EVALUATION OF THE "RESTORE" AND "SUPPORTS FOR DAILY LIVING" PROGRAMS

Mississauga Halton Local Health Integration Network

Final Report

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EXECUTIVE SUMMARY

This study was undertaken by SHERCON ASSOCIATES Inc. of Oakville to develop and apply an evaluation framework for the Mississauga Halton Local Health Integration Network (MH LHIN) Community Transformation Project. Work on the project commenced in March 2010 and was complete in late October 2010.

Specific areas of focus were the "Supports for Daily Living" (SDL) Program and the "Restore" Program. The evaluation approach followed the methodology and design prescribed by the Institute for Clinical Evaluative Sciences (ICES) and drew on a range of quantitative and qualitative data sources including documents and records, the interRAI community health assessment data base, Restore Program client files, focus groups with providers, referrers and clients, and key informant interviews.

The data quality is acceptable and the findings can be interpreted with a reasonable degree of confidence.

Key findings related to the Restore Program are the following:

- The program is functioning well in providing effective rehabilitation. Client satisfaction is high, and resource levels appear adequate.
- There is converging evidence from all sources that the program is achieving its intended outcomes. There are notable improvements in client conditions on key indicators between intake and discharge – including improved scores on the MAPLe, CHESS and Self-Reliance interRAI scales. Most clients are discharged home and experience low levels of hospital recidivism.

Principal findings related to the SDL Program are also positive:

- The program is functioning well although currently running over capacity.
- Clients are very satisfied and report improvements in abilities and independence as a result of the program.
- There is also strong converging evidence that the SDL Program is achieving its intended outcomes. For nine of the 10 key interRAI items that were compared, it was observed that the current SDL Program is caring for a greater number and proportion of clients with higher acuity compared to the earlier supportive housing program.
- The "Mobile" component of SDL is providing care for clients who are more impaired and resource intensive than clients in the conventional "Bricks and Mortar" program.

The evidence supports the notion that in the Restore and SDL programs, the right care is being provided in the right setting at the right time and at the right cost. Both programs are having a positive impact on system costs by freeing up acute care beds and diverting people from long term care to lower cost alternatives

Recommendations address communication and coordination, information management and leveraging the success of both programs.

1.0 INTRODUCTION

1.1 Background and Purpose

In March 2010 SHERCON ASSOCIATES Inc. of Oakville was awarded a contract through Nucleus Independent Living to develop an evaluation framework for the Mississauga Halton Local Health Integration Network (MH LHIN) Community Transformation Project. The specific areas of focus were the "Supports for Daily Living" (SDL) initiatives and the "Restore" Program. The proposed approach utilized a rigorous blend of qualitative and quantitative research methodology to generate valid and reliable concrete data to create and populate an evaluation framework and respond to a number of research questions posed by the LHIN.

The lead consultant and principal investigator was Dr. David Sheridan, a seasoned management consultant and accomplished process facilitator with a national profile in research and planning in the not-for-profit sector. He has worked in all sectors of health care in Ontario including acute care, community care, long term care, supportive housing, mental health and palliative care. Nick Sidoruk, a recognized expert in survey research and program evaluation, provided methodological and technical support to the project. Nick has an extensive client list of municipalities, provincial and federal governments, community agencies, universities and planning bodies.

The project was supervised by a Project Oversight Group consisting of representatives from the MH LHIN, the Mississauga Halton Community Care Access Centre (CCAC) and the programs being evaluated (see Appendix A). The Oversight Group met with the consultants on five occasions during the study. Support was also provided by Dr. Jeff Poss at the University of Waterloo who responded to requests for information from the interRAI CHA data base. Work on the evaluation got underway in March and was complete in late October 2010.

1.2 Program Descriptions

The study focused on the Restore Program and eight separate SDL initiatives funded by the MH LHIN in the 2009/2010 fiscal year.

The Restore Program is targeted to adults in hospital inpatient units who no longer require acute care, but need a period of time to recover their strength, endurance or functioning and have the potential to return to their home in the community. These clients are transferred to a dedicated 26-bed unit at the Mississauga Lifecare Centre and are served by a multidisciplinary health care team focusing on restoring physical function and facilitating activities of daily living in preparation for a return to independent living at home.

The program admitted 160 clients in 2008/2009 and 148 clients in 2009/2010. Average length of stay was 44 days in 2008/2009 and 56 days in 2009/2010. Program partners working with the Mississauga Halton LHIN to deliver the program included the Credit Valley Hospital, Halton Healthcare Services, Trillium Health Centre, Mississauga Halton CCAC as well as Mississauga Lifecare.

Supports for Daily Living (SDL) provides 24-hour practical assistance with the essential activities of daily living that one cannot perform due to physical limitations or impairments. Individuals appropriate for SDL do not require 24 hour medical assistance or supervision and with SDL support are able to maintain residence in their own home (either a designated building, within a designated neighbourhood, or in the MH LHIN if served by the "Mobile" program). The following eight SDL service providers serving about 900 clients were included in the evaluation:

MICBA Forum Italia Community Services	Hub program extension into adjacent apartment Tower on Forum property in Mississauga
Nucleus Independent Living	24 hour mobile SDL services across the LHIN
Oakville Senior Citizens Residence	Hub and spoke program extension to Lakeshore apartment building and a targeted building on Marine Drive
Ontario March of Dimes	Hub and spoke SDL program in Etobicoke at 251 West Mall
Peel Senior Link, Mississauga	Hub and spoke services to a new site at 1745 Dundas Street East in Mississauga
Regional Municipality of Halton,	Hub and spoke SDL neighbourhood program utilizing 271 Kerr Street, Oakville as a hub
Victorian Order of Nurses (VON) Peel Branch	Expanded hub and spoke services to 4150 Westminster Place and 3061 Battlefield Road
Yee Hong Centre for Geriatric Care	New integrated and ethno-culturally specific SDL program in neighbouring district

Hub only =in building; Hub and Spoke=in-building and surrounding neighbourhood; Mobile=flexible service area within LHIN

1.3 Study Objectives

The evaluation study addressed five areas identified by the MH LHIN:

1. An evaluation framework designed to produce valid and reliable data to assess and quantify the effects of LHIN investments in transforming the community sector.

2. Answers to key research questions including:

   - Have the programs reduced or delayed referrals to LTC?
   - Can we see proportionally that a higher level client need is in LTC and a lower level client need is in the community?
   - Are there criteria that would quickly identify a hospital patient to be able to go home? How can discharge risks be assessed and mitigated?
   - What is the cost-effectiveness and cost/benefits of the two programs?
   - Where do the two programs fit as part of the continuum of care?
   - What have been the experiences of the program clients?
   - How can the programs be improved?
   - Is the number of spaces within the programs adequate to meet needs and maximize flow?

- Are there differences in outcomes between the conventional ("bricks and mortar") and the mobile SDL programs?
- What happens to the client profile once the individual is in the SDL program?
- What would have happened to the individuals if there was no Restore or SDL program?
- What happens to individuals once discharged from the Restore program?
- What is the profile of people who would benefit from the programs?

These points can be summed up by the "4Rs" – is the right person going to the right place at the right time and at the right cost?

3. Methodologies to collect ongoing evaluative data to maintain the framework on a continuing basis. This includes the identification of existing and new performance indicators that can be used as baseline data for comparative purposes.

4. Linkages and synergies with the ministry level evaluation being carried out by the Institute for Clinical Evaluative Sciences (ICES) to ensure consistency of indicators and approach.

5. Recommendations related to identified needs and improved program effectiveness.

2.0 EVALUATION FRAMEWORK

The study methodology was designed to test and populate a framework for the ongoing evaluation of the Restore and SDL programs. This section describes the approach taken in carrying out the project and offers some suggestions for existing and new performance indicators.

2.1 Link to ICES

The evaluation approach followed the methodology and design prescribed by the Institute for Clinical Evaluative Sciences (ICES). The ICES evaluation framework for initiative-level evaluations under the "Aging at Home" strategy has three components:

1. Structure – Including resource/structural components needed to deliver the program and characteristics of the program and the setting.

2. Process – Including types of services/activities, how they were provided, and mechanisms/processes for integrated care delivery.

3. Outcomes – Including program outcomes, impact on clients and informal caregivers, health system impact and economic analysis.

Qualitative and quantitative evaluation methodologies suggested by ICES include document analysis, analysis of provincial and program data bases, key informant interviews, focus groups, surveys, cost effectiveness analysis and cost-benefit analysis. Similar methodologies were employed in this project. (The role of ICES in evaluation of the Aging at Home program has recently been reduced).

2.2 Variables

The study variables that appear below were drawn from the research questions posed by the LHIN and were suggested in the ICES design recommendations. They have been grouped into the ICES structure, process and outcomes categories and mapped to LHIN community transformation objectives.

LHIN Objective	Structure	Process	Outcomes
Alternative to LTC Placement:	• Needs of community/LTC placements	• Appropriateness of community/LTC placements • Caregiver and client experiences and satisfaction • Penetration of target population • Program uptake	• LTC reductions/delays • ER visits • ALC days • SDL wait times/wait lists • Restore wait times/wait lists • "Ideal candidate" profile and indicators
Transformation within the Hospital:	• Occupancy/LOS • Attitudes/perceptions of referrers	• Discharge speed • Risk assessment and mitigation	• Diversions from LTC • Readmissions • Occupancy/LOS change
Costing:	• Budgets • Resource requirements	• Per person unit cost data • Efficiency and cost effectiveness	• Costs/benefits • Payback on investments
Continuum of Care:	• Positioning re: other programs • Differences from CCAC	• Fit/niche on continuum • Integration and coordination • Referrals to/from agencies • Inter-agency interactions	• Gaps in continuum • Alternative configurations
System Capacity:	• Program gaps and needs	• Capacity required for optimal client flow	• System impact • Adequacy of investment
Contextual:	• Program descriptions • Client profiles • Caseload volume and complexity • Service eligibility and caps	• Perceived program effectiveness • Barriers and facilitators	• "The 4 Rs" • Unexpected or unintended outcomes • Participant/non-participant comparatives

2.3 Data Sources

The evaluation framework utilized a range of quantitative and qualitative data collection methodologies to measure the identified variables and address the study research questions:

1. Documents

   Relevant documents, records and studies were identified and reviewed including LHIN reports and publications, program statistics collected by the service providers, client satisfaction data, provider agency information, and related external studies and reports. A document log with over 50 entries was prepared as a project working paper early in the project.

2. The interRAI-Community Health Assessment Data Base

   The interRAI-CHA is a comprehensive standardized assessment instrument used to evaluate the needs, strengths and preferences of clients and is specifically tailored to the needs of community support agencies. Information on SDL program participants for the period from September 2009 to March 2010 was extracted from the data. InterRAI items were also collected as part of the Restore program evaluation.

   Appendix B provides definitions of the scale items used in the study.

3. Client Files

   A sample of 67 residents was drawn from the past and current client files of the Restore Program clients (about 300 cases). Written client consent was obtained and the files were abstracted to pick up key variables including demographics, interRAI assessment results, care plan details, services provided, progress reports and discharge information. Information was used to develop a profile of Restore program participants.

4. Focus Groups

   Focus group sessions were held with a cross section of health care staff responsible for making referrals to long-term care homes in the LHIN. Attendees were drawn from the Mississauga Halton CCAC (6 participants) and Trillium Health Care (16 participants) and included discharge planners, community case managers and other staff directly involved with client placements. The sessions focused on program characteristics and the key factors and influencers in making placement decisions. The sessions took place in August 2010.

   In addition a client focus group was held at the Oakville Senior Citizen's Centre in November 2010 and attended by a cross section of clients (8 participants and one follow-up phone interviewee) receiving in-building and mobile SDL services.

5. Key Informant Interviews

During the course of the study semi-structured telephone interviews were conducted with a number of "key informants" including senior officials from the provider agencies, referral sources and partner hospitals. Interview questions collected high-level respondent perceptions on a range of qualitative items related to the programs.

2.4 Statement of Data Quality

Great care was taken throughout the data collection and analysis stages to ensure the information gathered was objective, reliable and valid. A number of factors related to the data collection stage of the project suggest that there is a good level of data quality:

- Overall, the evaluation study used a range of qualitative and quantitative research methodologies, capturing the richness and flavour of the data.
- Tests of statistical significance performed in the analysis of the interRAI data on SDL clients pointed to high levels of confidence that one can have in the findings.
- The sample of Restore clients was comprehensive and proved to be representative of the total group of clients.
- Information gathered from the interviews with SDL providers generated consistent themes across programs and situations. Consistent themes also emerged from the focus groups.
- Qualitative information from the interviews and focus groups corroborated the quantitative data from other parts of the study.
- Reviews of preliminary findings with members of the Program Oversight Group suggested that the data had good "face validity" in that it was consistent with their own experiences and perceptions. No major anomalies were observed in the findings.
- Overall there was clear, consistent and converging evidence in support of the evaluation conclusions

There are also some limitations in the study data:

- Access to data on hospital usage of program clients was not available due to the long request lead times required by Ministry of Health and Long Term Care.

- Client satisfaction information was based on limited number of completed client satisfaction questionnaires, a client focus group, and anecdotal information from service providers. A formal client satisfaction survey with a valid standardized questionnaire was not carried out. (ICES had planned to have such a questionnaire developed, but their RFP for a Client and Caregiver Experiences Survey was withdrawn during the time of this evaluation).

In sum, the data quality is acceptable and the findings can be interpreted with a reasonable level of confidence.

2.5 Performance Indicators

The MH LHIN currently uses a broad range of system-level measures for monitoring program performance including the following:

Alternate Level of Care (ALC) patient days in hospital
Emergency Department (ED) wait times
Numbers of ED visits that could have been managed elsewhere
Numbers on wait lists for long-term care homes
Median wait times for long-term care
Hospital readmissions, and a range of other measures

The following system performance indicators are suggested for ongoing tracking of the SDL and Restore programs and for inclusion in a future framework for evaluation. Both qualitative and quantitative measures are being recommended:

Suggested Additional Performance Indicators

Levels of client satisfaction collected from a standardized questionnaire administered across all programs on a continuing basis

Restore client interRAI assessment scores on admission and discharge completed in all cases

SDL client interRAI assessment scores on admission and at six month intervals

Referrer perceptions collected annually through focus groups

Provider perceptions collected annually through semi-structured interviews

Selected CCAC budget items, such as PSW costs and other key indicators

Hospital recidivism statistics based on semi-annual MOHLTC data requests

3.0 DISCUSSION OF FINDINGS – RESTORE PROGRAM

Information about the Restore Program was drawn from abstractions of client charts, monthly reports submitted to the LHIN by Mississauga Lifecare, pre and post interRAI assessment data provided by the Mississauga Halton CCAC, analysis of questionnaires from client phone follow-ups by Mississauga Lifecare staff, MH LHIN reports and focus group sessions with participants from referring organizations.

3.1 Restore Client Profile

Sixty-seven files from discharged Restore Program residents were reviewed and abstracted to gather information on key variables. A profile of the sample of Restore clients included in the file abstracting appears below.

TABLE 1 – Profile of Restore Clients

Consents received:	67
Charts abstracted:	67
Time period covered:	May 2009 through July 2010
Average age:	82
Gender:	29 males/38 females
Living alone:	38%
Average time in program:	2 months*
Discharged home:	73%**

** 56 days per monthly reporting statistics vs. 44 days in 2008/2009*
***72% per monthly reporting statistics vs. 78% in 2009/2009*

The findings from the sample paralleled Mississauga Lifecare's monthly reporting statistics to the LHIN, suggesting a high level of representativeness.

The average length of stay increased from 44 days in 2008/2009 to 56 days in 2009/2010 due to high levels of client acuity. The percentage of clients discharged home declined from 78% to 72% for the same reasons.

The file review also gathered interRAI data for each client at intake including scores for MAPLe, CHESS and Self Reliance scores pertaining to locomotion, personal hygiene, bathing and ADL decline. Slightly over half of the files examined contained this information. Because interRAI scores at client discharge were not in the files, the Mississauga Halton CCAC provided intake scores for 56 of the sampled clients and discharge scores for 39 clients. Scores at both intake and discharge were available for 37 of the clients in the sample.

Not all pre-treatment and post-treatment assessment information was available for all of the clients. For a more rigorous approach to the analysis, it was decided to base the analysis on only those cases where both intake and discharge information was available for the same client. Simply comparing information from the larger intake and discharge cohorts as a whole would not be as stringent an approach to examining the impact of the Restore Program on individual clients.

The findings reported in Table 2 on Page 12 reveal some notable improvements of client conditions on key indicators between intake and discharge:

- MAPLe scores declined, with fewer clients showing high scores and more clients with low scores on discharge.
- CHESS scores declined in a similar fashion. Clients leaving the Restore program were less frail and more stable than when they entered.
- Locomotion scores (a key program goal) improved dramatically.
- Personal hygiene, bathing, and activities of daily living scores all showed clear improvement between intake and discharge.

TABLE 2 – Restore Client Outcomes

interRAI Item*		Scores	% at Intake	% at Discharge
MAPLe:		Mild (1,2)	0	13
		Moderate (3)	62	65
		High (4,5)	38	22
CHESS:		0	17	31
		1-2	78	58
		3+	6	11
Self Reliance Index:	Locomotion	0	13	61
		1-2	33	25
		3+	53	14
	Personal Hygiene	0	19	46
		1-2	67	43
		3+	14	11
	Bathing	0	3	5
		1-2	11	19
		3+	86	76
	ADL Decline	0	22	49
		1	78	51

** Descriptions of RAI items appear in Appendix B*

Scores from the Depression Rating Scale and the Cognitive Performance Scale fall outside the treatment domain of the Restore program and are not reported above in Table 2. Also, rather than looking at the broader IADL scores to further explore the impact of the Restore program, four key indicators were chosen to be examined more closely; namely, locomotion, personal hygiene, bathing and ADL decline.

3.2 Occupancy and Discharge

Monthly reporting statistics indicated that percentage occupancy fluctuated by month and ranged from 60% (16 beds) in January 2010 to 95% (25 beds) in April 2009. The average for the period from April 2009 to March 2010 was 82% (22 beds).

The Restore clients discharged home experienced low levels of hospital recidivism. In April 2010 Mississauga Lifecare conducted a phone follow-up with 45 clients discharged over the period December 2009 to March 2010. The survey indicated that:

- 45% of the clients returned home with CCAC services
- Of these clients, 15% reported using less CCAC service than when discharged
- No clients required increased CCAC service

- 11% required hospital emergency department service, within 14 days of discharge from Restore, related to the same reason as originally admitted to hospital
- None were admitted to hospital following discharge from Restore.

MH LHIN calculations show that Restore has saved the equivalent of 35 acute care beds over two years and a total of 230 people diverted from long-term care placement.

3.3 Restore Client Satisfaction

Client satisfaction information, based on a phone survey conducted by Mississauga Life Care appears in Table 3.

TABLE 3 – Satisfaction of Restore Clients

Category	Questionnaire Item	N=64 %
Entry to Program:	Reasons for coming to program explained clearly	97
	Individual goals understood by staff	95
Program Experience:	Accommodation and meals were satisfactory	86
	Privacy and dignity respected	97
Discharge:	Discharge plan was in place	80
Outcomes:	Felt goals were addressed	92
	Felt improved in ability to manage at home	84
Overall Rating:	Excellent	48
	Good	34
	Fair	11
	Poor	6

Ratings were positive on items related to program entry and the experience during the stay at Restore. Most clients felt their goals were addressed and their abilities improved.

3.4 Restore Stakeholder Perceptions

Separate focus group sessions were held with staff from the Mississauga Halton CCAC (6 participants) and Trillium Health Care (16 participants) and included discharge planners, community case managers and CCAC staff responsible for client placements. Participants were consistent in their belief that Restore was an effective and successful program with a number of significant strengths:

- Availability of spaces for clients
- Effective rehabilitation programs with a multidisciplinary focus
- Time sensitive, with a flexible length of stay and an appropriate length of time for reasonable rehabilitation
- Receptive to clients' specific needs

Focus group participants believed that the program was achieving its purpose of increasing physical functioning and independence. Although they did not have access to specific interRAI measures, their perception was that clients' mobility performance increased after a stay in the program.

A number of potential areas of improvement were also identified:

- Streamlining the intake process which was seen as too long. Weekend admissions were seen as particularly problematic
- Simplifying the process for completing the interRAI assessment. Some focus group participants reported requiring four hours to complete the assessment, slowing down the admission flow. Suggestions were received about a scaled down "mini-RAI" addressing mobility, cognition and special needs, and reduction of the number of times a RAI is administered to program participants
- Facilities issues, in particular the location of the program on the second floor near the dementia unit, seen to be a disincentive to families considering placement
- Communication between the Restore program and the referring organizations, especially around intake and around the need for feedback on patient outcomes.

Participants at both focus groups felt there was a need to expand eligibility criteria to include clients with mild dementia. However, an examination of the CPS (Cognitive Performance Scale) scores at client intake indicated that about half of the Restore clients in fact did have some cognitive issues. This reinforces the need for increased communication and information sharing with the referring organizations.

3.5 Restore Conclusions

The conclusions flowing from the Restore Program findings reported in Sections 3.1, 3.2 3.3 and 3.4 are organized under the Institute for Clinical Evaluative Sciences (ICES) evaluation components of structure, process and outcomes:

Structure:	• The overall program design is working and providing effective rehabilitation • The program is running slightly under capacity • Resources and supports appear adequate, although some facilities issues were noted
Process:	• Clients are satisfied with the program • Intake could be streamlined • Assessments could be simplified and reduced • Communication with referring agencies needs to be improved
Outcomes:	• Converging evidence from all sources that the program is achieving its intended outcomes • The program is having an impact on system costs by freeing up acute care beds and diverting people from long term care to lower cost alternatives

The evidence supports the notion that in the Restore Program, the right care is being provided in the right setting at the right time and at the right cost.

4.0 DISCUSSION OF FINDINGS – SDL PROGRAM

Information about the SDL initiatives was drawn from the interRAI Community Health Assessment Data Base, interviews with key staff from the eight SDL programs, MH LHIN reports and focus group sessions with participants from referring organizations.

4.1 SDL Client Profile

The SDL sample consisted of a total of 893 clients served by eight SDL programs. A detailed descriptive profile of this group appears in Appendix C.

MH LHIN data was examined and illustrated the impact of the SDL program on hospitals over the 2008/09/10 period:

- 161 patients were referred to SDL directly
- 1,046 ER were visits diverted
- 379 SDL clients were returned back from hospitals sooner

The MH LHIN information for the same period also indicated a notable impact on long term care demand:

- 54 clients were removed from wait lists
- 224 clients were diverted from long term care
- 18 clients were taken out of long-term care and returned to the community

The need for a total of 296 long-term care spaces was eliminated. The annual cost to serve these clients through the SDL program is $5.5 million vs. $10.8 million via LTC.

In 2009 new standards were implemented going from the 'Supportive Housing' program to the 'Supports for Daily Living' program. In 2008, John Hirdes et al conducted a study of the 'Supportive Housing' program for the MH LHIN. In the current 2010 evaluation of the 'Supports for Daily Living' program, similar data were collected for the period from September 2009 to March 31, 2010 – when all 8 SDL agencies were operational. The two data sets were compared along key variables. Results appear in Table 4.

TABLE 4 - Key interRAI-CHA Items by 2010 and 2008 Data Sets

interRAI Scale/Index/ Measure	% of Full SDL Sample 2010	% of Full Supportive Housing Sample 2008
1. RUG III PA1 PA2 Least impaired	64.7 %	← 56.0 % *
2. CCS 2+	26.5 % * →	9.0 %

Table continued on Page 16

interRAI Scale/Index/ Measure	% of Full SDL Sample 2010	% of Full Supportive Housing Sample 2008
3. MAPLe 4-5	40.4 % * →	23 %
4. CHESS 3+	21.2 % * →	5.0 %
5. Hospital Admits 1+	31.2 % * →	15.0 %
6. ER Visits 1+	26.5 % * →	15.0 %
7. SRI Impaired 1+	79.7 % * →	69.0 %
8. IADL 7+	77.3 % * →	57.0 %
9. DRS 3+	18.9 % * →	10.0 %
10. CPS 3+	4.4 % * →	3.0 %
Totals	**CHA** (n = 893)	**CHA All** (n = 367)

** Data set with highest percentage of more impaired clients.*
See Appendix B for a description of RAI measures.

For nine of the 10 key interRAI items that were compared, it was observed that the current SDL program is caring for a greater number and proportion of clients with higher impairment levels compared to what was seen in the earlier (2008) study of supportive housing clients The sole exception was the item relating to 'Resource Utilization Groups' (RUG scores) due the fact that a disproportionate number of physically disabled clients were included in the 2008 study.

The "Mobile program" offered by Nucleus Independent Living was compared to conventional building based ("bricks and mortar") programs offered by the other seven SDL providers in the current 2010 evaluation. Tables showing results of the statistical tests on the differences relating to the key interRAI measures appear in Appendix D.

A summary of the comparison appears in Table 5 on Page 17.

TABLE 5 – Mobile/Bricks and Mortar Comparisons

	interRAI Measure	Differences Observed 'Mobile' vs. 'Bricks and Mortar'	Statistically Significant
1	RUG III PA1 PA2	Substantially more clients in the Mobile program are more impaired and more resource intensive	*yes* *< .001*
2	CCS	Significantly more clients in the Mobile program are more impaired	*yes* *< .001*
3	MAPLe	Substantially more clients in the Mobile program are in the highest priority categories	*yes* *< .001*
4	CHESS	Substantially more clients in the Mobile program have higher levels of health frailty and instability	*yes* *< .001*
5	Hosp. Admits	Substantially more clients in the Mobile program had hospital admissions in the previous 90 days	*yes* *< .001*
6	ER Visits	Substantially more clients in the Mobile program had emergency room visits in the last 90 days	*yes* *< .001*
7	SRI	Substantially more clients in the Mobile program are not independent and are not self-reliant	*yes* *< .001*
8	IADL	More clients in the Mobile program have greater difficulty in performing instrumental activities	*yes* *< .001*
9	DRS	More clients in the Mobile program have more depressive orders	*yes* *< .001*
10	CPS	Clients in the Mobile program tend to be slightly more impaired	Not Significant

There is clear, consistent and converging evidence indicating that the 'Mobile' component of the current SDL program provides care for clients who are more impaired and more resource intensive compared to clients in the 'Bricks and Mortar' component of the current SDL program. Furthermore, almost all of the findings are statistically significant at less than the .001 level of significance

4.2 SDL Client Satisfaction

Findings from a recent client satisfaction survey of mobile clients conducted by Nucleus Independent Living were reviewed and are summarized in Table 6 below:

TABLE 6 – Satisfaction of Mobile Clients

Category	Questionnaire Item	N=28 %
Workers:	Respect home and belongings	96
	Sensitive to cultural, religious, spiritual beliefs	96
	Please with timing of visits	96
	Dependable, trustworthy and professional	93
	Spend adequate time during visits	88
Overall Service Rating*:	Excellent	37
	Good	51
	Fair	8
	Poor	4
Quality of Life:	Improved	54
	Maintained/No Change3	46
	Diminished	0

** Average of ratings for dressing, hygiene, security, medications, meal prep., calling in*

Respondents reported high levels of satisfaction with their support workers and gave positive ratings to the services they received. More than half of the mobile clients replying to the survey felt that their overall quality of life had improved since joining the SDL program and the remainder felt their quality of life had been maintained. The only suggested improvement was to reduce the number of workers visiting each client to improve continuity and consistence of service.

A similar positive picture of client satisfaction emerged through a focus group held with seven clients receiving a range of services from the hub and spoke SDL program operated by Oakville Senior Citizen's Residence. (An additional client offered his perceptions through a phone interview.) There was strong consensus evident on the following points:

- Complete and total satisfaction with the support workers and the services. The group was unable to offer any suggestions for improvement or create a specific "wish list" for additional services
- An agreement that the most important element of the service received was the regular "checking in" by their support workers
- An enhanced sense of security as a result of the program, a feeling that was also shared by family members
- No problems with the intake process, although some lack of understanding of the program at the outset. The participants did not express any concerns about providing information for the interRAI questionnaire. As one participant said "It was done with empathy, there was nothing unpleasant".

- All the focus group participants felt they were in better physical condition with more abilities since starting in the SDL program. One participant said “I was terrified when I came in a year ago. Now I am doing things I haven’t done since 2002”.

At the conclusion of the focus group session several participants stated they felt “very fortunate” that they were in the program and expressed a strong desire that the program be continued and expanded to reach other seniors.

In addition to the findings from the Mobile client survey and the SDL focus group, anecdotal reports from the SDL providers suggested that clients were satisfied with the program.

4.3 SDL Stakeholder Perceptions

Separate focus group sessions were held with staff from the Mississauga Halton CCAC (6 participants) and Trillium Health Care (16 participants) and included discharge planners, community case managers and CCAC staff responsible for client placements. Key leaders from the eight SDL programs were also interviewed. A number of common themes emerged:

- The SDL Program is positively viewed as a flexible, responsive and nimble model for providing comprehensive services beyond personal care that should be expanded
- The program is perceived as effective, preventing long term care admissions, reducing emergency room visits and targeting people at the right acuity level
- The Mobile Program was singled out as being particularly effective in terms of its accessibility to patients
- There is potential to increase the range services offered to include services such as vision, lab, nursing, respite and palliative care
- The program is seen as cost efficient. Some CCAC staff reported that it had reduced PSW costs.
- There is a good level of cooperation and coordination among SDL providers
- Admission criteria are clear and intake is efficient

A number of issues, concerns and areas for potential improvement were also noted:

- Concerns that waitlists had appeared in recent months
- Concerns re: staff safety with night visits in the Mobile program and the “hub and spoke” programs where staff had to leave the hub buildings
- Difficulties in staffing due to Personal Support Worker (PSW) shortages
- Service gaps for some geographic areas and populations, e.g. younger age groups
- Confusion re: the interface been the SDL program and CCAC services. Participants in both focus groups of referrers had different perceptions on how and if the both services could be offered at the same time
- A need for more information on client progress and outcomes to go back to the referring organizations

- Organizational change related challenges raised by some providers such as the need to make adjustments to their business model
- The time required for multiple interRAI assessments at different points in time
- Consistency of service providers especially with the Mobile program
- A tendency for some clients to "hold back" on reporting their actual condition out of concern about placement in long-term care.

Focus group participants also were asked to explain what factors they considered in making a client placement to long-term care, SDL or the Restore program. Factors included the needs of the client, resources and supports available, client/family preferences, potential risks and above all, attitudes and motivation of the client.

4.4 SDL Conclusions

The conclusions flowing from the SDL Program findings reported in Sections 4.1, 4.2 and 4.3 are organized under the Institute for Clinical Evaluative Sciences (ICES) evaluation components of structure, process and outcomes:

Structure:	• The overall program design is excellent • The program is running over capacity • Overall resources and supports are currently not adequate to meet the community need evidenced by increasing waitlists • There are additional needs for program expansion to other target populations and to offer a broadened range of services
Process:	• Client satisfaction appears high • The continuum of care vis-à-vis CCAC services requires clarification • There is a high level of coordination and cooperation among SDL providers • Communication back to the referring organizations needs to be increased • New approaches to administering the interRAI assessment could be examined such as centralized administration or streamlined versions of the instrument
Outcomes:	• Converging evidence from all sources that the program is achieving its intended outcomes • The program is freeing up acute care beds, diverting visits to hospital emergency departments and reducing the demand for long-term care • The Mobile program is providing supports for clients with higher level needs than the "bricks and mortar" based SDL programs • The program is cost-effective

The evidence supports the notion that in the overall current SDL program, the right care is provided in the right setting at the right time and at the right cost.

5.0 RECOMMENDATIONS

A number of recommendations are offered regarding the Restore Program, SDL and the management of information across the system.

5.1 Recommendations: Restore Program

R1 Enhance communication and feedback occurring between the hospitals and the Restore program.

R2 Consider revision of admission processes to admit clients with higher levels of dementia.

R3 Explore other sources of referral to the program.

5.2 Recommendations: SDL Program

S1 Leverage the success of the Mobile program through expanded services within the LHIN and replication in other areas of the province.

S2 Clarify SDL/CCAC roles on the continuum of care.

S3 Seek opportunities to identify and return high functioning LTC residents to the community with SDL supports.

S4 Continue to support standardization initiatives such as common core services across providers, increased coordination among providers, use of central registry and centralized administration of interRAI assessments.

5.3 Recommendations: Information Management

IM1 Continue the MH LHIN's involvement and leadership as an early adopter of the Community Health Assessment (CHA) instrument due to be introduced provincially by 2012.

IM2 As part of IM1, increase identification and use of follow-up interRAI assessment data to monitor client outcomes and program effectiveness.

IM3 Improve information sharing across all players, particularly in terms of "upstream feedback" on client outcomes.

IM4 Continue to improve the level of system coordination and standardization.

IM5 Use a standardized client satisfaction questionnaire for consistent application across all programs.

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November 22, 2010

APPENDIX A: Program Oversight Group

Name	Position	Organization
Marg Bouillon	Managing Director	Extendicare
Judy Bowyer	Senior Lead, Performance and Integration	MH LHIN
Lisa Gammage	SDL Lead, MH LHIN	Nucleus Independent Living MH LHIN
Kristina Hall	Executive Director	Nucleus Independent Living
Norma Jutan	Senior Research Analyst	Canadian Institute for Health Information
Nancy Kula	Senior Director, Client Services	MH CCAC
Rob Low	Senior Lead, Performance and Integration	MH LHIN
Michele MacKenzie	Restore Program Director of Care	Mississauga Lifecare Centre
Monita O'Connor	Director, Performance Improvement and Integration	MH LHIN
Don Paradine	Administrator	Mississauga Lifecare Centre
Janet Parks	Director of Client Services	MH CCAC

APPENDIX B: Description of RAI Measures

Resource Utilization Groups (RUGIII PA1 PA2)

The Resource Utilization Groups measure provides some indication of the variable costs of caring for persons with different needs.

This system begins with persons who are the most resource intensive and assigns them a RUG category. Then, based on a series of questions including clinical complexity, cognitive impairment and behavioural problems, other lower level RUG categories are assigned.

For persons who cannot be placed in any other RUG category, an assignment of PA1 or PA2 is given.

These groups represent, for the most part, those with the lowest ADL impairment levels and those who would be the least resource intensive.

Cognitive Performance Scale (CPS)

Scores range from: 0 (intact) to 5 (severe impairment). Higher score = More impairment

3 CHA items: C-2; C-1; D-1: memory/recall ability; cognitive skills for daily decision making

Changes in Health, End-stage disease and Signs and Symptoms (CHESS)

To detect frailty and instability in health, CHESS has a range of 0 to 4 in the interRAI-CHA.

Higher CHESS scores indicate a higher level of health frailty and instability.
(0 = not at all unstable; 3+ = highly unstable and frail)

6 CHA items are used: C-3; G-5; J-3j; K-1 b or c; K-1a; J-4: Worsening of decision making; ADL decline; Vomiting; Dehydration; Weight loss; Shortness of Breath

Crude Complexity Scale (CCS)

Different summary scales are combined to produce a meaningful indication of impairment:

(1) A CPS score of 3+ indicates moderate to very severe cognitive impairment.

(2) An ADL Hierarchy score of 1+ indicates set-up help required up to full dependence on others in ADLs.

(3) A CHESS score of 2+ indicates a moderate to high level of frailty and instability in health.

An individual's score may be 0, 1 or 2 on the CCS indicating whether the individual exceeds none, 1 or 2 of the above mentioned thresholds. High scores indicate more impairment.

Method of Assigning Priority Levels (MAPLe)

Used to categorize clients into 5 levels of risk for adverse outcomes. Scores range from 1 to 5.

Clients in the low priority level have no major functional, cognitive, behavioural or environmental problems and can be considered to be self-reliant.

Clients in the high priority level are nearly 9 times more likely to be admitted to a long term care facility than are the low priority clients. Higher scores indicate a higher priority client.

interRAI-CHA items are used to measure the presence of ADL impairment, wandering, behaviour problems and the nursing home risk CAP.

Self Reliance Scores

Locomotion in home, personal hygiene and bathing scores range from 0 to 5 where 0 is independence with no help and 5 is maximal assistance.

ADL decline is whether ADL status has become worse as compared to status 90 days ago or since last assessment.

Instrumental Activities of Daily Living (IADL)

7 CHA items are summed. Higher scores indicate greater difficulty in performing instrumental activities

7 CHA items: G-1 (a to e; and, g + h) Meal preparation; Ordinary housework; Managing finances; Medications; Phone use; Shopping; Transportation

IADL scores range from 0 to 21.

Depression Rating Scale (DRS)

Scores range from: 0 to 14
Scale scores of 3 or greater indicate major and minor depressive disorders

7 CHA items: E-1 (a to g) - Made negative statements; Persistent anger with self or others; Expressions of what appears to be unrealistic fears; Repetitive health complaints; Repetitive anxious complaints, concerns; Sad, pained, worried facial expression; Recurring crying, tearfulness.

Hospital Admissions/Emergency Department Visits in Previous 90 Days

Individuals who have been admitted to hospital or visited an Emergency Department in the previous 90 days; and/or who are more resource intensive (RUG); and/or who are more highly impaired (CCS); and/or who have higher MAPLe scores; and/or have higher CHESS scores, can be considered to be high ‘at risk’ clients.

APPENDIX C – SDL Client Profiles

	All	Forum Italia	Halton Seniors Supportive Housing	March of Dimes	Nucleus Independent Living (Mobile)	Oakville Senior Citizens Residence	Peel Senior Link	VON Mississauga	Yee Hong Centre for Geriatric Care
SAMPLE SIZE	**893**	**18**	**36**	**13**	**166**	**251**	**225**	**152**	**32**
Demographics									
Age (average in years)	79.9	75.4	78.0	79.6	74.0	82.1	78.4	86.6	77.1
Age : Less than 65	7.2%	11.1%	11.1%	7.7%	21.7%	0.8%	7.6%	1.3%	0.0%
65 – 74	20.2%	38.9%	33.3%	7.7%	22.3%	17.9%	27.1%	3.9%	34.4%
75 or greater	72.2%	44.4%	55.6%	84.6%	55.4%	81.3%	64.4%	94.7%	65.6%
Gender: Female	73.7%	83.3%	69.4%	61.5%	56.6%	78.1%	74.7%	86.2%	65.6%
Marital Status: Married	18.1%	33.3%	2.8%	46.2%	27.1%	12.7%	20.0%	6.6%	53.1%
Language - English	73.5%	33.3%	83.3%	76.9%	77.7%	88.8%	57.3%	84.2%	3.1%
- French	0.9%	5.6%	0.0%	0.0%	0.0%	0.8%	2.2%	0.0%	0.0%
- Other	21.7%	61.1%	16.7%	15.4%	19.3%	8.8%	30.7%	13.8%	96.9%
Living Situation									
Lives alone	75.3%	66.7%	100.0%	15.4%	62.0%	81.7%	73.3%	91.4%	31.3%
Lives in private home/apartment/rented room	68.6%	88.9%	33.3%	100.0%	38.0%	56.4%	81.8%	99.3%	100.0%
Resided in Nursing Home last 5 years	2.2%	0.0%	2.8%	8.3%	3.1%	2.4%	3.0%	0.0%	0.0%
Cognitive Status									
Short Term Memory - Impaired	31.0%	11.1%	58.3%	15.4%	32.5%	32.7%	32.4%	11.2%	81.3%
Dependent For Decision-Making	39.1%	11.1%	52.8%	38.5%	48.8%	37.8%	46.7%	12.5%	71.9%
Cognitive Decline Prev. 90 Days	22.1%	5.6%	22.2%	15.4%	32.5%	4.8%	25.8%	34.2%	31.3%
CPS 0	50.1%	88.9%	27.8%	61.5%	42.8%	51.4%	39.1%	78.9%	15.6%
1 – 2	45.6%	5.6%	55.6%	30.8%	51.2%	46.6%	55.1%	20.4%	78.1%
3 +	4.4%	5.6%	16.7%	7.7%	6.0%	2.0%	5.8%	0.7%	6.3%

	All	Forum Italia	Halton Seniors Supportive Housing	March of Dimes	Nucleus Independent Living (Mobile)	Oakville Senior Citizens Residence	Peel Senior Link	VON Mississauga	Yee Hong Centre for Geriatric Care
Communication									
Difficulty Making Self Understood	21.4%	11.1%	63.9%	15.4%	18.1%	13.5%	33.8%	12.5%	15.6%
Difficulty Understanding Others	24.2%	11.1%	44.4%	7.7%	19.9%	13.9%	38.2%	22.4%	28.1%
Sensory									
Any Visual Impairment	45.6%	27.8%	47.2%	30.8%	45.2%	33.9%	43.1%	61.8%	93.8%
Any Hearing Impairment	42.9%	61.1%	61.1%	46.2%	40.4%	39.4%	42.2%	44.1%	50.0%
Visual and Hearing Impairment	26.2%	22.2%	36.1%	15.4%	22.9%	18.3%	26.7%	36.2%	50.0%
Mood and Behavioural Patterns									
Withdrawal from activities of interest	32.0%	11.1%	25.0%	15.4%	45.2%	19.1%	45.3%	19.7%	56.3%
Reduced Social Interaction	35.3%	16.7%	25.0%	23.1%	41.6%	22.3%	52.0%	25.7%	59.4%
Depression Rating Scale 3+	18.9%	11.1%	11.1%	7.7%	28.3%	19.5%	24.9%	4.6%	9.4%
Self-report: - Little interest or pleasure	27.0%	11.1%	19.4%	0.0%	31.3%	8.8%	39.1%	44.1%	9.4%
- Anxious, restless, uneasy	41.7%	22.2%	30.6%	15.4%	57.8%	39.0%	49.8%	28.9%	15.6%
- Sad, depressed, hopeless	30.1%	44.4%	27.8%	15.4%	36.7%	22.7%	47.1%	15.1%	6.3%
Psychosocial									
Strengths:									
Participation in activities of long-standing interest	58.8%	55.6%	63.9%	15.4%	31.3%	79.7%	51.1%	62.5%	87.5%
Visit with social relation / family	85.4%	100.0%	91.7%	84.6%	84.3%	91.2%	78.2%	82.2%	96.9%
Strong and Supportive Family Relationship	85.7%	100.0%	80.6%	92.3%	73.5%	90.8%	78.7%	98.0%	93.8%
Other contact (telephone/e-mail)	88.4%	88.9%	94.4%	92.3%	80.7%	92.4%	83.1%	96.1%	87.5%
Deficits (in last 3 days):									
Openly expresses conflict/anger w family/friends	6.7%	0.0%	8.3%	7.7%	6.0%	3.6%	14.7%	1.3%	6.3%
Fearful of family member/acquaintance	0.7%	0.0%	0.0%	0.0%	0.0%	0.4%	2.2%	0.0%	0.0%
Neglected, abused, mistreated	2.6%	0.0%	0.0%	0.0%	1.8%	0.4%	7.6%	1.3%	0.0%
Alone 8 hours or more during day	47.8%	66.7%	55.6%	23.1%	50.0%	25.9%	46.2%	86.2%	28.1%

	All	Forum Italia	Halton Seniors Supportive Housing	March of Dimes	Nucleus Independent Living (Mobile)	Oakville Senior Citizens Residence	Peel Senior Link	VON Mississauga	Yee Hong Centre for Geriatric Care
Activities of Daily Living (NOT independent)									
Locomotion In Home	53.3%	16.7%	27.8%	53.8%	75.9%	66.1%	62.7%	2.0%	62.5%
Personal hygiene	59.6%	22.2%	36.1%	76.9%	86.1%	69.3%	64.4%	10.5%	84.4%
Bathing	91.3%	38.9%	75.0%	100.0%	98.2%	93.2%	95.1%	82.2%	100.0%
ADL Functional Decline	45.6%	27.8%	33.3%	46.2%	68.7%	23.5%	49.8%	52.6%	59.4%
Self Reliance Index: Not self reliant	79.7%	33.3%	52.8%	92.3%	95.8%	78.9%	80.0%	78.3%	59.4%
IADL Performance (NOT independent)									
Meal Preparation	79.7%	33.3%	52.8%	92.3%	95.8%	78.9%	80.0%	78.3%	59.4%
Ordinary Housework	94.5%	88.9%	83.3%	100.0%	97.6%	93.2%	96.4%	97.4%	75.0%
Managing Finances	64.7%	44.4%	58.3%	46.2%	59.6%	60.2%	71.6%	69.1%	84.4%
Managing Medications	60.2%	38.9%	63.9%	53.8%	67.5%	58.6%	71.6%	40.1%	62.5%
Phone Use	20.9%	11.1%	16.7%	30.8%	29.5%	14.7%	32.4%	7.2%	15.6%
Shopping	87.6%	44.4%	83.3%	92.3%	96.4%	85.7%	88.0%	84.2%	96.9%
Transportation	81.4%	55.6%	44.4%	76.9%	88.6%	84.5%	80.9%	84.2%	68.8%
*IADL Summary 0 – 6	22.7%	44.4%	41.7%	15.4%	10.2%	23.5%	23.1%	23.0%	46.9%
7 +	77.3%	55.6%	58.3%	84.6%	89.8%	76.5%	76.9%	77.0%	53.1%
Physical Activity									
Out of house/building less than every day	84.0%	77.8%	86.1%	84.6%	97.6%	70.9%	87.1%	91.4%	59.4%
Driving									
Drove in last 90 days	15.8%	22.2%	22.2%	23.1%	15.7%	16.7%	13.8%	13.8%	18.8%
If drove, suggestion of stopping/limiting driving	5.5%	0.0%	11.1%	7.7%	8.4%	3.6%	8.0%	2.0%	0.0%
Selected Diagnoses									
Diabetes	25.2%	27.8%	33.3%	7.7%	28.9%	21.1%	30.2%	21.1%	18.8%
CVA/Stroke	13.5%	11.1%	16.7%	7.7%	10.8%	18.3%	16.0%	7.9%	0.0%
Alzheimer's/Other Dementia	14.6%	11.1%	30.6%	15.4%	16.3%	15.9%	16.0%	6.6%	6.3%

	All	Forum Italia	Halton Seniors Supportive Housing	March of Dimes	Nucleus Independent Living (Mobile)	Oakville Senior Citizens Residence	Peel Senior Link	VON Mississauga	Yee Hong Centre for Geriatric Care
Emphysema/COPD/asthma	12.3%	0.0%	11.1%	0.0%	7.8%	17.5%	15.6%	8.6%	3.1%
Cancer	9.7%	11.1%	25.0%	15.4%	5.4%	10.4%	14.2%	2.6%	9.4%
Congestive Heart Failure	8.1%	5.6%	13.9%	0.0%	4.2%	9.2%	12.0%	3.9%	9.4%
Health Conditions									
1 or more falls last 90 days	31.6%	16.7%	44.4%	46.2%	48.2%	22.0%	43.1%	15.1%	6.3%
Chest Pain	15.6%	16.7%	36.1%	7.7%	22.9%	7.2%	22.7%	5.9%	18.8%
Delusions/Hallucinations	5.5%	0.0%	5.6%	0.0%	6.6%	1.2%	13.3%	0.7%	6.3%
Shortness of Breath	44.1%	38.9%	72.2%	15.4%	53.6%	25.9%	41.8%	57.2%	75.0%
Fatigue: moderate or greater	45.9%	38.9%	50.0%	76.9%	53.6%	27.9%	53.3%	52.6%	50.0%
Daily Pain	36.1%	61.1%	33.3%	46.2%	36.7%	37.8%	41.8%	19.1%	43.8%
Poor Self-Rated health	17.4%	16.7%	19.4%	23.1%	24.9%	8.4%	27.6%	5.3%	25.0%
CHESS 0	28.8%	33.3%	2.8%	38.5%	12.7%	52.2%	20.9%	30.3%	0.0%
1 - 2	50.1%	55.6%	77.8%	53.8%	47.0%	43.4%	56.0%	43.4%	71.9%
3+	21.2%	11.1%	19.4%	7.7%	40.4%	4.4%	23.1%	26.3%	28.1%
Lifestyle									
Potential Drinking Problem	1.1%	0.0%	5.6%	0.0%	0.0%	1.6%	1.8%	0.0%	0.0%
Daily smoking	7.2%	0.0%	22.2%	7.7%	6.0%	7.6%	9.8%	2.0%	3.1%
Preventative Health Measures									
Blood Pressure Measured	97.3%	94.4%	94.4%	100.0%	96.4%	98.0%	97.8%	98.0%	93.8%
Influenza Vaccination	76.4%	61.1%	75.0%	76.9%	54.2%	83.7%	74.7%	91.4%	84.4%
Breast Exam: Females (last 2 yrs)	30.7%	44.4%	30.6%	23.1%	20.5%	40.2%	35.6%	17.1%	34.4%
Colonoscopy in last 5 years	37.6%	22.2%	30.6%	15.4%	25.3%	33.9%	40.9%	56.6%	43.8%
Dental exam in last year	59.7%	44.4%	25.0%	76.9%	53.0%	58.6%	53.8%	86.8%	56.3%
Eye exam in last year	77.8%	66.7%	58.3%	69.2%	69.3%	81.3%	73.3%	93.4%	84.4%
Hearing exam in last 2 years	48.4%	16.7%	33.3%	30.8%	35.5%	47.4%	42.7%	84.9%	31.3%
Pneumovax last 5 years	3;5.9%	11.1%	38.9%	7.7%	18.7%	56.2%	27.1%	45.4%	6.3%

	All	Forum Italia	Halton Seniors Supportive Housing	March of Dimes	Nucleus Independent Living (Mobile)	Oakville Senior Citizens Residence	Peel Senior Link	VON Mississauga	Yee Hong Centre for Geriatric Care
Hospital Use (Prev. 90 Days)									
1+ Hospital Admits	31.2%	0.0%	52.8%	0.0%	60.8%	17.9%	32.0%	27.0%	3.1%
1+ Emergency Visits	26.5%	0.0%	30.6%	46.2%	48.2%	10.0%	30.7%	30.3%	0.0%
*MAPLe 1 – 2	28.3%	66.7%	19.4%	15.4%	3.6%	43.4%	13.8%	55.9%	3.1%
3	31.2%	22.2%	22.2%	30.8%	44.6%	30.3%	36.9%	9.2%	50.0%
4 - 5	40.4%	11.1%	58.3%	53.8%	51.8%	26.3%	49.3%	34.9%	46.9%
RUG III – PA1 or PA2	64.7%	77.8%	55.6%	38.5%	22.9%	86.5%	49.8%	96.7%	78.1%
CRUDE COMPLEXITY SCALE 0 domains	34.9%	50.0%	38.9%	23.1%	5.4%	64.1%	18.7%	44.1%	21.9%
1 domain	38.5%	33.3%	30.6%	46.2%	36.1%	28.7%	45.3%	50.7%	31.3%
2+ domains	26.5%	16.7%	30.6%	30.8%	58.4%	7.2%	36.0%	5.3%	46.9%

Source: Data provided by Dr. Jeff Poss, University of Waterloo

APPENDIX D – Mobile / Bricks and Mortar Comparisons

RUG by Components of the SDL Program

RUG Scores	**% of Mobile**	**% of Bricks & Mortar**	**% of Full Sample**
RUG III PA1 or PA2 *(Least Impaired)*	22.9 %	74.3 %	64.7 %
Other *(More impaired, and more Resource Intensive)*	77.1 →	25.7	35.3
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 153.90 *Degrees of freedom = 1* *Significance < .001*

CCS Scores by Components of the SDL Program

CCS Score	**% of Mobile**	**% of Bricks & Mortar**	**% of Full Sample**
0 Domains	5.4 %	41.7 %	34.9 %
1 Domain	36.1	39. 1	38.5
2+ Domains	58.4 →	19.3	26.5
Totals	**99.9 %** (n = 166)	**100.1 %** (n = 727)	**99.9 %** (n = 893)

Chi square = 129.55 *Degrees of freedom = 2* *Significance < .001*

MAPLe Scores by Components of the SDL Program

MAPLe Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
1 - 2	3.6 %	34.0 %	28.3 %
3	44.6	28.2	31.2
4 - 5	51.8 →	37.8	40.4
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**99.9 %** (n = 893)

Chi square = 61.99 *Degrees of freedom = 2* *Significance < .001*

CHESS Scores by Components of the SDL Program

CHESS Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
0	12.7 %	32.5 %	28.8 %
1 - 2	47.0	50.8	50.1
3 +	40.4 →	16.8	21.2
Totals	**100.1 %** (n = 166)	**100.1 %** (n = 727)	**100.1 %** (n = 893)

Chi square = 54.96 *Degrees of freedom = 2* *Significance < .001*

Hospital Admissions by Components of the SDL Program

Hospital Admits in past 90 days	% of Mobile	% of Bricks & Mortar	% of Full Sample
< 1	39.2 %	75.5 %	68.8 %
1 +	60.8 →	24.5	31.2
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 82.61 *Degrees of freedom = 1* *Significance < .001*

Emergency Room Visits by Components of the SDL Program

ER Visits in past 90 days	% of Mobile	% of Bricks & Mortar	% of Full Sample
< 1	51.8 %	78.4 %	73.5 %
1 +	48.2 →	21.6	26.5
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 49.22 *Degrees of freedom = 1* *Significance < .001*

SRI Scores by Components of the SDL Program

SRI Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
Independent	4.2 %	23.9 %	20.3 %
Impaired on at least one item	95.8 →	76.1	79.7
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 33.18 *Degrees of freedom = 1* *Significance < .001*

IADL Summary Scores by Components of the SDL Program

IADL Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
0 to 6	10.2 %	25.6 %	22.7 %
7+	89.8 →	74.4	77.3
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 18.51 Degrees of freedom = 1 Significance < .001

DRS Scores by Components of SDL Program

DRS Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
< 3	71.7 %	83.2 %	81.1 %
3 +	28.3 →	16.8	18.9
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.0 %** (n = 893)

Chi square = 12.45 Degrees of freedom = 1 Significance < .001

CPS Scores by Components of the SDL Program

CPS Scores	% of Mobile	% of Bricks & Mortar	% of Full Sample
0	42.8 %	51.7 %	50.1 %
1 - 2	51.2	44.3	45.6
3 +	6.0	4.0	4.4
Totals	**100.0 %** (n = 166)	**100.0 %** (n = 727)	**100.1 %** (n = 893)

Chi square = 5.01 Degrees of freedom = 2 Significance > .001