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### An Assessment of Institutional Relocation: Qualitative Perceptions and Resident Outcomes

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# An assessment of institutional relocation

## *Qualitative perceptions and Resident outcomes*



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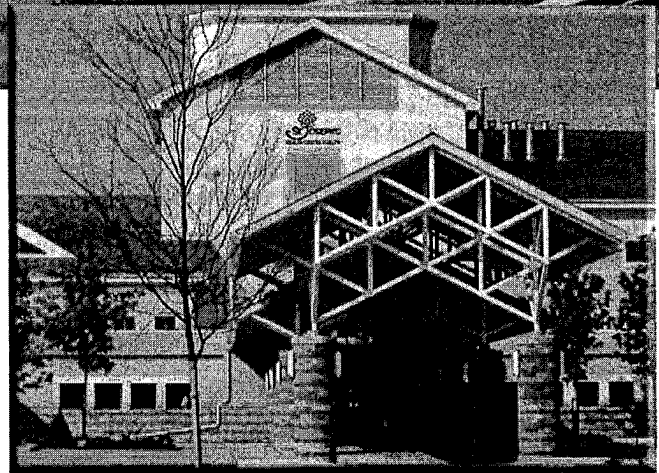
### INTRODUCTION

Relocation among older adults, either from their home to a long term care (LTC) facility or between facilities, has been studied since the early 1960s. The earliest studies focused on resident mortality while more recent papers have included other outcomes such as functional ability, depression, behavioral symptoms and general health and well-being.

Castle reviewed 78 studies measuring the impact of relocation. The vast majority of studies found no significant positive or negative effects of relocation. However, these studies were limited by sample size, equivocal time frames for outcome measurement and the lack of control groups.<sup>(1)</sup> Although the topic has clear relevance to Canadian LTC and complex continuing care (CCC) facilities, the Canadian literature is sparse.<sup>(2-4)</sup>

St. Joseph's Hospital and Home has been providing care for the people of Guelph since 1861. Planning began for a new building in 1994 and at that time, the decision was made to change the focus of the services provided. The acute care portion of staff and services were divested in 2001 to the Guelph General Hospital. In October 2002, residents, staff and volunteers moved into the new facility located on the existing property. The new 254-bed facility, known as St. Joseph's Health Centre (SJHC), includes LTC, complex continuing care and rehabilitation inpatient services as well as several outpatient programs.

The current study attempted to broaden the understanding of relocation from the perspectives of residents, families and staff at SJHC. Several characteristics of this project made it unique. For example, it took place within a Canadian context, used both qualitative and quantitative data collection methods, included families and staff and included questions to elicit a set of recommendations for other facilities preparing for a similar move.



### METHODS

The current project used a mixed method approach, incorporating the use of both qualitative and quantitative data collection and analytic strategies. Combining different methods allowed for a more complete understanding of the impact of relocation. Qualitative data collection, through individual interviews, provided a rich source of information from the perspectives of staff, families and residents while the quantitative data provided detailed information on the health and functional changes among residents.

#### Key informant interviews

Face to face, individual in-person interviews took place between January and March 2003, approximately three to five months post move. Interviews were typically an hour in length, were semi-structured and were conducted on site. Participants described their experiences regarding preparation for the move, the move itself and adjustment to life in the new building.

Residents, family members and staff who were known to be articulate and knowledgeable were purposely sampled for the face-to-face interviews. The interviews were taped, a summary was developed and a detailed transcript was then created for coding purposes. Eighteen months post move, four staff were interviewed by the research assistant (RK) to determine if issues had improved or had been resolved.

## RESULTS

The following section highlights some of the important themes arising from the key informant interviews. Subheadings indicate a different theme or topic of discussion.

A summary was randomly selected from among each of the three groups of participants (e.g., families, residents and staff) to begin to create a detailed codebook. Two members of the team independently reviewed the summary and began a set of codes that represented unique themes or issues raised in the interviews. Several meetings were held, some including another researcher with expertise in qualitative research, to finalize the set of codes. Text segments were regrouped according to their meaning within codes, and exemplary quotes were identified that reflected the opinions expressed in identified themes. This process of reviewing and editing out text segments was repeated to reduce the overwhelming amount of data to a more manageable size.

### Resident assessment data

In complex continuing care (CCC) at SJHC, as with all CCC facilities within Ontario, the Minimum Data Set 2.0 (MDS 2.0) is mandated for use with all residents on admission and on a quarterly basis. The MDS 2.0 is a multidimensional assessment that documents a resident's functional status across multiple domains including activities of daily living (ADLs), memory and cognition, pain, continence and mood.<sup>(5)</sup>

Embedded within the MDS 2.0 are several scales that use multiple MDS items to summarize a resident's level of functioning. The Cognitive Performance Scale (CPS) assesses cognitive functioning and has been validated against other standard instruments such as the Mini Mental State Examination and the Test for Severe Impairment.<sup>(6,7)</sup> A higher score indicates a higher degree of cognitive impairment.

The level of independence in carrying out ADLs was measured using the ADL Hierarchy Scale. This scale assesses a resident's ability to manage four ADLs on their own or with assistance: personal hygiene, toilet use, locomotion and eating. Any score above zero indicates that the resident required some level of assistance in completing these ADLs.<sup>(8)</sup>

The Depression Rating Scale (DRS) has been validated against other standard instruments such as the Hamilton Depression Rating Scale and the Cornell Scale for Depression<sup>(9)</sup> and a score of 3 or higher is considered indicative of symptoms of mild to moderate depression.

A pain scale has also been developed and ranges from 0 to 3, where 0 indicates no pain and a score of 3 indicates the presence of severe daily pain. This scale has also been shown to be a valid assessment of pain in a LTC population.<sup>(10)</sup> Two other scales, namely the Index of Social Engagement<sup>(11)</sup> and the Changes in Health, End-stage Disease, Signs and Symptoms (CHESS)<sup>(12)</sup>, can be calculated with items from a full MDS 2.0 assessment. The current sample had less than 10 full assessments and therefore these scales were not calculated.

MDS 2.0 assessments completed between December 5, 2001 and October 31, 2002 were included in the pre move cohort and those completed between November 1, 2002 and March 26, 2003, were defined as the post move cohort. Assessments were retained for analysis if a pre move MDS 2.0 assessment could be matched with one in the post move cohort. If an individual had multiple assessments within a cohort, the most recent assessment was chosen for analysis. A statistically significant difference ( $p < 0.05$ ) between the pre and post cohorts was assessed using McNemar's test for paired data.

The research proposal was reviewed and given full clearance from the Ethics Review Board of St. Joseph's Healthcare, Hamilton.

### Preparation for the move

In January 2002, SJHC implemented a number of preparation activities starting with the establishment of the Transition Monitoring Team and Transition Leader. Many participants recognized and noted the contribution of the Transition Leader for ensuring the whole relocation process went smoothly.

*"The move was well organized, I have to give all the credit for the organization to the (Transition Leader), she did a wonderful job...She kept everyone up to date as to what was happening; she was wonderful with the whole thing." — Family*

Tours of the new facility, information nights and newsletters were said to be especially helpful and most felt that the level of preparation was exceptional.

*"They were great keeping us informed. The newsletter often had lots of information which I read. The meetings with (CEO) were consistent and...informative when there was information to be shared." — Staff*

When asked about what else was needed in preparing for the move, some participants suggested that the tours be longer and staff suggested that there be additional orientation and training sessions and extra clinical staff to set up the work areas prior to the move.

### Best things about life in the new building

Participants from all groups talked about the positive physical qualities of the new facility. It was frequently mentioned as being one of the best things about life in the new building. Privacy for residents was an important positive attribute of the new facility. The new building includes only private and semi-private rooms, each with its own washroom, in contrast to the old facility that included mainly ward accommodation and communal washrooms.

*"Not so much having my own room, but having my own bathroom; that is a big plus. I guess everything is so nice. I can't think of anything we could ask for that we haven't got...." — Resident*

Many individuals talked about the staff as being the best part of life in the new facility and spoke very favorably about the quality of care provided.

*"My relationship with the staff (is the very best thing)...To see the staff's obvious caring, that has given me a real sense of comfort and support...The staff that do the hands on care are very skilled and very loving. They are the one thing that allows me some peace of mind." — Family*

### Hardest things about life in the new building

The layout of the new building was described as one of the hardest things about adjusting to life in the new facility. For example, neighbourhoods and hallways were now more spacious

but also spread farther apart, resulting in increased traveling distances for staff and residents.

*"... (One of the hardest things) I think, is access to staff because of the geographical layout and I think in every unit...staff are spread a lot thinner and have a lot more ground to cover." — Staff*

Staff members interviewed 18 months post move felt that staff have adapted to the longer distances, for example, by rearranging the location of supplies and equipment.

Participants also remarked that staff members were not as visible on the units in the new facility. In addition, the nursing centre was deliberately designed to be smaller and less intrusive in order to create a more homelike atmosphere.

*"... Maybe you're trying to attain a retirement home atmosphere, rather than a hospital atmosphere and in doing that some things are lost – the staff are not so much out there, not seen as often" —Family*

Eighteen months after the move, families appeared to have become more used to the layout and know how to locate staff when needed.

### Staffing changes

Several organizational changes took place in the months prior to and immediately following the move. The changes included layoffs, staff transfers to other areas, the introduction of personal support workers and new managers. For staff this meant job loss, or new roles and responsibilities, all generally adding to the level of adjustment. Disruption of bonds between families, residents and the staff that cared for them was stressful for those involved and led to a perceived decrease in communication between staff and families. However, those interviewed stated that the situation has improved.

*"My fears have been allayed since the move; there are more familiar staff in the unit than I expected there would be. The new people that I've gotten to know I've become comfortable with very quickly..." —Family*

### Meals

In the old facility, meals were prepared on the premises and residents could select items from a menu. It was easier to make substitutions if the residents did not like the choice. The new meal delivery system (re-therm system) was a significant contrast as the bulk of food is now outsourced and brought in frozen. The food is tempered and plated ahead of time which makes substitutions difficult. The majority of participants agreed that meals were one of the hardest things for residents to get used to. Not surprisingly one of the main concerns was the lack of choice with menu items.

*"One thing that sticks in my mind was that the old facility had a kitchen and there was some flexibility there as far as nutrition and meals for (resident). When we got over here it was pretty well laid out as to what was being served, the meals are brought in now. That was an issue..." — Family*

Food service representatives now attend the monthly resident and family neighbourhood meetings. In this way, they can hear the concerns and do their best to deal with them. The food service department is also tracking the menu choices to deter-

mine which are most popular. A cook has been hired to prepare some food items (e.g., roasts) on the premises. According to those involved in the follow-up interviews, families and residents have said they have noticed a real improvement with the meals.

## RECOMMENDATIONS

All those interviewed were asked to give recommendations to the SJHC and other facilities preparing to make a similar move. They stressed the need for a high level of communication between decisions makers and stakeholders throughout the transition period, especially in the immediate post move period. This would include the retention of the Transition Monitoring Team and Transition Leader for a few months after the relocation and the inclusion of debriefing sessions.

All stakeholder groups, including staff, families and residents, need to be involved with the planning and decision-making about the design of the new building. The management team should be committed to incorporating their recommendations. Since the facility may be home to different resident populations with different needs, this should be reflected in the design. In addition, because staff members and residents are knowledgeable about design features which effect quality of life, their ideas and opinions should be requested.

Table 1: Demographic characteristics of CCC residents

	Larger cohort (n=528)	Matched pairs sample (n=41)	p value
Mean (sd)			
Age (in years)	76.7 (12.8)	67.6 (17.8)	0.0025
Length of stay (in years)	1.4 (2.6)	2.7 (1.8)	<0.0001
% (n)			
Gender			
Male	44.4 (234)	43.9 (18)	1.0
Female	55.6 (293)	56.1 (23)	
Marital status*			
Married/widowed/divorced	87.7 (57)	85.7 (6)	1.0
Never married	12.3 (8)	14.3 (1)	

\* sample size is reduced for this item since it was based solely on respondents with a full MOS assessment

Strategies such as additional staff working for at least one month prior to and after the move were felt to be beneficial in terms of adjustment and stress. Where possible, staff should have the opportunity to set up their clinical areas and spend time in the new building prior to the move.

Facilities should also attempt to maintain staff and resident relationships in the neighbourhoods where possible. The importance of these relationships should not be underestimated and definitely help to support the adjustment process. In addition, volunteers should continue to be involved and maintain their contacts with residents as the move approaches and in the immediate period following the move.

## THE MINIMUM DATA SET 2.0

Forty-one individual CCC residents were matched to assess their functional and health status before and after the move. The sample of residents was significantly younger than the entire cohort of CCC residents, with a mean age of 67.6 years compared with 76.7 years ( $p=0.0025$ ). These residents also had a significantly longer length of stay at 2.7 years on average, compared with 1.4 years in the entire cohort ( $p<0.0001$ ). There was no significant difference on sex or marital status.

Table 2: Comparison between pre and post move health status among CCC residents

	Pre Move Cohort (n=41)	Post Move Cohort (n=41)	p value*
	%		
<b>WEIGHT LOSS</b>			
<b>Weight loss</b>			
Yes	4.9	7.3	<0.0001
No	95.1	92.7	
<b>MEDICATION USE</b>			
<b>Taking antipsychotic medication</b>			
Yes	5.5	17.0	<0.0001
No	94.5	83.0	
<b>Taking anti-anxiety medication</b>			
Yes	46.3	34.2	0.2
No	53.7	65.9	
<b>Taking antidepressant medication</b>			
Yes	26.8	19.5	0.0009
No	73.2	80.5	
<b>Taking hypnotic medication</b>			
Yes	12.2	0.0	<0.0001
No	87.8	100.0	
<b>FALLS, PHYSICAL FUNCTIONING, SLEEP</b>			
<b>Falls</b>			
At least one fall in previous month	2.4	7.3	<0.0001
No falls in the previous month	97.6	92.7	
<b>Activities of Daily Living (ADLs) (based on ADL Hierarchy scale)</b>			
Some level of dependence	100.0	97.6	<0.0001
Total independence	0.0	2.4	
<b>Pain (based on Pain scale)</b>			
Any pain	65.9	48.8	0.4
No pain	34.1	51.2	
<b>Insomnia or change in usual sleep pattern</b>			
Yes	19.5	9.8	<0.0001
No	80.5	90.2	
<b>COGNITIVE FUNCTIONING, BEHAVIORAL SYMPTOMS AND DEPRESSION</b>			
<b>Cognitive functioning (based on CPS scale)</b>			
Any indication of cognitive impairment	78.1	82.9	<0.0001
No cognitive impairment	21.9	17.1	
<b>Delirium (of recent onset)</b>			
Any indication of delirium	2.4	4.9	<0.0001
No indication of delirium	97.6	95.1	
<b>Any behavioral symptoms exhibited</b>			
Yes	61.0	41.3	0.7
No	39.0	53.7	
<b>Depression (based on DRS scale)</b>			
Symptoms of mild/moderate depression	61.0	39.0	1.0
No indication of depression	39.0	61.0	
<b>INVOLVEMENT</b>			
<b>Pursues involvement in life of facility</b>			
Yes	22.2	28.6	0.3

\* based on McNemar's test for paired data

When comparing the pre and post move data, the percentage of residents with weight loss increased significantly from 4.9% to 7.3% ( $p < 0.0001$ ); and the rate of falls increased significantly from 2.4% to 7.3% ( $p < 0.0001$ ). Significantly more residents in the post move time period also experienced symptoms of delirium (4.9% vs. 2.4%;  $p < 0.0001$ ).

However, across several other indicators, residents experienced improved outcomes. For example, the proportion of residents taking an antidepressant medication decreased significantly from 26.8% to 19.5% ( $p = 0.0009$ ) and the rate of hypnotic drug use also decreased significantly from 12.2% to 0% ( $p < 0.0001$ ). The percent of residents experiencing insomnia or a change in their sleep patterns also improved by 9.7% following the move ( $p < 0.0001$ ).

## DISCUSSION

Overall, the relocation to a new facility appears to have been a success. There were some issues that arose in the immediate post move period, but by the 18-month follow-up interviews, most of these issues had been resolved or individuals were finding ways to adapt to the new surroundings. Participants encouraged other organizations to involve key stakeholders, to maximize the level of communication and to provide adequate additional staffing levels both before and after the move to help support the residents and their families.

The availability of MDS 2.0 data on all CCC residents enabled detailed analysis of changes in residents' health status both

before and after the move. The scope of the MDS 2.0 tool allowed for comparisons across multiple domains such as pain, nutrition, activities of daily living and medication use. A major drawback within the SJHC is the lack of MDS 2.0 data for LTC residents. Although the SJHC has participated in pilot MDS implementation projects, the sample size of matched pairs was insufficient to warrant this analysis.

The use of a matched pairs design substantially reduced the available sample size with which to compare outcomes following the move. Residents with matching assessments were significantly younger and had a significantly shorter length of stay than the larger cohort of CCC residents. As such, these results cannot be considered to be indicative of outcomes among all the CCC residents within SJHC.

By matching residents, it increases the likelihood that changes in their health and functional status are related to the move itself. As additional MDS 2.0 data become available, further analysis can be completed to explore these outcomes over a longer period of time (e.g., one year post move) and with a larger sample of residents. This will enable the SJHC to assess whether the changes observed in the period immediately following the move continue to exist and to determine the best course of action to address them. This represents one way that MDS 2.0 data can be used within a facility to track resident outcomes and assess changes over time.

Although this project included only a single facility, much has been learned about the issues that arise immediately following a move and the potential impact to residents, staff and families. Ongoing analysis of MDS 2.0 data, discussions with staff and a continued dialogue with the continuous quality improvements teams will enable the SJHC to continue to learn how best to provide quality care to residents and their families.

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## REFERENCES

- Castle NG. Relocation of the Elderly. *Medical Care Research and Review* 58[3], 291-333. 2001.
- Grant Peter R, Skinkle Rodney R, Lipps Garth. The impact of an interinstitutional relocation on nursing home residents requiring a high level of care. *The Gerontologist* 32[6], 834-842. 1992.
- Liston T, Diamond M. Moving Out the stress of relocation. *Long Term Care* 11[2], 25-29. 2001.
- Hirdes JP, Brown K Stephen. A survival analysis of institutional relocation in a chronic care hospital. *Canadian Journal on Aging* 15[4], 514-524. 1996.
- Canadian Institute for Health Information. *Resident Assessment Instrument (RAI) MDS 2.0 and RAPs Canadian Version User's Manual*. 2002.
- Morris JN, Fries BE, Mehr DR, Hawes C, Mor V, Lipsitz L. MDS Cognitive Performance Scale. *Journal of Gerontology: Medical Sciences* 49[4], M174-M182. 1994.
- Hartmaier SL, Sloane PD, Guess HA, Koch GG, Mitchell CM, Phillips CD. Validation of the Minimum Data Set Cognitive Performance Scale: agreement with the Mini-Mental State Examination. *Journal of Gerontology: Medical Sciences* 50A[2], M128-M133. 1995.
- Morris JN, Fries BE, Morris SA. Scaling ADLs within the MDS. *Journal of Gerontology: Medical Sciences* 54A[11], M546-M553. 1999.
- Burrows AB, Morris JN, Simon SE, Hirdes JP, Phillips CD. Development of an MDS-based depression rating scale for use in nursing homes. *Age and Ageing* 29[2], 154-172. 2000.
- Fries BE, Simon SE, Morris JN, Flodstrom C, Bookstein FL. Pain in US nursing homes: validating a pain scale for the MDS. *The Gerontologist* 41[2], 173-179. 2001.
- Mor V, Fleishman J, Hawes C, Phillips CD, Morris J, Fries BE. The structure of social engagement among nursing home residents. *Journal of Gerontology: Psychological Sciences* 50B[1], P1-P8. 1995.
- Hirdes JP, Frijters DH, Teare GF. The MDS-CHESS scale: a new measure to predict mortality in institutionalized older people. *Journal of the American Geriatrics Society* 51[1], 96-100. 2003.



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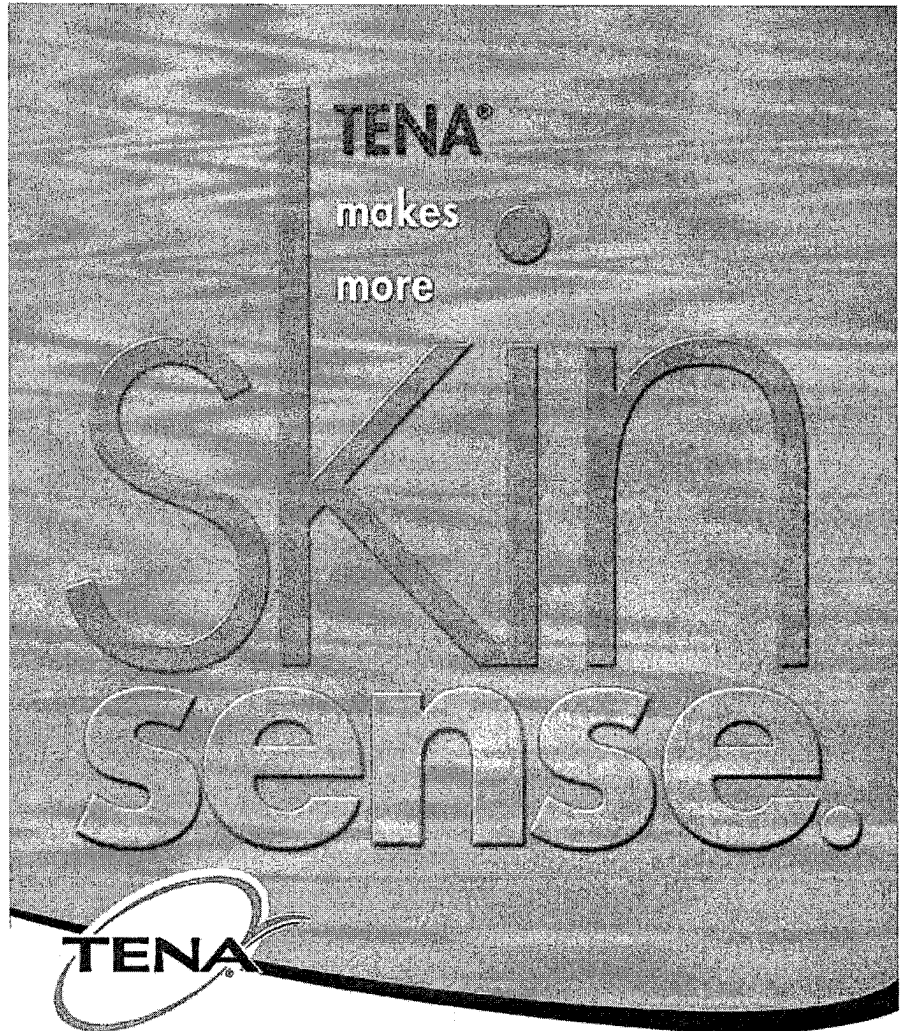
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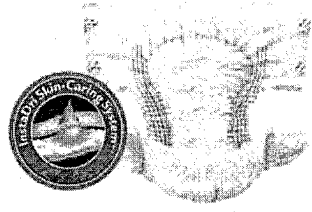
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