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PROMISING BEST PRACTICE: THE CHAMPLAIN GERIATRIC EMERGENCY MANAGEMENT *Plus* (GEM *Plus*) PROGRAM

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The emergency department (ED) is a common entry point for people to access the health care system. Overcrowding in the ED is a modern reality and hinders delivery of emergency care.[1–3] Overcrowding, combined with the high-paced, high-stress ED environment, promotes the rapid assessment and discharge of patients with a focus on treating the presenting complaint in isolation of other existing conditions. Although this approach has implications for all patients, it presents a particular challenge to vulnerable high-risk older adults with multiple comorbidities who are frequent users of the ED.

Older adults have unique physiological, medical, and social requirements that may not be considered within the traditional ED paradigm of care.[2,3] The complex nature of these patients means they consume more resources, have high rates of return ED visits, and frequently require admission to hospital.[4] Despite the frequency of ED visits, this environment remains poorly adapted to meet the needs of older adults, contributing to avoidable decline and loss of independence.[5,6]

An example of a promising best practice in the area of ED seniors' care is the Champlain Geriatric Emergency Management *Plus* (GEM *Plus*) program, which represents a unique adaptation of the successful GEM models found in other areas of Ontario, Canada.

Administered by the Regional Geriatric Program of Eastern Ontario (RGPEO), GEM *Plus* is an evidence-based regional program that includes specialized geriatric nurses within nine EDs across the (Eastern Ontario Regional Health Authority) (the Champlain Local Health Integration Network [LHIN]), as well as an integrated partnership with over 20 organizations, including both Specialized Geriatric Services (SGS) and Community Support Services (CSS). Funded as part of the Ontario Aging at Home Strategy, the GEM *Plus* program was rolled out in 2008 by the Champlain LHIN. With early identification of geriatric syndromes and initiation of appropriate referrals for high-risk seniors who are not being admitted to hospital but rather are being discharged to the community to SGS and CSS, the goal of the program is to promote safe, sustainable discharge of high-risk seniors from the ED, thereby preventing return ED visits and admissions to hospital.

A distinct feature of this model includes the two-stage approach to screening used to identify the target population, which is consistent among the nine program sites (see Figure 1). First, patients are identified through an electronic screening process (stage 1 screen) implemented during initial ED registration. Potential high-risk seniors are identified for the program ("screen positive") if they meet all of the following criteria: (1) are aged 75 years and over, (2) have had two or more ED visits in the previous six months, (3) are not currently living in long-term care; (4) present with a Canadian Triage and Acuity Scale or CTAS (http://caep.ca/resources/ctas) score of greater than 2, and (5) are currently living in the Ottawa-Carleton region in Ontario, Canada. Patients not meeting the screening criteria may also be referred to the GEM *Plus* program by any health care professional with geriatric concerns about a patient.

After the initial electronic screening process, patients screening positive who are likely to be discharged home are seen and assessed by the GEM nurse, who completes a more comprehensive risk assessment (stage 2 screen), using the Identifying Seniors

at Risk (ISAR) screening tool.[7]

Patients identified as high-risk then receive a targeted geriatric assessment, including recommendations for ED care. For patients who can be safely discharged home with enhanced support, GEM *Plus* interventions, such as priority referrals to SGS (e.g., geriatric outreach for home assessments, geriatric clinics, geriatric day hospitals, and geriatric psychiatry clinics), CSS (e.g., the "Going Home Program," which includes meals, transportation, homemaking, and Primary Care Outreach (http://www.seochc.on.ca/programs-services/primary-care-outreach-to-frail-seniors-pco/), and the Community Care Access Centre are initiated, with urgent access when appropriate.

GEM *Plus* Prevents Admissions To Hospital, Resulting In Cost Savings

The RGPEO works in partnership with The Ottawa Hospital (TOH), the largest adult tertiary acute-care hospital in Eastern Ontario. The program evaluation findings in Tables 1 through 3 are drawn from TOH GEM data. The attached analyses (Table 2) demonstrate that the TOH component of the GEM *Plus* program saves 1310 bed days (the equivalent of 4.75 acute-care beds). This in turn represents a cost savings of $1,941,340 for the TOH component of the GEM *Plus* program alone (Table 3).

More detailed analyses can be found at http://www.rgpeo.com/en/health-care-practitioners/research.aspx.

Table 1. Study Population

CTAS 3-5 Cases in 2012/13 FY	Emergency Department Cases	Admitted Cases
Study Population: GEM+	932	162
Comparator Population: Non-GEM+	6774	1955

Note: No significant differences were found between the two populations (e.g., Canadian Triage and Acuity Scale levels, risk adjusted mortality, comorbid score, and resource intensity levels).

Table 2. Bed Days Saved for CTAS 3-5 Cases in 2012/13 FY

Bed Days	Hospital Beds
1310.7 bed days saved	4.75 hospital beds saved

Table 3. Costs Avoided for CTAS 3-5 Cases in 2012/13 FY

Costing Findings for the GEM+ Program	
Total Costs Avoided by GEM+ Program	$2,326,284.79
TOH GEM+ Program Costs (e.g., staffing)	-$384,944.00
Total Cost Avoidance	**$1,941,340.79**

Critical Elements Contributing To The Success Of GEM *Plus*

1. Regional Governance Structure

One aspect of this model is a regional governance structure; that is, a Project Leadership Team (PLT) comprised of more than 20 program partners representing key SGS and CSS from across the Champlain LHIN. The PLT has the mandate to oversee the growth, coordination, and evolution of the GEM *Plus* program and sets direction and policies based on the project requirements, as determined by the Champlain LHIN. The PLT has embraced a shared governance model that supports decision-making through distributed and shared power to include regional coordination, local planning, and service while the RGPEO provides leadership and support for the program.

2. Accountability Agreements

Accountability agreements are signed with all partners and are reviewed on an annual basis. They detail the scope of services to be provided and specify the mandatory statistical and financial reporting required for evaluation purposes. The strength of this regional approach with formal accountability agreements is that it allows the PLT to monitor and shift resources according to demand, thereby adapting to ever-changing community needs.

3. Purchasing of Urgent Access to Services

The Aging at Home budget for the full regional GEM *Plus* program is $4.2 million, with $1.2 million directed to ED GEM nurses and $3 million directed to CSS and SGS. This means that 72% of the GEM *Plus* funding goes directly to support community-based SGS and CSS to ensure timely access to services for high-risk seniors discharged from the ED. This *purchased priority access* to SGS and CSS is unique to the Champlain GEM *Plus* model and leads to more sustainable discharge of patients through improved independence and patient safety, as well as urgent follow-up by geriatric specialists, thus preventing unnecessary hospital admissions and returns to ED.

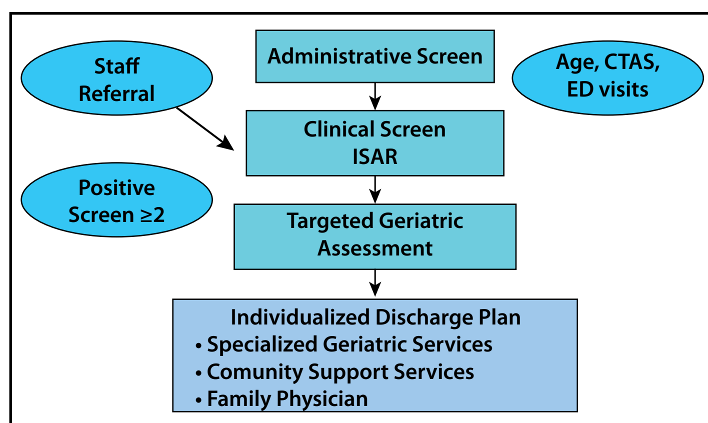

Figure 1.

Conclusion – Reintegration Of Community Health Care Silos

The population of older adults is growing in Canada and will represent 25% of the population in 2036 (Stats Canada); a fact that is threatening to overwhelm the acute-care system. The complexity of care for this population and the need to keep seniors as independent as possible in their own homes highlights the importance of creating coordinated community care that will allow services to be provided to seniors in the right place and at the right time in order to prevent avoidable, costly, and lengthy acute-care hospitalizations and to thereby contribute to a reductions in hospitalized patients requiring alternate levels of care (ALC). The GEM *Plus* program represents an example of successful integrated community care that prevents hospitalizations, resulting in significant cost savings to the health care system.

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EDITORIAL

Silo Busting: Saving Precious Health Care Resources by Reintegrating Seniors' Care via Adaptive Network Funding

To quote Einstein, "Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted." The waste in seniors' health care counts but would be difficult, if not impossible, to fully quantify. It is nevertheless apparent that seniors' health care remains fragmented ("siloed"), poorly coordinated, and therefore wasteful. Due to lack of a well-coordinated community-based health care system, seniors end up being treated not in the community but in the most expensive setting possible: acute-care hospitals. This contributes directly to hospital overcrowding (e.g., "bed gridlock"), high alternate level of care (ALC) rates, and waste of health care dollars.

To understand at least part of the fragmentation in seniors' care, we need only follow the money trail. Health care funding is commonly "*silo funding*"; that is, it is provided to single organizations for very specific episodes of care, with responsibility for patient care (and outcomes) ending as soon as the patient is handed over to another service (a myopic view of clinical responsibility that is in no way patient-centred). *Silo funding drives silo behaviour*, which contributes to fragmentation of health care, inefficiency (some would say dysfunction), and, in turn, waste of critical health care resources.

The article by Wilding and colleagues (page 6) shows us how strategically designed funding approaches and governance structures can break down silos and improve outcomes (e.g., decreased hospitalizations resulting in financial savings—a stunning $1.9 million a year in this case). The article demonstrates that the Champlain LHIN had great foresight when it permitted GEM *Plus* to spend most of its funds–not on GEM RNs, but to buy urgent access to other services the GEM RNs refer to, thereby empowering the GEM RNs and creating a clinical network. Control over where funding is spent has added a critical adaptive component to the program that allows money to be shifted to areas of greater need and greater success, thereby allowing the clinical network to adapt to changing community need.

These factors have broken down community health care silos and have resulted in a reintegration of community seniors' health care (similar to what existed in the Ontario Regional Geriatric Programs before their protected dedicated funding was shifted to unprotected host-hospital–based funding). The success of the GEM *Plus* program is telling; it demonstrates the cost savings that can be achieved when funding is not "siloed," but rather provided in a manner that permits network building and shifting of network funding to adapt to and match changing needs. This serves to break down silos and also breaks down the relatively static model of health care funding. In effect, the funding approach and the governance model created *adaptive health care network funding*.

Provincial and territorial ministries of health should closely examine this successful model of adaptive health care network funding (in particular, the critical drivers of success; regional governance structure, accountability agreements, and purchased urgent access to other services) to determine how these critical elements can be recreated in other areas of health care. Therein lies a key to building a robust community-based health care system that has the potential to prevent unnecessary acute-care hospitalization, avoidable functional decline, undesirable loss of independence, and unsustainable waste of scarce health care resources.

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