Systematic Complexities of Community-Based Acquired Brain Injury Rehabilitation: the interconnection of ABI, mental health, and addictions

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Background

- Mind Forward is a non-profit charitable organization, completely funded by the Ministry of Health and Long Term Care, the Mississauga Halton Local Health Integration Network (LHIN) and Central West LHIN to provide community based rehabilitation and life-long support for adults whose lives have been touched by acquired brain injury.
- Acquired brain injury is inherently multifaceted, exhibiting a range of dynamic characteristics that differ drastically from one individual to the next.
- Comorbid disorders, such as mental health and addictions, are prominent within this population which play a significant barrier in obtaining services and treatment outcomes.
- Currently these disorders have been managed by different systems of care in which treatments and outcomes are often fragmented.
- In order to successfully provide rehabilitation, clients require a multidisciplinary approach that is capable of holistically treating comorbid disorders.

Objective

- The purpose of this study is to examine the complexities of providing community-based rehabilitation and the interrelations among ABI, mental health and addictions.
- By utilizing case studies, we will demonstrate that in order to perpetually enhance the lives and rehabilitation goals of the individual, we must holistically treat comorbid disorders.

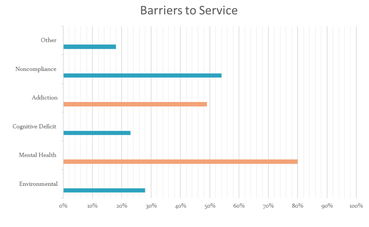
Methods

- We provided community-based rehabilitation to individuals living in the community with an ABI through a Supported Independent Living (SIL) program.
- The program, which operates daily, is facilitated by five full-time staff and two case managers. Each staff member provides rehabilitation for up to seven clients daily, based on client schedules and identified needs.
- SIL staff have received a variety of specialized training focused on ABI rehabilitation, mental health and addictions.

Results

- The SIL program provided support to 39 individuals.
- Within this population several barriers emerged to provide service, which drastically affected the rehabilitation outcome.
- The principal barriers were as follows: mental health 80%, non-compliance 54%, addictions 49%, environmental 28%, cognitive deficits 23%, other 18%.

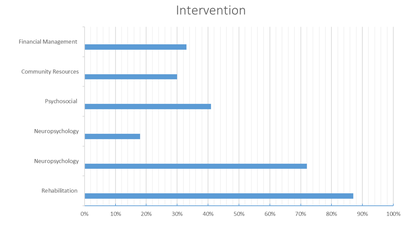
- Mental health: Clients demonstrated a range of mental health illnesses. Depression and anxiety were the most prevalent within this population.
- Noncompliance: Clients did not attend scheduled appointments and/or follow through with responsibilities.
- Addictions: Although this could have been included within mental health, it was decided to keep this separate to demonstrate its prevalence. Within this group alcohol abuse was most prominent, but further substance use was discovered such as but not limited to: opioids, cocaine, and marijuana.
- Environmental: Such factors as pest infestations, squalor, and dangerous conditions to staff affected the ability to provide in-home rehabilitation. Community safety audits were utilized to identify and resolve such concerns.
- Cognitive deficits: Clients demonstrated a range of cognitive deficits such as memory impairments and executive functioning difficulties.
- Other: Used to capture a range of barriers that did not fall under the above headings such as: family, health, and communication difficulties.



Results Continued

- It should be noted that multiple clients did present with more than one barrier at one time. In order to move beyond these barriers, a multidisciplinary team was utilized to design specific rehabilitation programs to reflect the needs of the clients. Multiple strategies were employed in order to break down these barriers. The frequency of these strategies are as follows: rehabilitation 87%, neuropsychiatry 72%, community resources 59%, psychosocial 41%, financial management 33%, neuropsychology 18%.

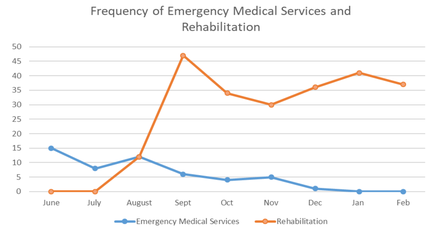
- Rehabilitation took on multiple forms including, but not limited to: case management, functional skill assessments/development, medication management, wellness checks, engagement and community integration.
- Neuropsychiatry was offered to clients that were identified within this population via standardized assessment tools and direct observation.
- Community resources included but were not limited to: addiction counsellors, mental health specialists, crisis intervention programs, occupational therapists, physiotherapists and speech & language pathologists.
- Psychosocial groups and counseling services were offered to identified clients via standardized assessment tools, direct observation, and self reported interest in groups such as: Cognitive Behavioural Therapy and Anger Management.
- Financial management varied from partnering with the public guardian and trustee (PGT) services, to utilizing our own finance department to assist clients to budget for expenditures such as rent.



- Neuropsychology was offered to clients identified within this population via standardized assessment tools and direct observation.

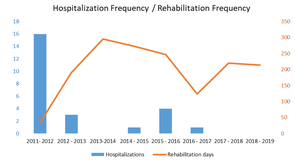
Sample Case Study

- Client X is a 67 year old woman who suffered a left middle cerebral artery stroke which resulted in significant right hemiparesis and expressive aphasia. She has low frustration tolerance and can present with verbal and physical aggression. Client X has also exhibited suicide ideation.
- She lives alone in an apartment and receives services from a personal support worker three times daily. She has no family and her only caregivers are two friends. Client X is isolated and depends on her friends to access the community. A Public Guardian and Trustee (PGT) oversees her finances.
- Came into service at the end of August 2018. During her first appointment, staff found Client X laying on the floor in a pool of blood in her apartment. EMS was contacted and Client X was taken to the hospital.
- Staff implemented daily wellness checks in which Client X demonstrated a lack of insight and frequently made decisions that placed her health and safety at significant risk.
- It was hypothesized that the root cause of these risk factors originated from Client X's substance abuse and the quantity of alcohol that was consumed on a daily basis. Client X was typically found by staff to be intoxicated, covered in her own bodily fluids, highly agitated, refusing support and frequently in need of EMS.
- In December 2018, a collaboration of professionals advocated for financial management and a monetary amendment. As a result, Client X received a decreased weekly cash allowance, while larger sums of money were provided via gifts cards that were to be used for community integration.
- This graph outlines the affect that consistent wellness checks and financial management had on the frequency of EMS usage over a period of nine months. Before Client X was in service, EMS was contacted 35 times within a three month period. Once Client X was in service, the first month the rate in which she required EMS was reduced by 50%. Six months later, the rate in which she required EMS was reduced by 100%. The reduction can be attributed to daily wellness checks, case management, rapport building, and financial management.



Sample Case Study

- Client Y is a 68 year old man who suffered chronic bilateral subdural hematomas with an acute subdural hematoma in the right temporal and left frontal region with association contusion. He exhibits depression, alcohol abuse and active suicidal ideation. He suffers from memory loss, executive functioning difficulties, and lacks insight. When intoxicated Client X has a history of verbal and physical abuse.
- Client Y lived alone in an apartment, infrequently visited by his family and rarely accessed the community alone.
- Came into service in March 2011. He presented with multiple crises and hospitalizations for active suicidal ideation within the first year.
- Several strategies and community resources were employed including but not limited to: neuropsychiatry, financial management, functional skills assessment/development, engagement, community integration, in-home/community addiction counseling, and wellness checks.
- This graph represents the frequency of hospitalizations that Client Y had over a period of eight years. The first year Client Y received case management services, while the following years he received case management and SIL services. The spike of hospitalizations and the decrease in rehabilitation that occurred in 2015/2016 was due to Client Y obtaining a large sum of money. Client Y relapsed and began drinking heavily until the spring of 2016. He was found in his apartment in medical distress and rushed to hospital. While in hospital he was deemed incompetent and a power of attorney was implemented. Four weeks later he was discharged and moved into a supervised living facility, and six months later he was transferred to an apartment in a long term care facility.



- Client Y had 16 hospitalizations within the first year of service and was admitted for several weeks at a time. By utilizing a multidisciplinary approach that number has been reduced by 100%.

Recommendations

- In order to improve upon services that are being delivered, providers must be prepared to treat all comorbid disorders as principal.
- Funding that is designated for specific service streams perpetuate barriers within the system. These barriers result in fragmented treatment that affects treatment outcomes and contributes to wasted resources.
- Staff must be provided with extensive training; not only in ABI rehabilitation, but in mental health and addictions.

Conclusion

- By utilizing a multidisciplinary and holistic approach, the SIL program has demonstrated the ability to effectively support individuals with ABI, mental health, and addictions in the community. Alleviating system pressures and providing a higher standard of care.

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