The Seniors Wellness Clinic: An Interprofessional Health Promotion and Disease Prevention Care Model

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Abstract

In light of the aging population trend and the complex needs of the aging population, there is an increasing impetus to develop innovative service delivery models that focus on health promotion and disease prevention and management, are easily accessible for older adults of diverse ethnic backgrounds, are community-oriented, and incorporate an interprofessional team approach.

This article describes the development, implementation, and evaluation of the Seniors Wellness Clinic, an innovative health promotion model of care for older adults focusing on primary and secondary disease prevention and disease management.

Key words: health services for the aged, multidisciplinary care team, program development, health promotion

Introduction

Various factors pose significant challenges in the provision of ambulatory health care services to the older adult population. By the year 2021, it is expected that 6.7 million of Canada’s population will be 65 years of age or older, and in the United States that number is estimated to be 70 million by 2030. The incidence of chronic disease is associated with increasing age. In the United States, the majority of those over the age of 70 have at least one chronic condition, causing significant implications for the health care system.

Access to quality health care is highly dependent on various determinants of health. For instance, age, ethnicity, and socioeconomic status have been shown to be barriers in taking recommended health actions. These barriers are also occurring in a health care system that shows trends towards decreased average lengths of stay (ALOS) for inpatients. The United States reported a decrease of 2.9 days over 31 years. Similarly, Canadian statistics indicate a decrease of 3.8% between 1995 and 2000. Ultimately this trend can affect the quality of inpatient care and has been shown to lead to increased re-admissions for several conditions following discharge.

Decreased ALOS and rising health care costs have contributed to an increased emphasis on community-based health education programs. Health promotion strategies address patients’ health educational needs related to chronic conditions and facilitate a connection between health status and lifestyle change. Evidence illustrates that group education has promoted physical activity for physically underactive seniors, improved knowledge and quality of life, resulted in better symptom control, prevented functional decline, and reduced hospitalizations and utilization of emergency health services in community-dwelling older people with chronic conditions. Provision of formalized education programs outside the traditional hospital setting has also
been shown to increase patient knowledge.\textsuperscript{16}

The interprofessional team approach focusing on integrated and coordinated care is becoming more prevalent\textsuperscript{17} and is more effective in delivering quality patient care compared to approaches that focus on each function and/or specialty.\textsuperscript{18} Although the terms interdisciplinary and interprofessional are frequently used interchangeably, they are in fact different. \textit{The Webster's Third New International Dictionary} defines discipline as a field of study, whereas profession is defined as a calling requiring specialized knowledge and often long and intensive preparation.\textsuperscript{19} As such, interdisciplinary can be taken to mean different specializations in the same profession.\textsuperscript{20} For instance, psychiatry and family medicine are both disciplines in medicine,\textsuperscript{20} and nurse practitioner and registered nurse are both disciplines in nursing. In light of the need for greater clarity, the term “interprofessional” has been the preferred term as it refers to different professional groups (i.e., social work, nursing, medicine) working collaboratively.\textsuperscript{20} It has been shown that community-based health promotion programs using an interprofessional, collaborative practice model can improve healthy behaviours, self-care disease management, and quality of life measures as well as help maintain the functional independence in individuals reporting a high number of chronic health conditions.\textsuperscript{4}

In light of the factors described above, an interprofessional health promotion model of care aiming to promote and support a healthy aging process was developed. The Seniors Wellness Clinic (SWC) focuses on primary and secondary disease prevention and the concept of self-management of chronic diseases. This article describes the development, implementation, and evaluation of the SWC.

**Development of the Program**

In October 1996, in response to health services restructuring and regionalization, an interprofessional task force was created with the vision of developing and implementing an ambulatory service with the goal of promoting a healthy aging process for older adults living in the surrounding community. In 1996, older adults aged 65 and older comprised 11.7% (approximately 40,000 individuals) of the hospital’s catchment area population; of those older adults, 13% were living alone. Approximately 45.4% of residents’ mother tongue was not English or French. The most common languages spoken at home were English, Portuguese, Chinese, Italian, Spanish, Vietnamese, Polish, and Greek. The catchment area housed 18% of Toronto’s population with less than grade 9 education.\textsuperscript{21}

Various initiatives were implemented in establishing the SWC including literature reviews that were conducted to understand the evidence base for programs and programmatic components; telephone interviews and site visits that were carried out to compare facilities offering outpatient geriatric programs to generate benchmarks; needs assessment surveys that were distributed to family physicians and older adults in the community to determine older adults’ common health issues, needs and concerns, and perceived barriers to attend health promotion programs; and an extensive community consultation (via focus groups) with community health workers and community health and social agency executive directors was conducted to establish the strengths, weaknesses, opportunities, and barriers to developing and implementing the proposed SWC. Based on the results, the team designed a program that was comprehensive, interprofessional, culturally and linguistically sensitive, and easily accessible to the older adults in the community.

The development of the SWC was grounded on the conceptual frameworks of the primary health care concept\textsuperscript{22} and the philosophy of health education/promotion programs.\textsuperscript{23} The most common barriers in attending the proposed SWC identified by the older adults were physical limitations, language, and transportation. To address these concerns, the SWC team utilized the primary health care concept\textsuperscript{22} of working in partnership with the community through the principle of public participation and intersectoral collaboration. Community partnerships were established through the initiative of the clinical nurse specialist (CNS) in order to make the clinic portable, delivering services to various community centres, agencies, and older adults’ residences.

In tune with the philosophy of health education/promotion programs,\textsuperscript{23} the SWC team supported the process of individual and community empowerment by acting as a point of entry to bring older adults together and facilitate supportive interactive relationships among themselves, creating an environment conducive to increasing knowledge, and supporting behaviour modification to maintain health/prevent disease, increasing awareness and facilitating access to resources, supporting older adults in taking personal action/responsibility for their health, expanding older adults’ understanding of health through a holistic approach, and improving the continuum of care by developing partnerships with other providers that offer services to older adults within the community.

**Description of the Program**

Seniors’ Wellness Centre is based at the Toronto Western Hospital (TWH), a 260-bed tertiary care hospital that is part of the University Health Network, an umbrella organization comprised of three hospitals. Seniors’ Wellness Centre is a community-oriented program targeted to adults 55 years of age and above who have some degree of frailty. Frailty in older persons is defined as having multiple acute or chronic health problems compounded with functional and/or cognitive impairments and the need for supportive care.\textsuperscript{24} However, the type of patients that benefit from this program are those that have one or more chronic illnesses affecting their physical and psychosocial health, but who are still able to provide some self-care and are cognitively capable of participating in the group sessions and individual counselling.

The SWC is comprised of an inter-
In the second hour, an interpreter is provided (such as blood-pressure cuff, glucometer, gloves, etc.). Attendance is taken necessary teaching aids and medical supplies (such as blood-pressure cuff, glucometer, gloves, etc.). Attendance is taken at every session for both in-house and onsite groups so that visits can be registered in the hospital database system. The program runs once per week for 2 hours over a period of 16 weeks, and group size varies between 10 and 20 participants. Four different programs are run concurrently on separate days. Due to the multicultural nature of the population, each program is language specific (English, Chinese, Portuguese, Vietnamese, Greek, Italian, and Spanish are included).

In 2005, the clinic had 1,858 patient visits (one visit = one face-to-face contact per day). As is the case with other hospital outpatient visits in Ontario, attendance in the SWC is covered by the Ontario Health Insurance Plan at no cost to the patient.

The SWC includes the following components: assessment, group education, group exercise, individual counseling and follow-up.

Assessment
The first four sessions of the 16-week program are used to orient patients, collect demographic information, and conduct a comprehensive individual assessment. To allow for consistency of information collected, the SWC developed an interprofessional assessment form, designed so that any health professional could conduct the assessment. This four-page form consists of medical history, nutritional profile, medication data, physical activity, stress management, social assessment, and patient’s expressed concerns/goals.

After all patients have been assessed, team rounds are held to review the assessment information and develop a care plan. The care plan identifies which team members need to see a patient individually, any necessary referrals that need to be made within and outside the hospital, and any recommendations for the family physician. Team members also consult with each other informally as needed throughout the program. Team rounds are held again at the end of the 16-week program to prepare the discharge reports for each patient’s family physician.

Group Education
Following assessment, each of the weekly 2-hour sessions consists of an interactive discussion during the first hour, delivered by the various team members on a wide range of health topics pertinent to older adults. In the second hour, an exercise class led by a registered physiotherapist takes place (Table 2). The concepts and strategies in teaching are based on principles of adult education. Team members use a variety of interactive approaches and teaching aids, such as games or culturally appropriate food replicas, tailored to suit the learning needs of older adults and their diverse ethnocultural backgrounds. A comprehensive manual containing information and key messages from each of the topics is provided to each patient.

Group Exercise
Patients participate in the exercise class once their physician completes a medical clearance form. The exercise class is performed at low-to-moderate intensity, monitored by taking a pulse prior to warm-up and cool-down exercises. The exercises are tailored to suit individuals as well as the entire group depending on participants’ fitness levels and the extent

Table 1: Full Time Equivalence (FTE) and Language Spoken of Team Members

<table>
<thead>
<tr>
<th>Professional</th>
<th>FTE</th>
<th>Second Language Spoken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Nurse Specialist</td>
<td>0.6</td>
<td>Filipino</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>0.5</td>
<td>Chinese</td>
</tr>
<tr>
<td>Dietitian</td>
<td>0.5</td>
<td>Filipino</td>
</tr>
<tr>
<td>Social Worker</td>
<td>0.4</td>
<td>Portuguese</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>0.1</td>
<td>Chinese</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>0.6</td>
<td>Russian</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>0.2</td>
<td>None</td>
</tr>
<tr>
<td>Psychologist</td>
<td>0.2</td>
<td>Portuguese and Spanish</td>
</tr>
<tr>
<td>Cognitive Behaviour Therapist</td>
<td>*</td>
<td>Portuguese and Spanish</td>
</tr>
<tr>
<td>Chiropodist</td>
<td>0.05</td>
<td>Portuguese and Spanish</td>
</tr>
<tr>
<td>Secretary</td>
<td>0.5</td>
<td>None</td>
</tr>
<tr>
<td>Care of the Elderly Physician</td>
<td>*</td>
<td>None</td>
</tr>
</tbody>
</table>

* By referral only.
of their disabilities. Low-to-moderate aerobic exercise is included as it has been found to be effective for older adults in the management of type II diabetes, hypertension, and cardiovascular disease.\textsuperscript{27} Resistive/strengthening exercises for upper and lower extremities are included, as these have been found to be effective in osteoarthritis and osteoporosis management for older adults.\textsuperscript{27,28} Finally, balance exercises are added as they have been found to be effective in reducing falls among older adults when combined with strengthening and aerobic exercises.\textsuperscript{29} Each session is 45 minutes in duration and is comprised of a warm-up (5 minutes), flexibility exercises (5 minutes), chair aerobic exercises (15 minutes), strengthening and balance training (15 minutes), and a cool-down (5 minutes). The majority of exercise is performed in sitting position and involves rhythmic movement of upper and lower extremities. All upper and some lower extremity strengthening is done with the use of elastic exercise bands (TheraBands\textsuperscript{TM}). The remaining lower extremity strengthening and balance exercises are performed in a standing position using chairs for support.

**Individual Counselling and Follow-up**

Ongoing individual counselling to address patient-specific issues is provided during the 16-week program and as needed after the program ends. Six months after the end of the program, a group follow-up is scheduled so that team members can follow-up with the patients they had counselled individually during the program in order to assess progress and address any outstanding and/or new concerns.

Patients also have an individual consultation with the Care of the Elderly Physician if requested by their family physician, and a consultation note with findings and recommendations is sent to the patient’s family physician.

**Evaluation of the Program**

The following are outcome indicators that have been used to evaluate the SWC.

**Patient Satisfaction**

At the end of each program, patients complete an 11-item questionnaire to evaluate the program. This tool, developed by team members, includes open and closed-ended questions about the different components of the program and what lifestyle changes they already made and/or plan to make. The results from this measure have been predominantly positive. In 2004, 82 patients completed the questionnaire. The following program elements were identified as being helpful: educational sessions (94%); exercise sessions (91%); and individual counselling (79%).

**Knowledge Outcome Indicator**

To evaluate the effectiveness of the educational sessions, a 12-item pre- and post-program multiple-choice questionnaire

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### Table 2: Sample Schedule of the 16-Week Program

<table>
<thead>
<tr>
<th>Week</th>
<th>First Hour</th>
<th>Team Member</th>
<th>Second Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to SWC</td>
<td>Any team member</td>
<td>Registration/Individual Assessment*</td>
</tr>
<tr>
<td>2</td>
<td>Introduction to Exercise</td>
<td>Physiotherapist</td>
<td>Individual Assessments*</td>
</tr>
<tr>
<td>3</td>
<td>Hypertension</td>
<td>Nurse</td>
<td>Individual Assessments*</td>
</tr>
<tr>
<td>4</td>
<td>Arthritis</td>
<td>Occupational therapist</td>
<td>Individual Assessments*</td>
</tr>
<tr>
<td>5</td>
<td>Healthy Eating</td>
<td>Dietitian</td>
<td>Exercise class</td>
</tr>
<tr>
<td>6</td>
<td>Home and Pedestrian Safety</td>
<td>Occupational therapist</td>
<td>Exercise class</td>
</tr>
<tr>
<td>7</td>
<td>Stress Management</td>
<td>Psychologist</td>
<td>Exercise class</td>
</tr>
<tr>
<td>8</td>
<td>Safe Use of Medication</td>
<td>Pharmacist</td>
<td>Exercise class</td>
</tr>
<tr>
<td>9</td>
<td>Power of Attorney and Wills</td>
<td>Social worker</td>
<td>Exercise class</td>
</tr>
<tr>
<td>10</td>
<td>Immunization</td>
<td>Nurse</td>
<td>Exercise class</td>
</tr>
<tr>
<td>11</td>
<td>Foot Care/Skin Care</td>
<td>Chiropodist</td>
<td>Exercise class</td>
</tr>
<tr>
<td>12</td>
<td>Stroke</td>
<td>Occupational therapist &amp; physiotherapist</td>
<td>Exercise class</td>
</tr>
<tr>
<td>13</td>
<td>Financial &amp; Community Resources</td>
<td>Social worker</td>
<td>Exercise class</td>
</tr>
<tr>
<td>14</td>
<td>Diabetes</td>
<td>Nurse</td>
<td>Exercise class</td>
</tr>
<tr>
<td>15</td>
<td>Osteoporosis</td>
<td>Nurse</td>
<td>Exercise class</td>
</tr>
<tr>
<td>16</td>
<td>Health information &amp; Resource Centre</td>
<td>Guest speaker from this centre</td>
<td>Program Evaluation &amp; Graduation</td>
</tr>
</tbody>
</table>

* When patients complete their individual assessment they need not stay for subsequent assessment sessions.
was developed to measure change in knowledge. Due to the length of time it took for patients to complete the questionnaire, this measure was implemented for a short period of time. Of eighteen patients who completed the questionnaire, an increase in knowledge was noted: 68% of the questions were answered correctly at baseline compared to 90% at the post-test.

**Behavioural Outcome Indicators**

From January 2002 to February 2003, the team undertook a pilot study to assess the effectiveness of the exercise component of the program. Patients completed a 6-minute walk test and a self-reported exercise activity questionnaire developed by the team. Both of these measures were administered pre- and post-program. Data for sixty-one patients indicated a significant (P<0.05) increase in metres walked from 398.3 (pre) to 425.1 (post). Complete publication of these results is forthcoming. Patients’ self-reported exercise activity also significantly (P<0.05) increased from 161.8 minutes (pre) to 281.3 minutes (post). The self-reported exercise questionnaire appears to be more sensitive to program-induced changes than the 6-minute walk test. The reliability of the self-reported exercise activity questionnaire was tested from August to September 2004 using a Pearson correlation and was found to be a reliable measure (r=0.980, P=0.000) to evaluate physical activity among older adults from multicultural backgrounds.

**Community Worker Satisfaction**

To measure the effectiveness of our community partnerships, a seven-item questionnaire including open and closed-ended questions was developed. At the end of each offsite program, the community worker who assisted with recruitment and management of the group was asked to complete the questionnaire. This evaluation tool was recently implemented therefore the results are from five community partners who all indicated the program filled a gap in existing community services and reported they would use our services again.

**Challenges and Lessons Learned**

The fact that all team members are part-time in the SWC, despite being full-time hospital employees, has been a challenge. Limited human resources coupled with the high demand of Toronto’s socially and economically disadvantaged inner city senior population, means that we must limit the group size and number of programs delivered per year.

Identifying appropriate outcome indicators and measures that are feasible to implement in a multicultural population with low-literacy levels has been another challenge. We discovered that multiple-choice questions are not well understood by our patient population. Consequently, we have developed measures that require only “yes” and “no” responses. In addition, the anecdotal evidence and the aforementioned outcome measures are indicative of short-term outcomes only. A longitudinal study is necessary to evaluate the long-term outcomes of the program, such as whether the program contributes to improving the quality of life of older adults and impacts on the development of long-term health complications, hospital admissions and healthcare costs.

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