Brief Reports

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Using mobile technology to promote independence: an innovation in psychiatric rehabilitation – a feasibility study

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Key words: Mobile technology, Psychiatric rehabilitation

ABSTRACT

This study evaluated the facilitative effect on psychiatric rehabilitation of cueing software, which was installed in mobile phones. These phones were used by persons with a mental illness who resided in a residential treatment and rehabilitation program. A total of 10 clients participated in the study over a six-month period. Evaluations included baseline and end point interviews measuring demographics, community integration, cognitive skills, and level of functioning. A focus group session examined experiences with the mobile technology. Community integration improved significantly from baseline to end point. We found that mobile phones with cueing software increase community integration and independence.

Abbreviations

CGI-S Clinical Global Impression – Severity of Illness MOCA Montreal Cognitive Assessment
CIQ Community Integration Questionnaire SOFAS Social and Occupational Functioning Scale

Background

GAF

Individuals living with serious and persistent mental illness often face cognitive impairments in addition to other symptoms. Cognitive impairments prevalent in schizophrenia have been found to be associated with unemployment, poor social skills and difficulties in

Global Assessment of Functioning

independent living (Green et al., 2000). Researchers have begun testing the use of technology to assist groups of individuals with cognitive impairments, such as the elderly (Haigh et al., 2002). Stip and Rialle (2005) conducted a review of literature on cognitive remediation and social reintegration of

patients with severe and persistent mental illnesses and concluded that rehabilitation can be enhanced using smart home technology. Further, they found that smart technology can provide solutions for individuals with respect to care delivery and socialization (Stip et al., 2005).

A small number of studies have been published examining various outcomes related to the use of technology for individuals living with mental illness. Web-based therapy treatments have been found to improve clinical outcomes and reduce symptoms for individuals with depression and/or anxiety disorders (Titov et al., 2011). Also, interventions, which included text messaging, have been found to improve medication adherence for individuals with schizophrenia (Montes et al., 2012). A recent study in London, Ontario found that a web-based application intervention improved ratings of independence for individuals with mood or psychotic disorders (Forchuk et al., 2014).

Research evidence has demonstrated that technology has the potential to improve symptoms and functioning for individuals living with mental illness but, requires further study in a variety of settings and sample groups. The purpose of this feasibility study was to investigate and evaluate the effects of community-based treatment supported by mobile technology. We hypothesized that providing mobile technology to individuals with mental illness residing in a residential treatment and rehabilitation program would support independence and integration within the community.

Methods

The current study employed a mixed method intervention design. Ethics approval was obtained from the Research Ethics Board of Western University.

Participants

Individuals were eligible and invited to participate if they lived in the residential treatment and rehabilitation program selected for the study. The residential program provides individuals with severe mental illness with integrated treatment, rehabilitation and support for a maximum of two years. The residence is staffed 24 hours per day. This program was selected because it is affiliated with a hospital already utilizing technology in a variety of ways to assist clients in recovery. A total of 10 clients were recruited by a program care provider and met with a trained research assistant to provide informed consent and complete a baseline interview.

The average age of participants was 34.6 years (SD = 9.40). All participants were single (never married) and five participants (50.0%) had at least one child. More than half of participants (60.0%) reported that their highest level of education was grade school. All participants reported a diagnosis schizophrenia/psychosis disorder, two reported a comorbid disorder of childhood/adolescence, one reported a comorbid substance-related disorder, two reported a comorbid anxiety disorder and one reported a comorbid organic disorder. All participants had at least one previous psychiatric hospitalization and were receiving treatment for their mental illness at the time of the study.

Measures

Baseline interviews included three questionnaires completed by participants, a modified version of the Community Integration Questionnaire (CIQ) (Dijkers, 2000, Appendix A), the Montreal Cognitive Assessment (MOCA) (Nasreddine, 2003) and a demographics form created by the study research team. One program care provider provided three ratings of participant functioning, Clinical Global Impression – Severity of Illness (CGI-S) (Busner et al., 2007), Global Assessment of Functioning (GAF, Hall, 1995) and Social and Occupational Functioning Scale (SOFAS) (Goldman, et al., 1992), as well as verified the psychiatric diagnosis provided by the participant.

Procedure

After completing the baseline interview, participants were given a Samsung Galaxy 551 mobile phone to use for the six-month duration of the study. The mobile phone had regular applications, such as an alarm clock, internet access and map, in addition to applications tailored to the study, including medication cues, appointment reminders, and a personalized calendar. All individualized information for the cues and reminders were input by care providers on a web-based application securely protected behind the affiliated hospital firewall. Care providers were first trained on using the web-based application by a technical consultant. In turn, the care providers trained the participants, with the assistance of the technical consultant, on using the applications on their mobile phones.

At the end of the study, participants and care providers were invited to participate in one focus group session to discuss their perceptions of the mobile technology intervention. Questions included reflections on the study and experiences with the mobile phones. A total of six participants and two

care providers participated in the focus group session. The remaining four participants were unavailable to attend the focus group. In addition, participants completed an end point interview with a research assistant. End point interviews included the CIQ, MOCA and a perception of mobile technology form created by the study research team. The same care provider as baseline also completed the CGI-S and SOFAS scales for each participant. Participants (clients only) were compensated \$20 for each of their interviews and focus group participation.

Results

As shown in Table 1, participants showed slight improvement in cognitive functioning from baseline (M=22.67, SD=4.06) to end point (M=24.00, SD=4.47), however the improvement was not statistically significant. Participant perceptions of their community integration improved significantly from baseline (M=13.47, SD=2.53) to end point (M=17.81, SD=3.87, p<0.05). Clinician ratings of participant functioning and severity of illness did not change significantly from baseline to end point.

	Baseline	End point	
	Mean (SD)	Mean (SD)	t- Statistic
Community Integration (CIQ)	13.47 (2.53)	17.81 (3.87)	3.90*
Cognitive Assessment (MOCA)	22.67 (4.06)	24.00 (4.47)	-1.08
Severity of Illness (CGI-S)	3.88 (1.25)	4.25 (1.03)	-0.20
Social/Occupational Functioning (SOFAS)	59.50 (13.94)	57.13 (17.52)	-0.60

A summary of focus group feedback is provided in Table 2. During the focus group session, participants and care providers gave positive feedback on a variety of aspects of using mobile technology in a residential treatment context. The most prominent feedback was that the mobile technology helped participants connect with others. For example, one

participant explained: "I use the phone pretty much every day when I call my parents, or my cousins, and my aunt and uncle ... so I use it to contact my support people and that does involve calling [name of residence] when I'm out." Participants also reported feeling less anxious about leaving the house alone because they could contact help if needed. As

explained by one care provider, "In the past ... we've had people complaining of anxiety, with paranoid feelings, that sort of thing, that are afraid to go out in the community, it's been a real comfort for people that they can basically call someone when they run into trouble." Both participants and care providers reflected on a number of other useful functions of the mobile technology, including the medication cues, daily reminders for doctor and laboratory appointments, alarm clock applications, banking applications, and music applications.

Neither participants nor care providers expressed concerns or dissatisfaction with the use of mobile technology as an aspect of mental health care. However, there were some criticisms with the

particular mobile phone and data plan selected for the study. Issues with the mobile phones included sensitivity of the touch screen and delayed cues and reminders. Issues with the data plans included restrictions of long-distance phone calls and unexpected costs of some downloadable applications. One participant expressed disappointment that the service plan was cancelled at the end of the study, "It's kind of frustrating cause I've kind of organized my life around the phone ... before I could live without it, but now... (participant did not complete sentence)." This feedback is valuable for future studies, which should consider both the type of technology and data plans selected as well as sustainability of services.

Table 2. Summary of Focus Group Feedback Themes		
Feedback	Examples	n
Positive Feedback	Increased opportunity to connect with others outside of residence (family, friends)	6 (4 C, 2 S)
	Increased opportunity to connect with others inside the residence (clients, staff)	4 (2 C, 2 S)
	Useful applications (e.g. alarm clock, music, social media)	5 (4 C, 1 S)
	Health care prompts (e.g. medication prompts, appointment reminders)	6 (4 C, 2 S)
	Increased sense of community acceptance through technology possession	2 (1 C, 1 S)
Negative Feedback	Service plan limitations	4 (4 C)
	Application issues	4 (2 C, 2 S)
	Issues with physical phone	3 (1 C, 2 S)
	Loss of service plan at end of study	2 (1 C, 1 S)
C indicates clients, S indicates staff		

Conclusion

The study results demonstrate that clients within a residential treatment and rehabilitation program benefitted from having mobile technology, particularly in the area of community integration. The mobile phone and data plan were selected based on the availability of funds for this study but served as a limitation because participants and care providers were not satisfied with those selected. Future research examining sustainable and affordable service plans with larger client groups is necessary to understand and increase the benefits experienced by participants.

References

Busner, J. & Targum, S. D. (2007). The Clinical Global Impression Scale: Applying a research tool in clinical practice. *Psychiatry*, *4*(7), 28-37.

Dijkers, M. (2000). The Community Integration Questionnaire. Retrieved from http://www.tbims.org/combi/ciq

Goldman, H. H., Skodol, A. E. & Lave, T. R. (1992). Revising axis V for DSM-IV: A review of measures of social functioning. *American Journal of Psychiatry*, *149*(9), 1148-1156.

Green, M. F., Kern, R. S., Braff, D. L. & Minstz, J. (2000). Neurocognitive deficits and functional outcomes in schizophrenia: Are we measuring the 'right stuff'? *Schizophrenia Bulletin*, 26(1), 119-136.

Forchuk, C., Rudnick, A., Hoch, J., Donelle, L., Campbell, R., Osaka, W., Edwards, B., Osuch, E., Norman, R., Vingilis, E., Mitchell, B., Reiss, J., Corring, D., Petrenko, M., Godin, M., Reed, J. & McKillop, M. (2014). Mental Health Engagement Network: Innovating community-based mental healthcare. *Journal of General Practice*, 2(1), DOI 10.4172/2329-9126.1000143.

Haigh, K. Z. & Yanco, H. A. (2002). Automation as caregiver: A survey of issues and technologies. In AAAI Workshop on Automation as Caregiver: The Role of Intelligent Technology in Elder Care. Edmonton, Alberta, p. 39-53.

Hall, R. C. W. (1995). Global Assessment of Functioning: A modified scale. *Psychosomatics*, *36*(3), 267-275.

Montes, J. M., Medina, E., Gomez-Beneyto, M. & Maurino, J. (2012). A short message service (SMS)-based strategy for enhancing adherence to antipsychotic medication in schizophrenia. *Psychiatry Research*, 200(2-3), 89-95.

Nasreddine, Z. (2003). The Montreal Cognitive Assessment. Retrieved from http://www.mocatest.org.

Stip, E. & Rialle, V. (2005). Environmental cognitive remediation in schizophrenia: Ethical implications of 'smart home' technology. *Canadian Journal of Psychiatry*, *50*(5), 281-291.

Titov, N., Dear, B. F., Schwencke, G., Andrews, G., Johnston, L., Craske, M. G. & McEvoy, P. (2011). Transdiagnostic internet treatment for anxiety and depression: A randomized controlled trial. *Behaviour Research and Therapy*, 49(8), 441-452.

The Community Integration Questionnaire-Revised (CIQ-R)

Nan	ne:			Date:	
1	Who usually does the shopp	ing for groceries or other no	ecessities in you	ır household?	
	☐ Yourself alone	☐ Yourself and someone	e else	☐ Someone else	
2	Who usually prepares meals	in your household?			
	☐ Yourself alone	☐ Yourself and someone	e else	☐ Someone else	
3	In your home who usually do	es normal everyday house	work?		
	☐ Yourself alone	☐ Yourself and someon	e else	☐ Someone else	
4	Who usually cares for the ch	ildren in your home?			
	☐ Yourself alone☐ Not applicable (no childre	☐ Yourself and someon en under 17 yrs in the home		☐ Someone else	
5	Who usually plans social arra	angements such as get-tog	ethers with fami	ily and friends?	
	☐ Yourself alone	☐ Yourself and someon	e else	☐ Someone else	
6	Who usually looks after your	personal finances, such as	banking or pay	ing bills?	
	☐ Yourself alone	☐ Yourself and someon	e else	☐ Someone else	
7	Approximately how many time	nes a month do you usually	participate in sl	nopping outside your home?	
	☐ 5 or more	☐ 1-4 times	□ Never		
8	Approximately how many times sports, restaurants, etc?	nes a month do you usually	participate in le	isure activities such as movies,	
	☐ 5 or more	☐ 1-4 times	☐ Never		
9	Approximately how many time	nes a month do you usually	visit friends or r	relatives?	
	☐ 5 or more	☐ 1-4 times	☐ Never		
10	When you participate in leisu	re activities do you usually	do this alone or	with others?	
	☐ Mostly alone ☐ Mo	ostly with family members	☐ Mostly wi	th friends who have a disability	
	☐ Mostly with friends who	do not have a disability	☐ With a co	mbination of family and friends	

	8					
	11	Do you have a best friend in w	hom you confide?			
		☐ Yes ☐ No				
	12	How often do you travel outsic	de the home?			
		☐ Almost every day ☐	Almost every week	☐ Seldom /	never (less than once p	er week)
	13	Please check the answer that work situation:	best corresponds to your	current (durin	g the past month)	
		 □ Full-time (more than 20 hou □ Part-time (less than or equa □ Not working, but actively loc □ Not working, not looking for □ Not applicable, retired due to 	al to 20 hours per week) oking for work r work			
	14	Please check the answer that program situation:	best corresponds to your	current (durin	g the past month) school	ol or training
		 ☐ Full-time ☐ Part-time ☐ Not attending school or trai ☐ Not applicable, retired due to the school or trainent of the school or trainent or trainent of the school or trainent or train				
	15	In the past month, how often did you engage in volunteer activities?				
		□ 5 or more □	1-4 times	□ Never		
*	16	How often do you write to peo such as Facebook)?	ple for social contact usi	ng the Interne	t (e.g., email, social netw	orking sites
		☐ Every day / most days	☐ Almost every w	veek	☐ Seldom / never	
*	17	How often do you talk to peop (e.g. Skype, FaceTime)?	le for social contact using	g an online vid	leo link	
		☐ Every day / most days	☐ Almost every w	reek	☐ Seldom / never	
*	18	How often do you make social your phone?	contact with people by t	alking or text	messaging using	
		☐ Every day / most days	☐ Almost every w	reek	☐ Seldom / never	

Comments:

^{*} Editor's note: these three items were not in the earlier version of the CIQ-R and were not used in this paper.

Barriers to discharge form: a tool for ensuring realism in discharge planning for a geriatric psychiatry setting

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Key words

Discharge Planning, Barriers, Challenges, Long Stay, Dementia, Mental Illness, Placement

ABSTRACT

The purpose of this paper is to describe a method of evaluating barriers to timely discharge from an inpatient geriatric psychiatry tertiary setting. A key evaluative role is played by the "Social Work Summary of Barriers to Discharge Form", by which resources required to facilitate discharge are systematically identified in the areas of Patient, Family, System and Long Term Care. The review is done after the first 60 days, the next 60 days and repeated every 90 days thereafter. Findings indicate multiple factors impede compassionate discharge from hospital. There were some non-significant differences in discharge barriers between the Long Term Stay (LTS, >1 year stay) and Short Term Stay (STS, <1 year stay) patients. These results support the use of this instrument to help address root causes of prolonged hospitalization.

Abbreviations

ALC Alternate Level of Care LTS Long Term Stay

LHIN Local Health Integration Network RAI Residential Assessment Instrument

LOS Length of Stay STS Short Term Stay

LTC Long Term Care

Background Highlights

Discharge planning is a core integral part of patient care. Lack of discharge planning not only prevents a patient's transition from the hospital setting to a more suitable residence; it also has a negative impact on the patient flow of the hospital (Ontario Ministry of Health and Long Term Care, 2006). Locally, the South West Local Health Integration Network (LHIN) has also identified the discharge process as an area requiring improvement. The criteria were detailed in the Complex Continuing Care & Rehabilitation Program, which addresses importance of discharge planning and several barriers that have prevented patients to be discharged (South West LHIN, 2012).

The literature is not clear on factors associated with length of stay. It has been shown that in order to have a seamless discharge process, involvement of the patient and relatives is critical (Watts et al., 2000). Demographics are seen to be poorly associated with length of stay (Hopko et al., 2001). However, psychiatric symptoms seem to have an effect on the length of stay. Patients diagnosed with depression will have a longer stay (Draper et al., 1998). Clinician based measures such as the Brief Psychiatric Rating Scale has also been used in predicting length of stay (LOS). However, not all populations are able to identify a correlation between diagnosis and length of stay (Gigantesco et al., 2009).

We have used several measures specific to our geriatric setting to identify issues related to prolonged hospital stay. The Residential Assessment Instrument (RAI) (Hirdes et al., 2002) is used to measure activities of daily living, cognitive function, pain, aggression and psychiatric symptomatology. A Patient Safety Reporting System is employed to report on incidents such as falls, which may complicate the time of stay in hospital. (Black et al., 2012).

The main objective of this study is to describe a third measure, the *Barriers to Discharge Form* (see Appendix A), which was developed by a team of social workers to address perceived obstacles to discharge in four areas: Patient, Family, System and Long Term Care (LTC). Under each factor, specific barriers are identified. We have provided preliminary data on barriers associated with Long Term Stay (LTS) and Short Term Stay (STS).

Methods

The Geriatric Program has two units and a total of 42 beds. One unit has 18 beds for the care of individuals with moderate to severe dementias in addition to psychiatric disorders. The other unit has 24 beds for the acute care of individuals with mood and other psychogeriatric disorders.

Our sample population consisted of Short Term Stay (STS) n=27 and Long Term Stay (LTS) n=15 groups. Patients were classified as STS if they were in the hospital shorter than a year.

The sample population included 62.5% males. The LTS group mainly consisted of patients with dementia 71%, schizophrenia 29% and no patients with mood disorder. The STS group was more evenly distributed between patients with dementia 40%, schizophrenia 32%, and mood disorder 28%. The STS group had no Alternate Level of Care (ALC) patients while the LTS included six ALC patients. ALC patients are defined as patients who are occupying a bed in a hospital and do not require the intensity of resources/services provided in this care setting.

Inpatient cases were reviewed through a process that focused on identifying what resources were required to transition clients to the best care destination possible. Using the *Barriers to Discharge* instrument, which consisted of four main factors: Patient, Family, System and Long Term Care, we identified specific barriers in each patient's symptomatic and behavioral

profile. If the patient remained in hospital after 60 days, a social worker completed the barriers form and updated the form on the next 60 days and every 90 days thereafter. The social work team also was able to identify recurring themes and trends in barriers.

Results

Differences in the experience of key barriers by the LTS and STS groups are given in Table1. The

proportion of cases involving a particular barrier in the LTS group (n=15) was compared to the proportion of cases involving the same barrier in the STS group (n=27). The differences of proportions in the two samples were tested using the *z*-test for differences between two proportions (Bruning et al., 1987). There were no significant differences.

Table 1: Frequency of Key Barriers to Discharge in Long Stay and Short Stay Groups				
	Stay > 1 year, N= 15	Stay <1 year, N= 27	z - statistic	
Barriers	Proportion (n)	Proportion (n)		
Patient-Related				
Symptom control inadequate	.60 (9)	.67 (18)	.47	
Patient refusing / non-compliant	.20 (3)	.15 (4)	.44	
Exhibits difficult behavior	.53 (8)	.52 (14)	.62	
Family Related				
Un-met Expectations	.20 (3)	.19 (5)	.12	
Safety Issues in current living	.07 (1)	.11 (3)	.13	
situation				
System Related				
On wait list for term care	.27 (4)	.07 (2)	1.8	
Appropriate housing, not available	.13 (2)	0	1.8	
Appropriate housing, not affordable	0	.07 (2)	.99	
Lack of Basic accommodation in	.27(4)	.07 (2)	1.8	
long term care				
Long Term Care Factors				
Lost bed-patient not ready to return	.07 (1)	.15 (4)	.22	
within 45 days				
Unable to extend length of stay	.07 (1)	.15 (4)	.22	
Inadequate Community Supports	.13 (2)	.15 (4)	.14	

Overall, the salient barriers to discharge were inadequate psychiatric symptom control – the most prevalent, disturbed behaviour, unmet expectations of family and lack of affordable long term care (see Figures 1-3).

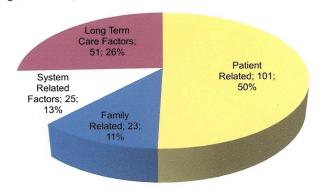


Figure 1. Frequency of the four discharge factor groups for patients.

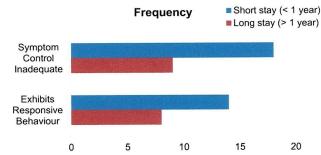


Figure 2. Prevalent patient related factors with differences between the LTS and STS groups.

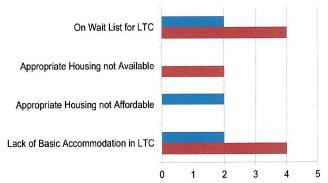


Figure 3. System related factors with differences between LTS and STS groups.

The most prevalent issue that prevented the LTS being discharged was a lack group from lack of care or appropriate long term accommodations in LTC, which is consistent with results of Gigantesco et al. (2009). Our social workers have identified several themes that prevented patients from being discharged, including the readiness to be placed in LTC, the inability to find proper LTC promptly and the lack of community support for those returning home. Several studies agree with the fact that greater resources should be invested into LTC, in terms of providing more facilities in general and providing specialized LTC services that are better able to meet the needs of the patient (Ontario Ministry of Health and Long Term Care, 2006; Butterill et al., 2009). The lack of LTC facilities, especially facilities that meet the needs of many patients, has been identified in Ontario by the South West LHIN, as well, and there have been efforts to address the problem by investing in LTC facilities (South West LHIN, 2012).

Conclusions

The results identified factors impeding discharge. The use of this data collection tool has enabled us to determine root causes of prolonged hospitalization. The aforementioned instrument (RAI) enables the collection of comprehensive informatics which helps support clinical decision making and the creation of best practice guidelines.

In conclusion, the discharge plan needs to be carefully planned and tailored to the needs of the individual and/or family, appropriately timed, and collaborative in nature to ensure a grounded after-care transition. By identifying the barriers to discharge and incorporating it into the standard level of care, the criteria for a successful discharge can be met.

From a systems perspective, the results allow us to determine what resources need to be developed in the community. The implication of access to high

support housing and community mental health services and supports continue to be serious problems due to long wait-lists and shortage of resources. This form could also be used for future research and long term program evaluation activities.

References

Black E., Van Bussel L., Ross, T., & Speziale J. (2012). Advancing clinical practice in patient safety: linking incident reporting to proactive practices in a geriatric psychiatry program. *Research Insights*, 9(2).

Bruning, J.L., & Kintz, B.L (1987). *Computational Handbook of Statistics*. Glenview, IL: Harper Collins.

Butterill, D., Lin, E., Durbin, J., Lunsky Y., Urbanoski, K., & Soberman, H. (2009). From Hospital to Home: The Transitioning of Alternate Level of Care and Long-stay Mental Health Patients. Toronto, ON: Health Systems Research and Consulting Unit, Centre for Addiction and Mental Health.

Draper, B., & Luscombe, G. (1998). Quantification of factors contributing to length of stay in an acute psychogeriatric ward. *International Journal of Geriatric Psychiatry*, 13:1-7.

Gigantesco, A., Girolamo, G., Santone, G., Miglio, R., & Picardi, A. (2009). Long-stay in short-stay inpatient facilities: risk factors and barriers to discharge. *BMC Public Health*, 9:306 doi:10.1186/1471-2458-9-306.

Hirdes, J.P., Smith, T.F., Rabinowitz, T., et al. (2002). The Resident Assessment Instrument – Mental Health (RAI-MH): inter-rater reliability and convergent validity. *Journal of Behavioral Health Services & Research*, 29(4), 419-432.

Hopko, D., Lachar, D., Bailley, S., & Varner, R. (2001). Assessing predictive factors for extended hospitalization at acute psychiatric admission. *Psychiatric Services*, *52*(10):1367-1373.

Ontario Ministry of Health and Long Term Care. (2006, December). Expert Panel on Appropriate level of Care. Appropriate level of care: a patient flow, system integration and capacity solution. Toronto, ON.

South West Local Health Integration Network (LHIN). (2012, March). Complex Continuing Care & Rehabilitation Final Report Executive Summary. London, ON.

Watts, R., Richold, P., & Berney, T. (2000). Delay in the discharge of psychiatric in-patients with learning disabilities. *Psychiatric Bulletin*, 24:179-181.

APPENDIX A.

SOCIAL WORK SUMMARY OF BARRIERS TO DISCHARGE

Patient Name: Casebook:

Date of Review: Date of Admission:

ALC: Y/N: Diagnosis: Date made ALC: Sex: M/F

Number of PSRS events: Days in Care at time of assessment:

	Patient Related Factors	Present
1.	Symptom control inadequate	
2.	Patient refusing/non-compliant with treatment	
3.	Patient risk to self. (suicidal & other safety concerns)	
4.	Patient risk to others. (homicidal, aggressive, unsafe smoking, other)	
5.	Exhibits disturbed behaviour(s): Add drop down menu: <i>Noisy, verbal aggression, hits, kicks, bites, head butts, smears, suicidal, exit seeks, sexual, other</i>	
6.	Patient refuses to leave hospital	
7.	Substance abuse issues	
8.	Legal issues	
9.	Not smoke free 6 months	
10.	Financial issues	
11.	Patient unwilling to engage in discharge planning	
12.	Medically unstable	
13.	Safety devices/restraints in use	
14.	Frequent use of prn's	
15.	Risk of abuse (finances, physical, psychological, neglect)	
16.	Requires frequent medical care i.e., blood draws/ maintenance ECT	

	Family Related Factors	Present
1.	Family unwilling to engage in discharge planning	
2.	Family avoiding/stalling on discharge planning	
3.	Family refused bed offer	
4.	Financial issues	
5.	Legal issues	
6.	Unrealistic expectations of family	
7.	Safety issues related to current living situation	
8.	Health related issues of family member	
9.	Family refuse to choose nursing home with short wait list	
10.	Family gave up LTC bed prior to expiration of 45 day leave.	

SOCIAL WORK SUMMARY OF BARRIERS TO DISCHARGE – page 2 $\,$

	System Related Factors	Present
1.	Medications not covered by ODBP	
2.	On wait list for LTC	
3.	Subsidized housing wait list long	
4.	Gap in service in patient's home community	
5.	Appropriate housing not available	
6.	Appropriate housing not affordable	
7.	Inadequate income	
8.	Awaiting action by PGT regarding living situation	
9.	Awaiting action by PGT regarding finances	
10.	Lack of basic accommodation in LTC	
11.	Inadequate community support services	
12.	No agency available to either administer or monitor medications	
13.	Unclear/inadequate charting (regarding behaviours, restraint usage)	

	Long Term Care Factors	Present
1.	Long term care wait lists 1 – 2 years	
2.	Basic bed required	
3.	Not smoke free 6+ months	
4.	Application(s) rejected by LTC. Facility:	
5.	No response from LTC facility regarding application for LTC. Facility:	
6.	Application pending. Facility:	
7.	Facility refusing to have resident return following treatment	
8.	Financial barriers (e.g. semi. available but can only afford basic)	
9.	Lost bed – patient not ready to return within 45 days	
10.	Transfer from other psych units – inadequate time for assessment & treatment	
11.	Unable to extend length of stay beyond 45 days	
12.	Sending facility has discharged patient upon transfer to Parkwood Institute Mental Health Care	
13.	LTC facility claims they do not have the resources to meet patient's needs	
14.	Patient to have personal specialized seating prior to transfer to LTC	
15.	Patient requires private room for clinical reasons but cannot afford one	
16.	Placements on hold due to preferred placements by general hospital	
17.	Conditions placed on bed offer	
18.	Bypassed by LTC – deemed not ready for placement at time bed available	

Other Barriers to Discharge:	
(Please list)	