Concurrent Disorders Stabilization Unit: Review of Modifiable and Non-Modifiable Potential Factors Impacting Length of Stay

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Abstract

Topic:

Brockville General Hospital is categorized as medium-sized full-service community hospital with a proud history of innovation and community service since 1885. BGH is designated as a Schedule 1 Psychiatric Facility under the Mental Health Act. BGH is located approximately 85 kilometres east of Kingston, Ontario along the Highway 401 corridor. BGH serves the catchment area of the United Counties of Leeds & Grenville (and South Lanark for acute-care mental health services) with a population base of over 100,000 residents, a mix of rural and smaller urban communities including the City of Brockville.

The Concurrent Disorders Stabilization Unit (CDSU) is a newly developed 5-bed inpatient service that provides care to persons aged 16 and older presenting with concurrent psychiatric disorders and substance use disorders. An integrated care model allows a seamless integration of psychiatric and substance use interventions. Individuals with concurrent disorders often experience poorer physical health and greater psychological distress than do people with a single disorder. They may also receive less-than-optimal health care. The complex health care needs of this subpopulation can result in long hospital stays, high readmission rates, and increased health care costs.

Recognizing the imbalance between community need and service availability within our catchment area, identifying the key predictors contributing to admission and program readiness are critical to optimizing outcomes of this HHR intensive service, including but not limited to: program engagement and completion rates; number of post-discharge MHA-related ED visits and repeat visits; rates of substance use recurrence and overdose; and, number of readmissions.

Abstract

Methodology:
Although the data set is limited due to the CDSU launch occurring only six months ago, the characteristics of two patient groups were compared: length of stay was less than 2 weeks and length of stay was more than 2 weeks. The following characteristics were compared: co-existing psychiatric diagnoses; clinical/functional status at program entry; and, quality of the inpatient experience (i.e., documented incidents leading to premature discharge from the program).

Results:
Of the 37 patients admitted to the CDSU, 19 have remained in the program for less than 2 weeks, while 18 have requested discharge prior to the 2 week point. Patients who had a co-existing anxiety disorder (68.42%) or depressive disorder (63.16%) had the highest early departure rates, whereas patients with a co-existing personality disorder (50.00%) had the highest retention rate. Due to the small sample size, significant trends in clinical/functional status at program entry could not be discerned. Chart review of the documented reasons for patient-initiated discharge prior to two weeks in the program revealed the following categories: psychosocial stressor(s) (42.11%); environmental restrictions (31.58%); conflict with staff (10.53%); inappropriate conduct on the unit (10.53%); and boredom (5.26%), with 26.32% of patients not providing a clear reason for requesting discharge.

Discussion/Summary:
Initial analysis of the patients admitted to the CDSU suggest that there are patient subgroups who are particularly vulnerable to seeking early discharge. A number of the characteristics/factors are modifiable or can be attenuated during the pre-hospital engagement/readiness process and during the immediate period following admission.

Logic Model for the Concurrent Disorders Stabilization Unit (CDSU)

Draft – last revised April 5, 2022

Program goal: to provide mental health and addictions assessment, stabilization, treatment, and rehabilitative services for individuals with severe concurrent disorders. This program is one part of a larger continuum of care and aims to "meet people where they are at".

Situation

Since 2016 there has been a consistently high rate of ER visits/repeat visits related to mental health & substance use at BGH. This rate has increased since 2018. There has also been an increase in fatal drug overdoses in the local community. **There is a high prevalence of concurrent disorders in our community & limited specialized services.**

Inputs/Resources

- 5 inpatient beds
- 5 nursing positions
- Primary care positions (1 nurse practitioner; 5 MRPs)
- Allied health & supportive care positions (1 peer support, 1 OT, 1 SW, 1 addictions counsellor)
- Support from inpatient psychiatry, on-call psychiatry & hospitalists
- Collaborations with Change Health Care & Outpatient Mental Health Services

Activities

Pre-admission – peer support, medical, biopsychosocial & instrumental assessments

Stabilization – medical & psychiatric assessment, withdrawal management, medical & psychiatric treatment of co-morbidities, supportive care

Therapeutic support – group therapy, individual counselling, functional assessment & intervention, self-guided work, recreation, comprehensive primary care assessment & treatment, health & wellness services

Discharge planning – instrumental support, family counselling, relapse management & safety planning, harm reduction teaching & supplies, referrals to: medical & psychological supports, functional supports, housing, & community peer support

Post-admission – follow-up medical assessment, peer support, short-term counselling & psychotherapy, ongoing drop-in peer group

Audience

Individuals 18 & older with concurrent mental health & substance use disorders, who reside within United Counties of Leeds, Grenville & South Lanark, and who indicate a desire to engage in stabilization & therapeutic intervention*

Outputs

- # groups/week; # participants/group
- # morning/evening meetings
- # therapy sessions
- # rec sessions
- # psychoeducation sessions
- # peer support groups
- # ind peer support sessions/week
- # ind provider assessments & interventions
- # health/wellness assessments & treatments
- # patients referred, admitted
- # patients completing program
- Wait time for admission
- Length of inpatient stay

Outcomes

Short-term
Symptom reduction (mental health/substance use);
Increase in knowledge of concurrent disorders, safety planning, relapse management, & coping strategies;
Increase in confidence in strategies to manage mental health & substance use disorders;
Increase in engagement in peer support/counselling

Medium-term
Sustained symptom reduction;
Decrease in high-risk behaviours (e.g., sharing equipment, self-harm);
Sustained engagement with community supports (e.g., counselling, peer support);
Decrease in repeat ER visits

Long-term
Sustained decrease in repeat ER visits;
Decrease in fatal overdoses in local community;
Increase in quality of life and wellness;
Increase in engagement in purpose-driven activities and roles (e.g., employment, volunteering, relationships);
Decrease in homelessness in local community

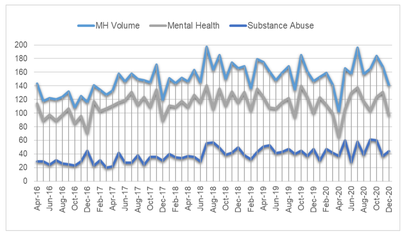
Assumptions

- Concurrent disorders are complex and chronic; treatment is multi-faceted
- Periods of wellness & illness fluctuate & vary for each individual
- CDSU is one part of a larger continuum of care for individuals with concurrent disorders
- Participants have experienced stigma in health care system related to their mental health &/or substance use
- Participants will be motivated to engage in programming & meaningful reflection
- Many participants will have experienced significant interpersonal trauma
- Many participants will experience challenges meeting basic needs (e.g., shelter, food, sleep, security)
- Many participants will have limited or no contact with a primary care provider
- Participants will benefit from psychoeducation & coaching related to living with concurrent disorders
- Many participants will require help linking to, reinstituting, or strengthening connections with community services
- Many participants will have deficiencies in support from family and friends

External Factors

- Changes in funding &/or resources for program
- Stigma in health care system directed toward individuals who use substances or have mental health concerns
- Limited access to housing and other basic needs
- Psychosocial & environmental stressors experienced by patient and their family and friends
- Long waitlists for community mental health & addictions support
- Long waitlists & limited availability of residential treatment
- Covid-19 pandemic regulations & restrictions

Context and Assumptions: BGH ED Visits Mental Illness Versus Substance Abuse



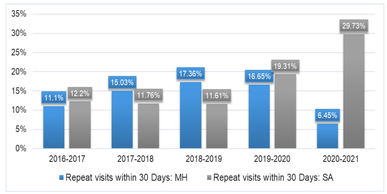
Continuum of Care

The Concurrent Disorders Stabilization Unit plays a critical role in the continuum of mental health services for the adult residents of United Counties of Leeds & Grenville and South Lanark. The service will provide mental health and substance use assessment, medically-managed withdrawal and stabilization, treatment and rehabilitative services for individuals with severe and often disabling concurrent disorders.

Core continuum components and their future service locations, i.e., hospital and/or community-based services providers:

Service	BGH	C-BSP
Crisis/Emergency/Urgent Care	●	
Adult Inpatients	●	
Adult Residential		●
Adult Ambulatory Clinic	●	●
Case Management		●
Day Care Services		●
Transitional/Supportive Housing		●

Context and Assumptions: Repeat BGH ED Visits Mental Illness Versus Substance Abuse



Core Team

Concurrent disorders specialist: conducts biopsychosocial assessments with each new patient and identifying individualized goals and discharge planning needs. The CDS also provides psychoeducation and supportive counselling in individual and group formats.

Family physician group and lead (5): are the most responsible physicians for CDSU patients. The lead has deep expertise in medical management of substance use disorders and acts as a critical resource to the physician group and broader clinical team.

Intake coordinator: develops the initial connections with prospective patients, conducts intake and screening assessments, and assists patients in taking that first crucial step of arriving to the program, including meeting them at the door of the hospital at the time of admission.

Nurse practitioner: provides both a critical clinical leadership and coordination role. In addition to providing direct primary care services, the nurse practitioner oversees development, implementation and evaluation of an individualized plan of care.

Nursing team: provides primary nursing care for patients within the CDSU program including standardized assessment of patients during withdrawal using the CIWA-Ar and COWS assessment tools, provision of treatment based on signs and symptoms of withdrawal, and provision of mental health and medical nursing care.

Occupational therapist: provides clinical leadership in the development and implementation of CDSU individual and group programming. Interventions are informed by a number of evidence-based approaches to treatment of CDs, including cognitive behaviour therapy and dialectic behaviour therapy, motivational interviewing, and acceptance and commitment therapy.

Peer support worker: engages new and prospective patients, providing supportive counselling from a lived experience perspective, and leading psychoeducational group sessions, as well as providing essential bridging support once patients are discharged to the community.

CDSU Referral Management and Program Entry

Preliminary Review of Potential Factors Impacting Length of Stay

CDSU Patient Characteristics	Length of Stay <2wks		Length of Stay >2wks	
	n=19	%	n=18	%
Co-existing psychiatric disorders in addition to Substance Use Disorders:				
● Neurodevelopmental Disorders	6	31.58	5	27.78
● Schizophrenia Spectrum and Other Psychotic Disorders	2	10.53	3	16.67
● Bipolar and Related Disorders	2	10.53	1	5.56
● Depressive Disorders	12	63.16	8	44.44
● Anxiety Disorders	13	68.42	7	38.89
● Obsessive-Compulsive and Related Disorders	2	10.53	2	11.11
● Trauma- and Stressor-Related Disorders	7	36.84	9	38.89
● Disruptive, Impulse Control and Conduct Disorders	6	31.58	5	27.78
● Personality Disorders	8	42.11	9	50.00
Psychosocial Functioning on Program Entry:				
● **51 – 60** Moderate symptoms (e.g., flat affect and circumlocutory speech, occasional panic attacks) or moderate difficulty in social, occupational, or school functioning (e.g., few friends, conflicts with peers or co-workers).	6	31.58	6	33.33
● **41 – 50** Serious symptoms (e.g., suicidal ideation, severe obsessional rituals, frequent shoplifting) or any serious impairment in social, occupational, or school functioning (e.g., no friends, unable to keep a job, cannot work).	2	10.53	4	22.22
● **31 – 40** Some impairment in reality testing or communication (e.g., speech is at times illogical, obscure, or irrelevant) or major impairment in several areas, such as work or school, family relations, judgment, thinking, or mood (e.g., depressed adult avoids friends, neglects family, and is unable to work; child frequently beats up younger children, is defiant at home, and is failing at school).	4	21.05	2	11.11
● **21 – 30** Behavior is considerably influenced by delusions or hallucinations or serious impairment, in communication or judgment (e.g., sometimes incoherent, acts grossly inappropriately, suicidal preoccupation) or inability to function in almost all areas (e.g., stays in bed all day, no job, home, or friends)	7	36.84	6	33.33
Self-Reported Inpatient Care Experience, i.e., contributing factors to discharge before 2 weeks:				
● Conflict with Staff	2	10.53		
● Environmental Restrictions (e.g., no smoking, restricted access to personal items)	6	31.58		
● Psychosocial Stressor(s) (e.g., distressing interaction, caregiving responsibilities)	8	42.11		
● Boredom	1	5.26		
● Inappropriate Conduct on Unit (asked to leave)	2	10.53		
● Unreported/Other	5	26.32		