Vancouver Coastal Health Integrated Primary and Community Care

Chronic Disease Nurse Clinic Evaluation Results

Vancouver Coastal Health – North Shore

April 2nd, 2013

New Centralized CDN Clinic Shows Promising Results for Patients

How does the CDN Clinic work?

Any patient on the North Shore can be referred to the CDN Clinic by their GP. The comprehensive appointment ranges from 1-2 hours, and includes a complete medication review. There is no limit on the number of times a patient can be seen at the clinic, although the majority of patients have an average of 2 visits per year.

In August 2011, a centralized Chronic Disease Nurse (CDN) clinic was established in West Vancouver Community Health Centre to service patients across the North Shore with two or more chronic conditions who would benefit from comprehensive, guideline-based care to manage their chronic conditions.

Between August 2011 and January 2013, a total of 70 referrals were received by the clinic, with 56 clients seen by the CDN. Twenty (20) GPs referred to the clinic.

An evaluation of the clinic took place during the winter of 2013. This report outlines the findings from the patient survey, the GP survey, and the acute health utilization data of the patients enrolled in the clinic.

Most Common Conditions Seen by the CDN Clinic

- Prediabetes/Diabetes
- Hypertension
- COPD
- Chronic kidney Disease
- Hypothyroidism
- Anxiety and Depression

Patients Give High Praise to the CDN Clinic

A Patient Survey was completed with CDN Clinic patients in January and February 2013. Twenty-two surveys were distributed, with 18 returned representing 32% of the patient population. The survey found that **87%** of patients strongly agree or agreed that they would recommend this service. **Diabetes** was the most commonly cited condition which patients discussed with the CDN, followed by **arthritis** and **hypertension**. In addition, **food/groceries, recreation**, and **exercise** were the most frequently cited non medical issues which patients discussed with the CDN. Over **93%** of patients strongly agreed or agreed that they had a better understanding of how to take their medications and knew how to reach their agreed upon health goals.

Patients did not have a problem attending the centralized clinic. The clinic had an 85% attendance rate, with 47% of patients driving their own car to the appointment. Over 94% of patients said that they did not have difficulty getting to the clinic.

Characteristic *	
Average Age of the Patients	69.1 years
Average Number of Conditions per Patient	5.7 (1-15)
Percentage Reporting Two or More Conditions	95%
Percentage Reporting Six or More Conditions	42%
Average number of appointments	2 visits
Range of number of appointments	1-6 visits
Rate of attendance	85%

* Administrative data collected by the program

"I appreciate Princeton's (the CDN) ability to clarify my understanding. His explanations really helped me reach a more informed level. For instance, the specific role of how the drugs work."

- CDN Clinic Patient

Patient Success Story

Patient A was recently diagnosed with Type 2 Diabetes, was overweight, a poor diet, and stress from a challenging job. With the help of the CDN, he made health goals for himself and identified barriers to achieving his goals. In a few months, the patient has

- ✓ Been participating in the Community Cardio Metabolic Program through Flex Funding from the CDN Clinic
- ✓ Lost over 20 pounds
- ✓ Not taking any diabetic medication
- ✓ Teenage daughter likes to go out in public with him now

Project Team Members

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GPs are very satisfied with the CDN Clinic

GPs who had referred to the CDN Clinic were invited to participate in a survey. Fourteen GPs invited and 7 responded. **100%** of family physicians rated their overall satisfaction with the clinic as either **very good** or **excellent**. **100%** of GPs also stated they were very satisfied with the timeliness and usefulness of communication from the CDN. Finally, **100%** of GPs said they were either very satisfied or satisfied with improved patient/client awareness and self-management of their health conditions since seeing the CDN and improved patient/client satisfaction outcomes.

When asked what the **main difference the CDN has made**, GPs said:

- ✓ Complex clients receiving more complex care
- ✓ Connection and referrals to community programs
- ✓ Able to identify and treat the bio-social-psycho needs of patients

Improved Patient Outcomes

Acute health utilization data on 56 patients who were seen at the clinic were analyzed for this evaluation. Patients attending the Centralized CDN Clinic on the North Shore experienced a **52.7% decrease in ED visits** and a **76.0% decrease in hospital admissions** for Lion's Gate Hospital, 6 months after being seen at the clinic. While some patients had multiple ED visits, the number of unique patients with an ED visit in the past 6 months decreased from 17 to 14 patients, for an 18% decrease in ED visits.

Patients also had no readmissions to hospital at 3 or 6 months after being seen at the clinic, however due to the low sample size (n=6) included in this calculation, this result is to be expected.

"I appreciate having this service available. Complex patients with chronic disease are better managed in this team fashion. I enjoy communicating with Princeton over the telephone and continue to learn about other community resources available to my patients through Princeton."

- North Shore GP

Where to from here?

The evaluation results demonstrate a need for this type of clinic on the North Shore. Having the CDN located centrally does not seem to be a limiting factor in having GPs refer to the clinic, or for patients to attend the clinic.

It has been a challenge to communicate this service to GPs, and in the coming months, the CDN clinic will look at new communication avenues in order to increase the number of referrals to the program.

Interested in referring a patient to the CDN Clinic?

Fax a referral to 604-904-6172 or call 604-904-6200 x 4167 for more information.