Alberta Innovates Health Solutions.

The intent of AICE grants is to allow Alberta-based medical technology companies to work with the SCNs to conduct demonstration projects to test, evaluate and validate the impacts of new technology on disease outcomes, with the intent of improving the health system and overall health of Albertans. In the case of the DON SCN, Orpyx and Exciton, we will work together to improve foot care options in diabetic patients with foot ulcers.

As reported previously in this space, a priority of the DON SCN is to implement and evaluate the Diabetes Foot Care Clinical Pathway. Within the patient cohort entering the care pathway, some will have foot wounds that fail to heal in timely fashion.

The Exciton technology, a wound dressing called ExSalt7 contains a special formulation of silver oxysalts with antimicrobial properties expected to promote wound healing. The dressing is expected to be cost-effective and well-tolerated by patients. Once a patient’s ulcer has healed, it is well known that up to 50% will have the ulcer recur within one year.

The Orpyx technology is a “smart” insole called Surrosense that detects pressure points in the foot and alerts the patient to the situation, which allows him/her to then change footwear, rest the foot or take other preventative measures. In trials to date, Surrosense wearers have 80% less ulcer recurrence than predicted.

Over the next 3 years, our research team will evaluate the use of ExSalt7 wound dressings and Surrosense insoles in eligible patients at our three Diabetes Foot Care clinical pathway sites in WestView, Brooks and Slave Lake. We will monitor clinical outcomes and clinician and patient satisfaction with the devices. The anticipated outcomes are better care options for diabetes patients with foot ulcers as well as increased exposure of these Alberta-based technologies in our health system.

Community Scholar Award
DON SCN Scientific Director Catherine Chan and colleague Rhonda Bell were honoured in May by the University of Alberta as the 2016 Community Scholars. These awards are for an individual or team of academic staff members who not only excel in their scholarship, but also read and frequently bring that scholarship into the community, showing how their work affects people’s lives. Congratulations Cathy and Rhonda!

Research Highlights
Submitted by Dr. Catherine Chan, DON SCN Scientific Director & Dr. Naomi Popeski, DON SCN Assistant Scientific Director

In spring of 2016, the DON SCN Scientific Office received fifteen applications of the highest scientific rigour for our Seed Grant Funding competition. Submissions were focused on the prevention and/or improvement of outcomes from diabetes, obesity, and nutrition-related health problems, and were reviewed by both patients and a number of individuals from the research community.

We are excited to announce the awardees / topics as follows:

Dr. Tanis Fenton (University of Calgary): Preterm infants risk of overweight at three years of age, after controlling for important determinants

Melani Gillam (Alberta Health Services): Improving the accuracy of measuring oral food and fluid intake of adult patients in acute care.

Dr. Brenda Leung (University of Lethbridge): The link between gestational diabetes and perinatal depression: the role of nutrient status.

Dr. Kerri McBrien (University of Calgary): Care guide for patients with high risk diabetes-development of a novel intervention.

Dr. Arya Sharma (University of Alberta): Weight bias research: moving beyond raising awareness and creating change!

Dr. Ellen Toth (University of Alberta): Breaking the cycle: understanding diabetes in pregnancy in aboriginal women.

We would like to acknowledge Dr. Arya Sharma on his Talk, How to Lose 50 Pounds and Keep Them Off, which is available on YouTube (click here). In his talk, Dr. Sharma discusses weight loss and regain, and how obesity behaves as a chronic disease. Dr. Sharma is Professor and Chair in Obesity Research and Management at the University of Alberta as well as Medical Director of the Alberta Health Services Provincial Obesity Strategy. He is also the Scientific Director of the Canadian Obesity Network.

The Scientific office would like to recognize Dr. Donna Manca, an Associate Professor and Director of Research in the Department of Family Medicine at the University of Alberta.

Dr. Manca was successful in Alberta Innovates Health Solutions’ Cancer Prevention Research Opportunity (CPRRO), with funding provided by the Alberta Cancer Prevention Legacy Fund (ACPLF).

Her research - The BETTER WISE Project - will build on existing tools to improve cancer and chronic disease prevention and screening in primary care for wellness of cancer survivors and patients.

If you are a DON SCN member and you would like to see your research profiled here, please contact Naomi.Popeski@ahs.ca.

For more information about or to get involved with the DON SCN:
- Contact us at DiabetesObesityNutrition.SCN@ahs.ca
- Visit www.ahs.ca/donscn