The Effect of a Structured vs. Non-structured Homebound Seniors Program on Resident Attitudes towards House Calls

Sunnybrook ACADEMIC FAMILY HEALTH TEAM

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Background

→ As Canadians aged 65+ continues to rise, more attention has been given to **home-based healthcare**.

→ Homebound seniors (>100,000 Canadians) have higher rates of diseases, chronic medication use, emergency department visits, hospitalizations, and challenges in accessing care.

→ Despite this growing concern, the number of physicians participating in house calls is declining.

→ Family Medicine residents have generally perceived lack of training as a significant factor limiting their likelihood of pursuing house calls in the future. Few academic centres have looked into instituting a structured homebound seniors program as part of residency training to **improve resident knowledge, skills, attitudes, and confidence in performing house calls**.

Sunnybrook BRIDGES Integrated Home-Based Primary Care (IHBPC) Project:
Dr. J. Rezmovitz, Dr. J. Charles, J. Smart (RN), Dr. A. David, Dr. R. Jain, I. Wirsig (Coordinator)

→ Sites having either a **structured** or **non-structured** homebound seniors program implemented in the residency curriculum were compared to assess if there is a difference in **resident attitudes** towards house calls.

→ 'Structured program' defined as a program which mandates residents to participate in home visits as part of the residency curriculum.

→ **Needs assessment** of resident perspective on improving the house call curriculum also performed.

Methods

→ Approved by REB at the University of Toronto

→ Survey distributed to Family Medicine residents from all 15 teaching sites at the **University of Toronto** at Academic Core Day (March 2013)

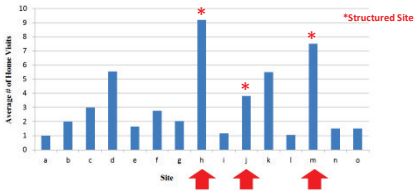
→ Core Day: 140 PGY1 & 112 PGY2 residents in attendance (Response rate of 94/252 = 37%)

Results

Resident Exposure to Home Visits at Each Training Site

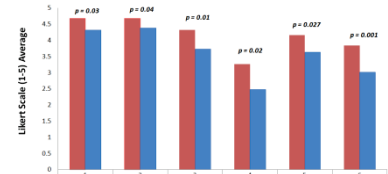
Mean (**structured**) = 6.7
Mean (non-structured) = 2.6
t = 4.70, p < 0.0001

a. Credit Valley Hospital
b. Markham Stouffville Hospital
c. Mount Sinai Hospital (MSH)
d. North York General Hospital
e. Royal Victoria Hospital
f. Rural Based Site
g. Southlake Regional Health Centre
h. St. Joseph's Health Centre
i. St. Michael's Hospital (SMH)
j. Sunnybrook Health Sciences Centre (SHSC)
k. The Scarborough Hospital
l. Toronto East General Hospital (TEGH)
m. Toronto Western Hospital
n. Trillium Health Centre
o. Women's College Hospital



Resident Attitudes between Structured and Non-Structured Sites

Statistically Significant Differences in Attitudes between Structured and Non-structured sites (p < 0.05)



	1	2	3	4	5	6
Structured	4.68	4.68	4.32	3.26	4.16	3.84
Non-structured	4.32	4.38	3.73	2.48	3.63	3.01

1) Compared to an office visit, you can learn unique things relevant to your patient's care by visiting them in their home (such as ADLs) (p = 0.03)

2) House calls enhance the doctor-patient relationship (p = 0.04)

3) A home-based primary care program could prevent or delay patients from entering long-term care (p = 0.01)

4) I feel adequately trained to do house calls (p = 0.002)

5) I have enjoyed house calls that I have been a part of in the past (p = 0.027)

6) I will likely participate in house calls as part of my own practice after completing residency training (p = 0.001)

Attitudes (approaching statistical significance p = 0.05 – 0.10)

	Structured	Non-structured	p-value
The patient's home environment plays an important role in their health	4.79	4.53	0.07
House calls are too time-consuming to incorporate into my practice	3.16	3.60	0.08

Attitudes (not statistically significant or "motherhood statements" common to most residents irrespective of site)

	Structured	Non-structured	p-value
Access to health care is a significant problem for homebound older adults	4.58	4.44	0.37
House calls provide access to care for homebound patients who would not otherwise have primary care	4.53	4.51	0.90
Concerns about my safety is an important barrier to doing house calls	3.26	3.25	0.97
Elderly homebound patients are at lower risk of hospital admission than non-homebound patients	2.58	2.27	0.32
Physician house calls reduce costs to the health care system	3.89	3.74	0.47
Home based primary care is most effective with an interprofessional team approach	4.58	4.36	0.18

Needs Assessment

Demonstrated that training related to the following would improve residency house call experience (irrespective of site):

Billing (70%) **Procedures (77%)** **Increased supervision (77%)** **Greater exposure to house calls (75%)**

Discussion

• **Variability of exposure:** some sites are in their infancy of program development (ex. SHSC launched BRIDGES July 2012); some sites are partially structured - preceptor dependent (ex. TEGH, MSH and SMH)

• **Resident Attitudes:** Attitudes re: patient, physician and health care system factors were viewed more positively among residents belonging to a structured program. Speculated reasons for this trend may be related to increased **exposure** and the overall **culture** of caring for elderly in their homes which is modeled at structured sites.

LOGIC OF INQUIRY – Resident Perspective

Intervention: Structured Homebound Seniors Program
↓
Increased Exposure (Statistical Significance) ↓
(Correlation) ↓
Promotes Positive Attitudes
↓
Increases confidence AND enjoyment in performing home visits
↓
Outcome: Increased likelihood of residents performing home visits in future practice

• **Supports Literature Review** findings (mostly Internal Medicine/Geriatrics)

Conclusions

Positive implications of study at multiple levels in **improving & sustaining care** for **homebound seniors** - can be implemented at a national level.

Resident Trainee
Residency Program
Medical Education System
Healthcare System

"There is nothing more powerful than an idea whose time has come" – Victor Hugo (1802-1855)

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