



## Tools to Address Substance use after Brain injury


Carolyn Lemsky, Ph.D., C.Psych

## Overview

- Community Context
- Promising interventions when addictions co-occur with brain injury
  - Treatment Incentives
  - Community Reinforcement Approach
  - MI
- Case management overview
- Case study examples
- Implications for programming
  - Ethical Decision-making
  - Partnership building

## Context



Banksy



### Barriers to Care

**Services not designed** to manage complex co-occurring disorders

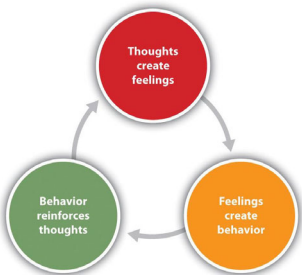
**Stigma**

**Lack of knowledge/information**

Wait times/complex admissions result in **lost to care**

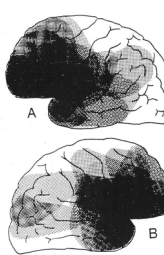
**Limited Resources**

Many mental health and addictions therapies have the goal of harnessing conscious cognitive processing (executive functioning) to better manage the automatic thought and behavior processes.

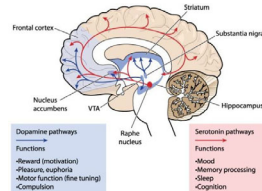


## The Finger print of TBI

### Pattern of Injury



### Neuroanatomy of Reward



**Dopamine pathways**

Functions

- Reward (motivation)
- Pleasure, euphoria
- Motor function (fine tuning)
- Compulsion
- Reinforcement

**Serotonin pathways**

Functions

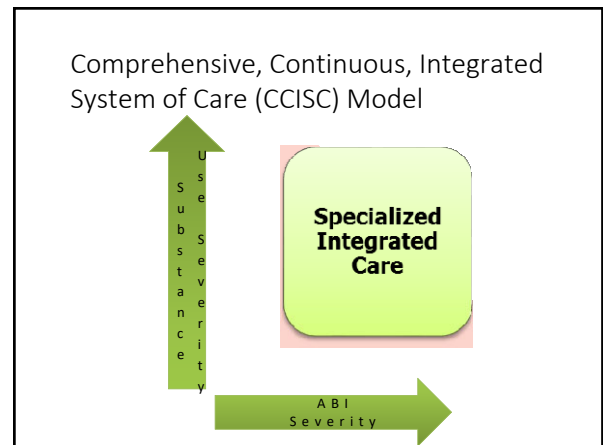
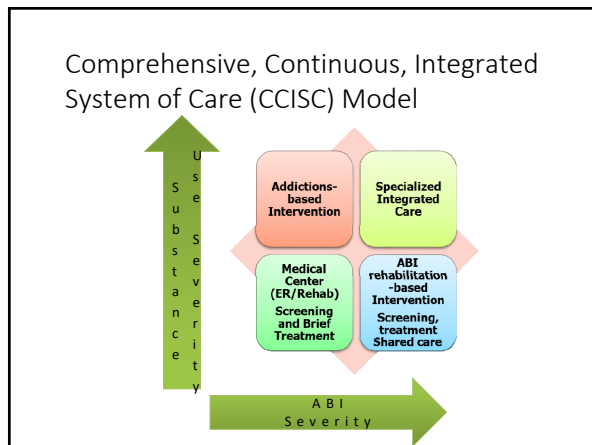
- Mood
- Memory processing
- Sleep
- Cognition

Neurocognitive impairment that is easily misunderstood as a lack of motivation or cooperation

Disorganization	Failure to initiate activity
Difficulty in completing tasks	Repeating the same mistakes
Failing to make a plan	Failing to follow a plan
Grandiose planning	Stubbornness
Jumping to conclusions	Impulsivity
Difficulty in making plans or decisions	Disruptive behaviour

### Clinical Presentation

Big gap between 'Say and Do' despite the presence of change/commitment talk and many elements of action.



### What are we integrating?

Care related to Diagnosis.

- Mental Health
- Substance Use
- Neurocognitive Impact

Care across sectors

- Healthcare
  - Inpatient
  - Outpatient
  - Community
- Social Services
  - Housing
  - Transportation
  - Justice

### “An Integrative Approach to Care”

Miller, Forcehimes & Zweben, 2019

1. Comprehensive and evidence based
2. Multidisciplinary
3. Holistic
4. Collaborative
  1. Across agencies
  2. With clients and families

## Phased care

Phase 1 Engagement (palliative) – what happens before a person is ready for change

Phase 2: Preparation (stabilization)

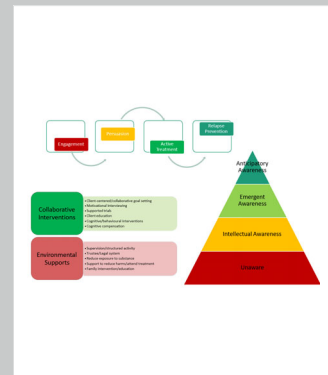
Phase 3: Active Treatment (rehabilitation)

Phase 4: Maintenance

## Community-Based Integrated care

Long-term Program (staged care)

Pick up where short-term treatment/case management ends.



### The Team

4 Community Facilitators	Consulting
1 MSW (Addictions trained)	Neuropsychiatry
1 Behaviour Therapist	Addictions Medicine
1 Service Coordinator (RPN)	
.25 Psychologist	

## The Clients

- 35 Clients w/Moderate to Severe ABI
- Active SUD or Serious Mental Health problem with difficulty accepting or engaging in support.
- Living in the community (most independently, in supported housing, with family or homeless).
- Age range 23 - 68
- Average time post Injury 12 years (2 to 25+).
- 1/3 unstably housed or homeless in the past year.
- ¼ more than 5 ER or hospital visits in the past year.
- Referred by programs not managing the complexity

Promising  
Evidence  
Based  
Interventions

Substance use disorders and brain injury

## From the ABI specific literature

- Fewer than 20 studies
- Five types of intervention
  - Strategies for treatment retention
  - Intensive case management
  - Skills training
  - Motivational Interviewing
  - Peer Support
  - Long-term residential programming

## Examples of ABI tested

- Motivational Interviewing (Cox et al., 2003)
- Intensive case management (Bogner et al., 1997)
- Skills training (Vungkhanching et al., 2007)
- Treatment incentives (Corrigan et al., 2005)

## Evidence-based interventions for Substance Use Disorders

- Treatment incentives.
- Community Reinforcement Approach (CRA/CRAFT)
- Motivational Interviewing
- Harm reduction
- Cognitive-Behavioural Therapies including relapse prevention
- Peer Supports (smart recovery and 12-Step)
- Pharmacological Treatments (e.g. naltrexone, suboxone, methadone).

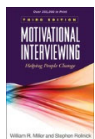
## ABI-Specific, and Concurrent Disorders Treatment Models

### Common Characteristics

- Phased intervention that begins before insight/readiness to change
- Supports to engage in treatment
- Development of behaviours incompatible with substance use
- Skills training
- Emphasis on environmental supports

## Key Evidence-Based Interventions for cognitive impairment and emotional dysregulation

- Assertive case management
- Cognitive Rehabilitation
  - Metacognitive strategy training (goal management)
  - Cognitive compensation strategies
  - Behavioural analysis (positive behavioural supports)
- DBT (skills System)
- Mindfulness
- Cognitive Behavior Therapy
- Neuropsychiatry
- Addictions Medicine



## Definition of MI (3)

### A technical therapeutic definition

"Motivational Interviewing is a collaborative, goal-oriented style of communication with particular attention to the language of change. It is designed to strengthen personal motivation for and commitment to a specific goal by eliciting and exploring the person's own reasons for change within an atmosphere of acceptance and compassion."

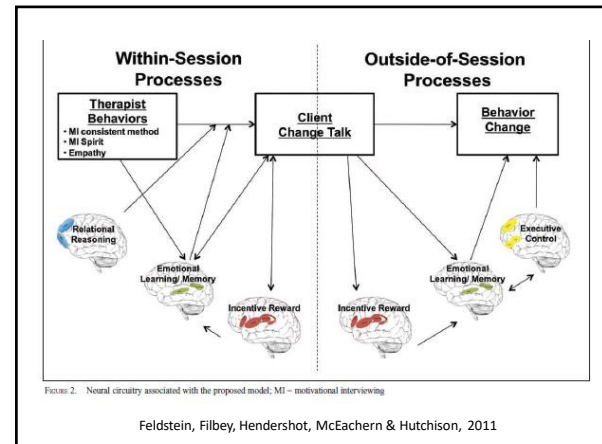
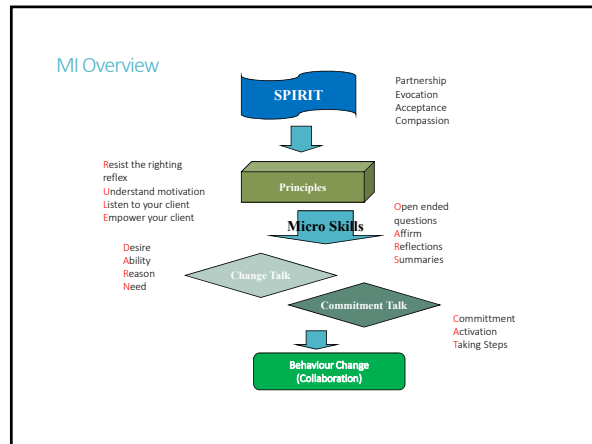
Miller and Rollnick, MINT Forum, 2011.

## Motivational Interviewing (MI)

MI is based on idea that ambivalence is normal and that only when it's adequately explored, can behaviour change take place

Direct confrontation often leads to resistance to change.

Just because we don't directly confront someone over a behaviour, doesn't mean we agree with it.



## ABI specific Interventions

- **Motivational Interviewing** – improves motivational structure, small impact on substance use.
  - Accommodate cognitive impairment in session
  - Build motivation to accept appropriate environmental supports.
- **Screening, Brief Intervention and Referral**
  - Accommodate cognitive impairment with booster session, use of cognitive compensation.
  - **Brain-Health Focus.** (Limits recovery, effects on balance, effects on behavior, interactions with medications, worsens cognitive problems, negative impact on mood, increased risk for seizures)

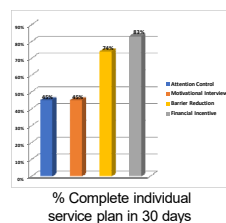
## Strategies for Treatment Retention

Corrigan, Bogner, Lamb-Hart, Heinemann & Moore (2005):

- Brief Motivational Interview
- Reduction of barriers to attendance
- Financial incentives
- Attention control

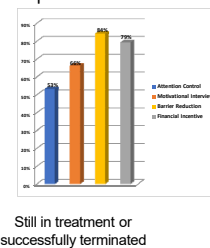
## Findings

N = 195 (138 men;  
57 women)  
Mean age = 36.6  
(range = 18 to 72)  
Mean time since  
injury = 8.0 years  
(range = 3 weeks  
to 55 years)



## Six-month follow-up data

- By six months, over 30% had terminated therapy
- 50% improvement over control for Barrier Reduction and Financial Incentives
- Brief phone intervention makes a big difference



Why did these interventions work?

- Attendance early in treatment increases engagement
- Rule-governed learning is easier for many individuals surviving brain injury and enabled engagement
- Support to attend sessions enabled engagement

## How incentives are used

- Treatment incentives (lottery entries earned for 'clean' urine.
- Tokens for achievements (AA chips)
- Tokens for attendance (SUBI Beads, certificates of completion)
- Rewards for attendance early in treatment (gift certificates)
- Coffee, transit tokens, meals

## CRA/CRAFT

ARCR | ALCOHOL RESEARCH  
Current Reviews

Alcohol Res Health 2011; 33(4): 380-388

PMCID: PMC3080553

PMID: 22550522

The Community Reinforcement Approach  
An Update of the Evidence

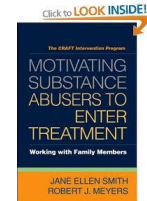
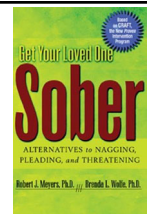
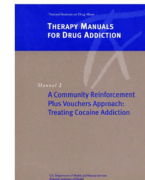
Robert J. Meyers, Ph.D., Joseph S. Henders, Ph.D., and Jane Ellen Smith, Ph.D.

• Author Information • Copyright and License Information • Disclaimer

"Multiple research reviews and meta-analyses of the treatment-outcome literature have shown CRA to be among the most strongly supported treatment methods (Finney and Monahan 1996; Holder et al. 1991; Miller et al. 1995, 2003)."

**Building a life that is more reinforcing than using**

1. Motivational strategies
2. Functional analysis of the substance use behavior
3. Sobriety sampling
4. Domestic violence precautions
5. Communication training
6. Discouragement of using behavior
7. Reinforcement on non-using behavior
7. Significant other self-reinforcement training
8. How to suggest treatment to the identified Patient



<https://archives.drugabuse.gov/sites/default/files/cra.pdf>

## Stages of Change (insight)

### Pre-contemplation

- I don't see a problem

### Contemplation

- Other people say I have a problem or I might recognize a problem

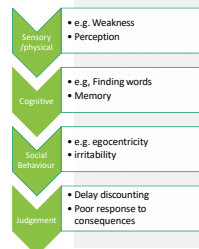
### Preparation/Action

- I should do something, what should I do, how will I do it?

### Action/Maintenance

- I'm acting on the problem, and I know what I need to prevent problems

## Awareness of Neurological Impairment.



### No awareness

- I don't see a problem

### Intellectual Awareness

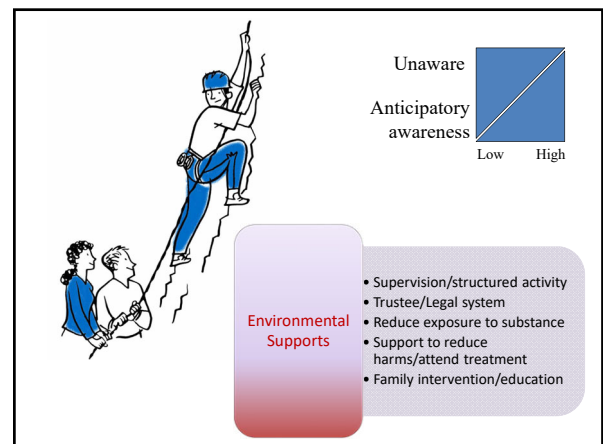
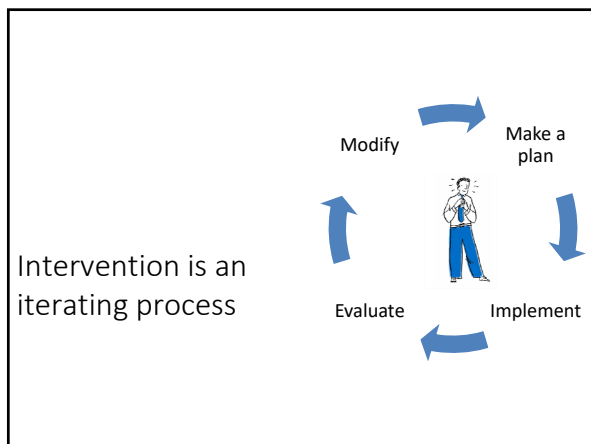
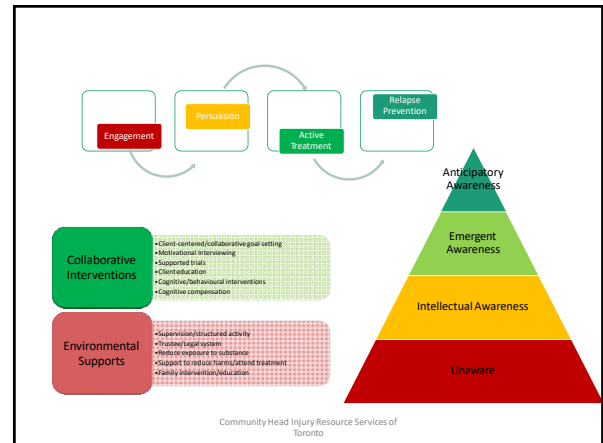
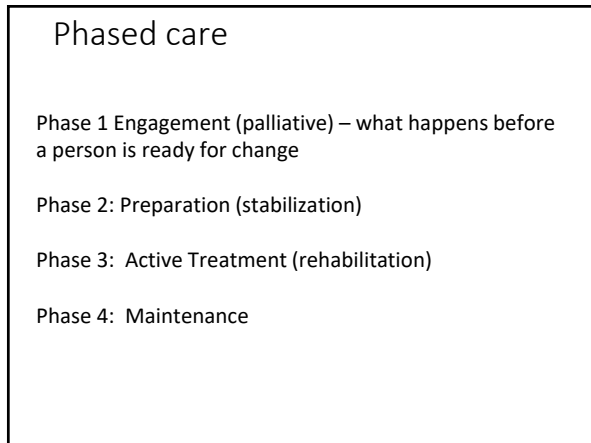
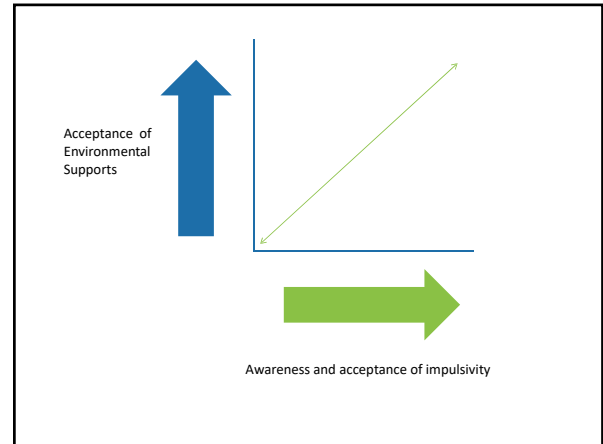
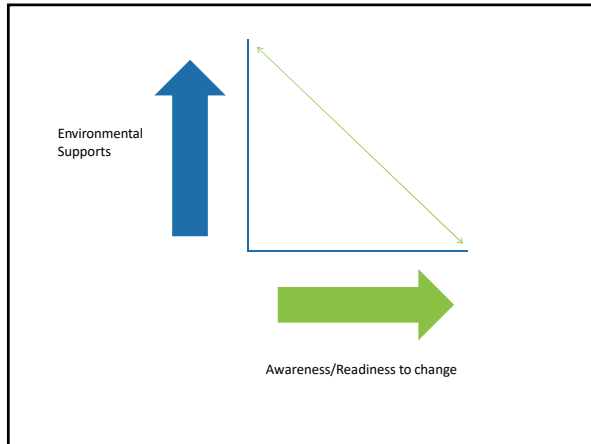
- Other people say I have a problem

### Emergent Awareness

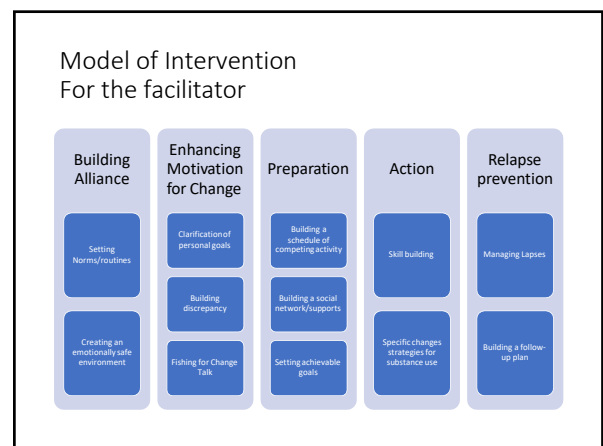
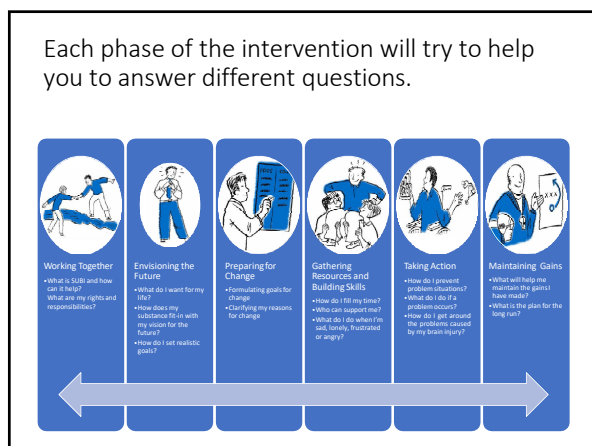
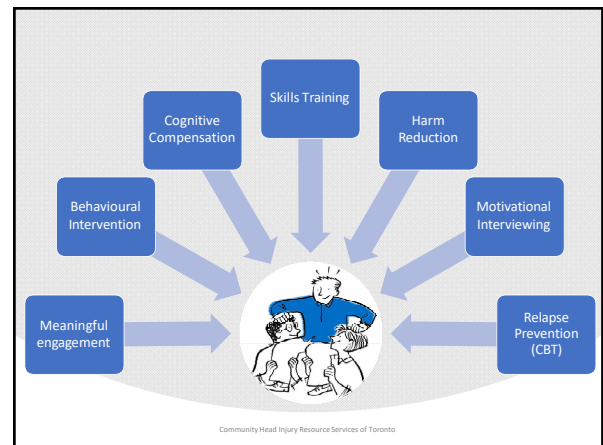
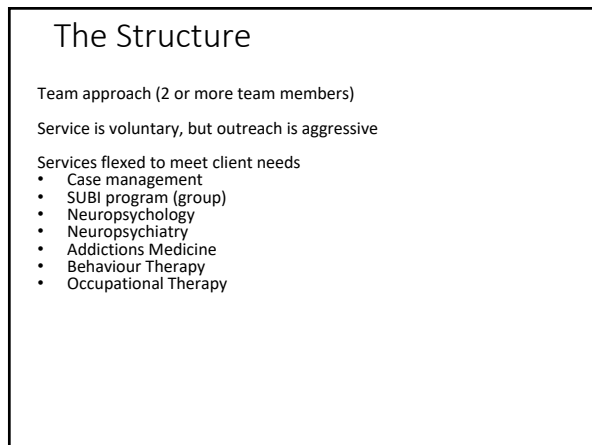
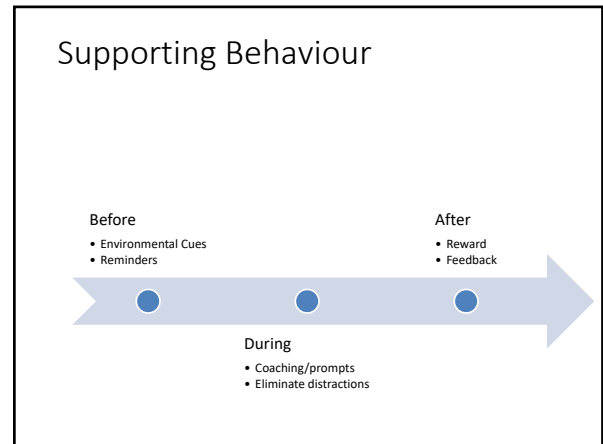
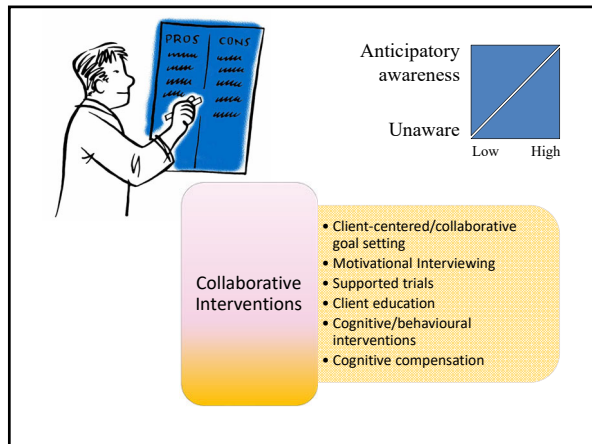
- OOPS, I think I have a problem

### Anticipatory Awareness

- I know what's likely to happen, so I better do something about it









## Andrea History

31 year-old dental hygienist, mother of a 4 year old.  
 Injured in single car accident 1.5 years prior referral.  
 Severe TBI with 2 weeks coma, 3 months PTA  
 Right-sided frontal lobe hemorrhage with evidence of axonal shearing.  
 Pre-injury history of Alcohol with use from age 14 to pregnancy—binges, with black outs, risky behaviour.  
 Mental health history included undiagnosed /untreated bingeing and purging and some self-injury  
 Abstained during pregnancy, moderate use to 6 months prior to injury with episodes of lapse.

## At assessment

Moderately impaired memory.  
 Family described her as impulsive, irritable, with episodes of aggression, exacerbated by substance use. Poor judgement, poor planning and initiation.  
 Limited awareness of neurobehavioral impairments.  
 Abstained one-year post-injury as recommended by doctors. Gradual increase in alcohol use in the six months prior to referral.  
 Pre-contemplative with respect to substance use

## At assessment

- Living with Mom and daughter.
- Boyfriend, a light drinker, lives near by and is supportive.
- Social with rehabilitation team, but doesn't see a reason for their presence.
- When alone in the home, client drinks to intoxication is Irritable, and demanding with verbal arguments when intoxicated.
- Minimized use, sometimes saying she needs to cut back, but not ready to stop.

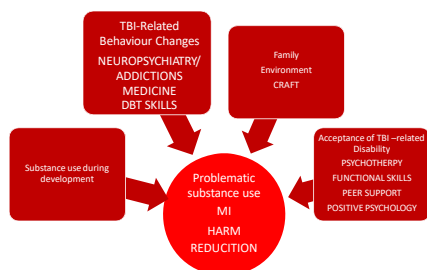
Community Head Injury Resource Services of Toronto

## Client's perspective

"My life is not my own"  
 "I don't drink as much as the say, but I see being intoxicated is a problem."  
 "Not much makes me happy anymore."  
 "I don't see the point of these therapies..."

Community Head Injury Resource Services of Toronto

## Andrea's causal model and key Interventions - Engagement



## Behavioural Analysis (Early)

Situation	Use	Outcome
Home alone	Drink to intoxication	Falls, arguments
Spends weekend with boyfriend and daughter at boyfriend's home	No alcohol consumption	Good Mood Bonding with daughter and boyfriend
Date Night with boyfriend	One glass of wine with dinner	Enjoyable evening
Carrying bank card	Buying alcohol and impulsive spending	Hiding outcome, arguments, limited finances

Community Head Injury Resource Services of Toronto

## Family intervention

- Education about the gap between 'say and do'
- Communication strategies to reduce conflict
- Safety plan
- Encourage self-care
- Collaborative approach to environmental supports
- Strategies to encourage non-use, and discourage use



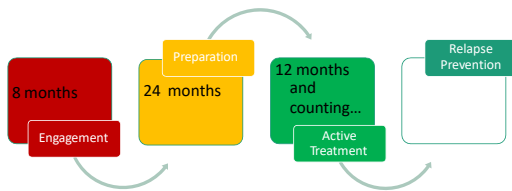
Community Head Injury Resource Services of Toronto

## Harm reduction/ environmental supports

Goal	Impact of TBI	Impact of Substance Use	Possible Plans
Parent my child effectively	Short fuse	Shortens my fuse	Days when I parent should be 'free' days. No alcohol present. A routine that reminds me that I shouldn't drink.
Continue to recover from my TBI so that I can return to work.	Damaged brain tissue	Toxic to brain tissue	Only drink on date nights, and not at home.
Take more control of my finances	Not working. Less Money.	Spend money on alcohol. More 'spendy' when intoxicated	Make a budget. Leave card at home.

Community Head Injury Resource Services of Toronto

## Timeline



## Interventions

1:1 psychotherapy using modified DBT approach to address emotional self-management, adjustment to disability.

1:1 Motivational Interviewing: Addressing ambivalence.

Using written notes as reminders of sessions

Group: DBT skills, positive psychology (identifying and using strengths workshop, woman's brain injury support group.)

## Behavioural Analysis (Preparation)

Situation	Use	Outcome
At home, bored	Drinking daily allotment early	Guilt, feels shamed by boyfriend
Aware of 'UGH' feeling Uses coping strategies	No alcohol consumption.	Improved mood Feels proud
Waiting for daily allotment (doesn't want to ask) Very focused on 'wanting'	Drinks allotment quickly	Feels guilty. Angry about wanting. Wants to not want.

Community Head Injury Resource Services of Toronto

## MI/psychotherapy/environmental supports

Goal	Impact of TBI	Intervention	Possible Plans
Drink in moderation without restriction (not want)	Needs support to recognize cause/effect and to recognize options	Couples work with boyfriend	1 Pour provided in the AM 1 pour provided later in the day Sample sobriety (set a goal)
Feel ready to abstain	Unable to work, changed abilities, Altered self esteem	DBT approach to emotional self-management Resources for parenting Planning for volunteer work Emails/diary entries	Allow full access to build awareness Support to begin Smart Recovery

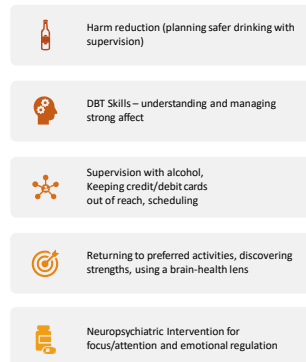
Community Head Injury Resource Services of Toronto

## Addictions based care

### Smart Recovery

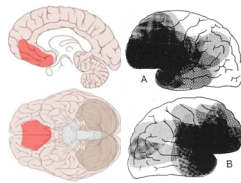
- 1:1 education about model, introduction to website and materials.
- Escort to initial groups
- Follow-up related to group content with case manager
- Preparation of questions and participation in 1:1 sessions.

## Interventions



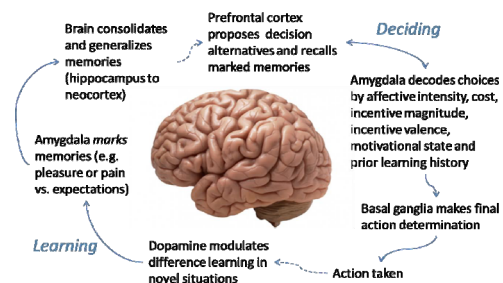
## Somatic marking ventro-medial pre-frontal cortex

Responsible for creating what it “feels like” to be in a given situation by combining sensory memories.



Damasio, A. R. (1996) The somatic marker hypothesis and the possible functions of the prefrontal cortex. *Philosophical Transactions of the Royal Society, London. B* 351, 1413-1420

### Somatic Marking



## Jill - History

- At age 20 she fell ill with meningitis which resulted in confusion and incomplete paraplegia at the T-10 level
- Brain MRI “multiple scattered foci of altered signal” and “a new foci of ring-shaped enhancement within the right frontal lobe” at 2 weeks.
- 2 prior concussions one with brief LOC related to HS soccer
- HS graduate –honors student.
- Working in food service, living with 2 roommates.
- History of social (binge type) drinking pattern with no known harms.
- Father identifies as a recovered alcoholic (20+ years)

## Jill at Assessment

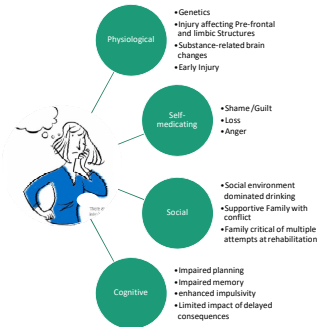
- 23 years old, referred by disability support services at her university, 3 years post injury.
- Living in a shared apartment with roommates, attempting to return to school
- Ambulatory with mild balance and lower extremity weakness and neuro-genic bladder
- Returned to drinking at 2.5 years post.
- No other substance use
- Neuropsych assessment showed moderate memory impairment, with mild slowing.

## Substance Use at Assessment

- Nearly daily intake of 6-8 SD, in the evenings.
- Harms resulting from substance use:
  - Blackouts
  - Falls with injury
  - Lost employment
  - School failures
  - Family conflict
- Stage of Change = Contemplative
  - Aware of harms
  - Willing to discuss alternatives
  - Ambivalent about lifestyle changes
  - Attended a few AA meetings with Dad

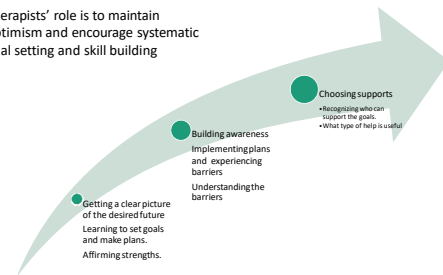
## ABI recovery at Assessment

- Grief and shame related to ABI (covering for impairments).
- Extra time on tests but no other disability supports
- Neurogenic bladder ( no follow-up)
- Intermittent pursuit of strength/balance training
- Parents unaware of the client's struggle with cognitive impairments
- Depressed/Anxious mood



## Bridging the gap between "Say and Do"

Therapists' role is to maintain optimism and encourage systematic goal setting and skill building



## Behavioural Analysis

Situation	Use	Outcome
Working at restaurant—end of shift beer	Intends to have one and go home to sleep, unable to moderate	Falls, embarrassing behaviour
Starts to study at home, feels anxious. Roommates drinking	Drinks with intention to be intoxicated	Hung over Misses Classes
Weekends with Family	No Alcohol	Feels better physically. Able to work on art.
Meets friend with intention to have a coffee. Meets at bar.	Drinks more than intended, sometimes not intoxicated.	Feels guilty, often feels hungover.

Community Head Injury Resource Services of Toronto

- T: I think you and I have talked about the impact of the meningitis when you had it.
- C: Right
- T: And how sometimes it has affected how you make decisions about things in the moment. What have you noticed about that?
- C: Umm I think I don't think very long about things. I mean like I always think via hindsight, really. Oh...I shouldn't have done that...type of thing. Oh wow a huge mistake, er... I feel like I always know better, but then the same things keep happening.
- T: So...you understand, um, in hindsight, that there would have been a better choice, but in that moment something happens where..
- C: I validate it for some reason. Almost. I think.

'A'

T: One of the reasons that people don't repeat the same mistake over and over again is that, it happens a couple of times and you build a memory of wow "that didn't work out so well." And with that memory comes a somatic marker...It comes with like a feeling of dread or "oh oh problems are coming." Like anxiety. And that's what really stops you. That's what stops you from doing that thing that you really shouldn't ought to do.

37

C: You know what. I'm in dangerous situations more times than not and I don't care.

T: You don't feel it.

C: No.

T: Do you think that is a change for you?

C: I only notice that I shouldn't have been doing that. If I think...what if this person knew I was there? But at the time...I don't give a shit.

T: And in hindsight...

C: But I don't think I used to be like that. So is that a thing?

T: It's a thing.

C: Holy shit.

T: But in the beginning you need to stop yourself, protect yourself from the absence of fear by creating structures...walls.

C: Like training a puppy. No?

T: Yeah, well I'm working with it. I'm working with the metaphor. Training a puppy....tell me how is it like...what were you thinking?

H.

C: Basically. Like if I was a puppy I would try to eat that stake off of the table and you'd be like..."Don't eat that stake. Stop eating that stake"

T: That's right and you wouldn't rely on the puppy's self-management. You'd prevent the puppy from eating the stake.

C: Right, because the puppy is like, "Why would I not do that?"

This analogy really helps. Because I can't rely on myself to be accountable to myself. I have to make it as difficult for a while, right?

T: I'm going to re-frame that a little.

C: alright.

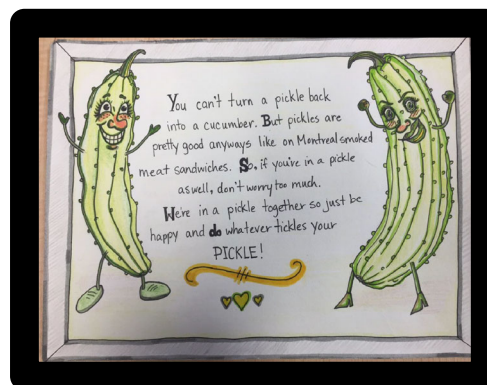
T: One way that you take responsibility for this is by making it easier on yourself.

C: Oh...okay. Laughter. It does sound better when you say that.

T: Cause when you that.. what I heard you saying is that you know...um I'm such a twit...I need other people...But I honestly don't see it that way.

C: You said that so well. That was funny.

Laughter



So, we talked about how a person living with this kind of problem has to make plans when their judgement is best (you have really good judgement and see things clearly when there are no distractions). YOU ARE SMART, and have a lot of insight. But as you develop your ability to manage your impulses you need to use the support available in the environment. We talked about puppy-proofing your iPad. Creating an environment that directly supports your goals by removing the toilet aspect—metaphorically speaking of course. You need toilet paper.



The puppy-proofing will include making a safe environment. The examples from our meeting included keeping company only with 'safe' people, having less money in your hands, having a schedule that keeps you in the right places at the right times. We also talked about keeping your reasons for wanting to remain sober front and center (literally) in the form of a poster (phone/computer wallpaper) the password you choose—all should be reminders of the road you're on.

(The self-management strategies). These include: asking for help when in uncharted waters, practicing how to say 'no' without feeling that you're singling yourself out or being rude, talking nicely to yourself about your strengths and all you are doing for yourself (and not beating yourself up). Learning to compensate. Puppies do better with good environments and positive reinforcement, and so will you.

So guys...did I forget anything? P.S., this isn't my dog, but she looks just like this puppy, and well, we did forget her passion for TP a couple of times.

Carsten Lemsky, Ph.D., C.Dyab, ABPP-CN


32 | 3010

## Intervention /Maintenance

- Inpatient treatment (3 cycles)
- 1 year living with parents
- Move back to City
  - Intensive case management
  - ABI support group
  - Psychotherapy

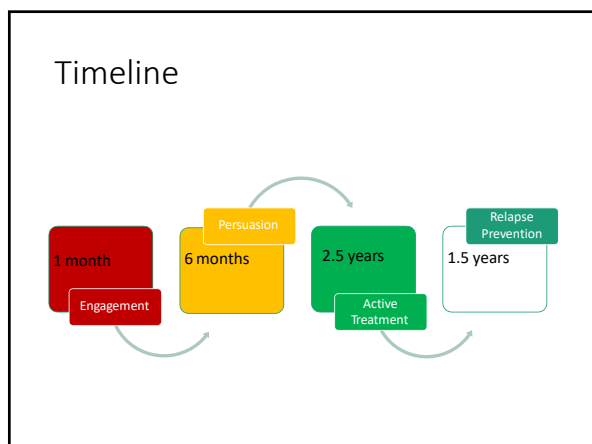
## Illustrate the Conversation

- "The end goal is really teaching art"
- "I do need to get my degree, but I have to pass Art History..."
- "When I was in school before, I was a mess. Now I'm coping better, but I still need better work habits..."
- "I guess I have come along way...I could give myself more credit. I didn't drink today, and it was a really bad day."
- "If I'm going to make school work time, I have to be taking care of myself better."



## The magic of paper and pen...

- Slows down the conversation naturally
- Provides a shared focus
- Assists in processing the information
- Acts as a memory aid
- Allows the therapist to capture change talk
- Provides an opportunity for joint planning



## Alice at Admission

- 38 Year old single woman
- 3 years post TBI/Anoxic injury as the result of cardiac arrest and fall.
- Imaging: Cerebellar infarct, evidence of diffuse axonal injury and a small right frontal hemorrhage.
- Cognitive:
  - Moderate new verbal learning and memory impairment.
  - Mild cognitive slowing.
  - Moderately ataxic gait and dysarthria
  - Mildly impaired judgement
  - Limited awareness of difficulties

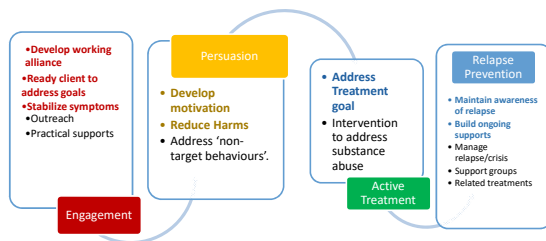
## Alice

- X-ray technician
- Heavy social drinker (daily one or two SD, more on the weekend) from the age of 25.
- Social life revolved around events with alcohol.
- Break up of an engagement led to an increase in alcohol use with harms including family conflict and missing shifts at work.
- Family history of SUD in one of three siblings.

## Post-injury Course

- Inpatient rehab for 3 weeks, outpatient for 6.
- Lived with parents
- Period of abstaining for 6 months, with slow increase back to heavy drinking.
- Several falls while intoxicated with injuries
- One attempt at inpatient treatment which lasted less than a week.
- Hiding alcohol in her room.

## Phases of concurrent treatment (case management model)



## Engagement (8 months)

- Attended intake with sister
- 1 on 1 meetings with a case manager /addictions counsellor
  - MI
  - Community reinforcement
  - Harm-reduction

## Client's perspective

"My life is not my own"

"I don't drink as much as the say, but I see being intoxicated is a problem."

"Not much makes me happy anymore."

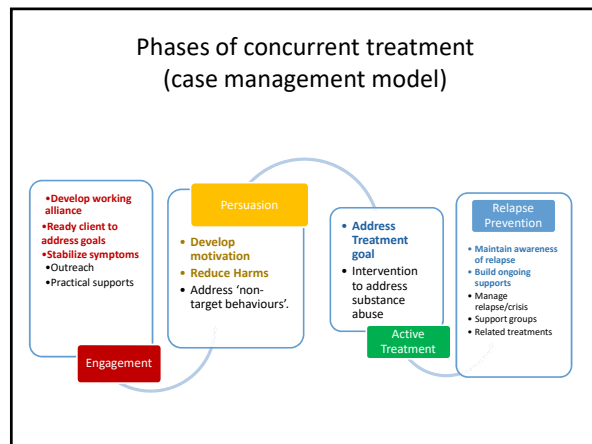
"I don't see the point of these therapies..."

Community Head Injury Resource Services  
of Toronto

## MI

- How ETOH was preventing goals
- How behavioural analysis encouraged decision to allow an alcohol-free environment.





### Persuasion to the start of action (2 years)

- Intervention
  - SUBI group (treatment incentive/social support)
  - Volunteer work at CHIRS
  - Adapted AA group
- Outcomes
  - Engaged
  - Periods of abstaining lasting 2-3 months
  - Return to drinking with under-reporting
  - Conflict in family
  - Repeated crises

### Residential Treatment 1 year

- Supported admission to the program:
  - OT assessment for safety of physical plant
- 6 weeks in program:
  - Not initiating AM routine
  - Forgetting rules
  - Seems un-engaged in groups
- Supported program to adapt to client's physical and cognitive difficulties.
  - Staff education
  - Development of compensation strategies effective for the program schedule (i.e. daily routine).
  - SUBI workbook introduced as a way of addressing topics the program was covering.

### Gains in treatment

I need a 'safe environment' to stay sober.  
 Routines are helpful in staying healthy.  
 I need coping strategies for strong emotion.  
 I Learned to assertively communicate needs.  
 I Began to build positive self-esteem.

### Post-treatment (relapse prevention)

- Case management supports (addictions trained)
  - vocational rehabilitation
  - re-enter an academic program in medical reception.
- Identification of self-help supports in the community.
- Volunteer work as a receptionist.

### 7 years of intervention

- 2 years abstaining.
- Completed certificate program
- Temporary employment looking for voc. Rehab.
- Mood is improved
- Self-esteem positive
- Goal: Move out of parent's home, employment.

<p>Match Study (Project Match Research group 1993)</p> <ul style="list-style-type: none"> <li>• 12 Sessions 12 step facilitation (TSF)</li> <li>• 4 sessions Motivational Enhancement Therapy (MET)</li> <li>• Cognitive behaviour therapy CBT</li> </ul>	Client Characteristic	Best Rx	Notes
	Social network that encouraged drinking.	TSF	Fellowship during treatment supports longer term benefit
	Angry/low initial motivation	MET	Better one-year outcomes in MET
	No psych diagnoses, more severe	TSF	Fared better in TSF than CBT
	Less severe	CBT	Better than TSF. May identify better with AA image
	Aboriginal	MET	Significantly better than CBT or TSF

Incentive fares better than other treatments when...

- SUD is more severe
- Substance of abuse are opioids or stimulants
- Youth

## Supporting Cognitive Processes (Reducing Cognitive Load)



Slow down



Break down tasks



Use routines



Create reminders and teach clients to use them



Set clear goals and agendas



Remove Distractions

## Interventions



Support to find and attend addictions programming (3 admissions)



DBT Skills – understanding and managing strong affect



Inpatient programming, Lived with parents  
Visual reminders of goal

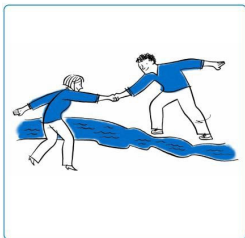


Art Teacher, school, volunteering, safe social opportunities



Neuropsychiatric Intervention for focus/attention and emotional regulation

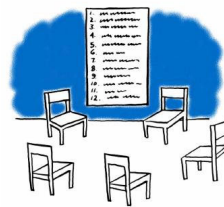
## SUBI Client Workbook



- Designed to illustrate adaptations of common practice in addictions for ABI
- A place to 'get started' for ABI-trained professionals

Downloadable @ SUBI.ca

## Peer Support Programs (12-step and Smart Recovery)



Ready to accept the need for change

Able to participate in a group

AA Provides reinforcement (chips)

Clear simplified and repeated messages

## Avoid group peer support

- Memory is very poor      Triggers without recall of context
- Empathy or social skills are a challenge      Disruptive or can't relate to how others' stories may apply to them.

## 12-Steps for Brain injury (page 101)

### Original 12 steps of Alcoholics Anonymous

- 1 Admitted we were powerless over alcohol; that our lives had become unmanageable.
- 2 Came to believe that a Power greater than ourselves could restore us to sanity.
- 3 Made a decision to turn our will and our lives over to the care of God as we understood Him.
- 4 Made a searching and fearless moral inventory of ourselves.
- 5 Admit to God, to ourselves and to another human being the exact nature of our wrongs.

### TBI 12 steps of AA/NA

- 1 Admit that if you drink and/or use drugs your life will be out of control. Admit that the use of substances after having had a traumatic brain injury will make your life unmanageable.
- 2 Start to believe that someone can help you put your life in order. This someone could be God, an AA group, counsellor, sponsor, etc.
- 3 Decide to get help from others or God. Open yourself up.
- 4 Make a complete list of the negative behaviours in your past and current behaviour problems. Also make a list of your positive behaviours.
- 5 Meet with some one you trust and discuss what you wrote in Step 4.

## Chapter 1 Getting ready for change

Clearly stated goal

### Goals

- To learn that the good things associated with substance use may come quick and easy, but they don't last long
- To learn that the problems that come from using drugs or alcohol last a long time

### Information

The first step in your recovery is to understand why you use drugs or alcohol and your reasons for wanting to make a change

### Self-assessment

Check any or all of these short-term benefits of drinking or drug use that apply to you

- ☐ Instant gratification (feeling good right away)
- ☐ Helps me get to sleep
- ☐ Helps me deal with pain
- ☐ Helps me deal with stress
- ☐ Puts off having to deal with something that I don't want to think about
- ☐ Makes me numb (helps me to stop having feelings)
- ☐ Gives me something to do when I feel lonely

Support discussion with client

## Worksheet, Chapter 1 Getting ready for change

Now that you've had a chance to examine some of the pros and cons of your drinking or drug use, you might find it helpful to complete this chart. You may want to come back to it from time to time as you learn more about yourself.

### Drinking or drug use

What's good about it

What's not good about it

Written record that is to be completed with the client

## Workbook



## Program considerations

- Longer length of stay
- Smaller case loads—guard against burn out by setting reasonable expectations and celebrating successes.
- Availability of case management or other environmental supports
- Assertive approach to engagement
- Community-based teams that include required expertise (brain injury and addictions).
  - Reach out to addictions programs
  - Reach out to brain injury associations and intervention programs [www.biausa.org](http://www.biausa.org)

## Ethical Decision-making

-  Addresses moral distress
-  Builds team capacity for decision making in crisis situations.
-  Improves clinical decision-making

## CHIRS Ethical Decision - Making Worksheet

- Based on the Ethics Toolkit developed by the Community Ethics Network
- IDEA**
  - I** – Identify the facts
  - D** – Determine ethical principles involved
  - E** – Explore options
  - A** – Act on your decision and evaluate

## CHIRS Code of Ethics

1. Respect for the Dignity of People
2. Responsible Service Provision
3. Integrity in Relationships
4. Responsibility to the Community

## Ethical Decision-Making Worksheet

**STEP 1: IDENTIFY THE RELEVANT FACTS – 4 BOX METHOD**

<b>Relevant Medical/Health/Brain Injury Information</b> Provide information about the client's medical/health status, brain injury effects What current supports/treatments are being provided?	<b>Client Perspective</b> State the client's preferences. Describe quality of life in the client's terms. Do they have the capacity to decide? If yes, are the client's wishes informed, understood, voluntary? If not, who is the substitute decision-maker? Does the client have prior, capable, expressed wishes? Is the client's right to choose being respected?
<b>Staff/Support Provider Perspective</b> Include views and concerns of the Staff/Care Provider. May include emotional factors influencing each individual, such as existing feelings, values, biases and prior experiences.	<b>Contextual Features</b> Any family involved or significant relationships? State their perspectives? Relevant social, legal, and economic circumstances? Other relevant features, e.g. religious and cultural factors, limits on confidentiality, resource allocation issues, legal implications?

## Step 2 - DETERMINE

**STEP 2: DETERMINE THE ETHICAL PRINCIPLES IN CONFLICT**

**Identify Ethical Issues**  
 What ethical principles are relevant and/or are in conflict? (e.g. Respect for the Dignity of People, Responsible Service Provision, Integrity in Relationships, and Responsibility to the Community; refer to the CHIRS Code of Ethics for further details.)

Principle	Explain the Issue
Respect for the Dignity of People	The team wants to respect Mr. D's dignity and autonomy –the right to know what is occurring in his family and how his life may change.
Responsible Service Provision	Telling Mr. D about his mother's health concerns risks causing stress and depression which may be difficult for him to cope with and may compromise his participation in his program.
Integrity in Relationships	By withholding information from Mr. D, team members risk damaging their relationship with him. By telling Mr. D about his mom's illness without the family's support, team members risk damaging their relationship with the family.

## Step 3 – EXPLORE Options

**STEP 3: EXPLORE OPTIONS**

**Explore options and consider their strengths and weaknesses**  
 Brainstorm and discuss options, either alone or with peers. Be creative; use your imagination. Consider a compromise. Predict the outcomes for each alternative. Does the alternative fit with the client's/family's values? Question whether the alternative meets the agency's policies and directives.

Option	Strengths (practical and ethical)	Weaknesses (practical and ethical)

## CHIRS Ethical Decision-Making Worksheet



- Can assist staff to address ethical issues in logical manner
- Serves as record of discussion
- Justifies/explains challenging decisions made
- Goal = LITERALLY work with team to be "on the same page"
- Ethics Team Motto = "If in Doubt- Fill it Out"

## 3. Process Is Collaborative



- Empowers staff when they can voice perspectives
- Addresses the "yuck factor" – can improve work 'quality of life' for staff
- Includes involved team members in decision-making process, enhancing the decision-making
- Helps to shift polarized positions and bring team together.

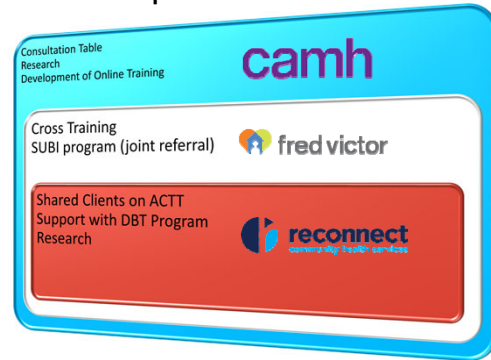
## Key Elements of partnership-making



Started with an offer (not an ask).  
 Explored the strengths, needs and limits of each provider to ensure mutual benefit.  
 Evolve around a small number of clients.  
 Simple agreements.  
 Informal and formal training and exchange of ideas



## Partnerships








## General Adaptations






Challenge	Adaptations
Cognitive Impairment	Simplified Content Routines that support cognitive compensation (e.g. journaling with supports) Behavioural rehearsal
Impairments of Awareness	Focus on environmental supports Allow for a lengthy period of engagement
Impaired reward system	Focus on accepting environmental supports rather than relying on self-management Incentives Drug Testing (with consent)

Challenge	Adaptation
Limited Decision-making Capacity Family is often in a supervisory role	Combine CRAFT approach with family intervention models (e.g. BIFI, Kreutzer et al.)
Dense Amnesia	Errorless approach to the introduction of new routines that directly compete with substance use.  Avoid discussion about substance use or meetings based on sharing.

**Recommendations for service providers in addictions settings**


-  Routine Screening for brain injury and other sources of neurocognitive impairment
-  Learning to recognize when behaviors are the result of neurological challenges
-  Making programs more accommodating
-  Viewing complexity as a rule and develop programming accordingly
-  Care plans that include long-term supports

**Recommendations for service providers in brain injury settings**

-  Routine Screening for problematic substance use
-  Learning how to talk about substance use and prevention messages / Brief intervention
-  Making programs more accommodating by supporting harm reduction
-  Viewing complexity as a rule and develop programming accordingly
-  Care plans that include long-term supports

Supporting clients to reduce impulsivity and emotional dysregulation.

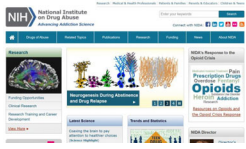
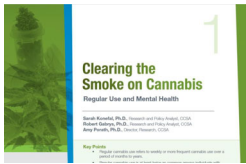
We use DBT Skills.  
<https://skillssystem.com/>

 SkillsSystem®

Neuropsychiatric Referral

Environmental Supports.

Resources

[www.drugabuse.gov](http://www.drugabuse.gov)

[www.CCSA.ca](http://www.CCSA.ca)

**Craft/CRA**

The Community Reinforcement Approach  
 An Update of the Evidence  
 Robert J. Meyers, Ph.D., Hendrik G. Roosen, Ph.D., and Jane Ellen Smith, Ph.D.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3860533/>

Community Reinforcement Approach  
<https://www.ccsa.ca/community-reinforcement-approach-essentials-series>

## SUD and TBI



[www.Ohio Valley.org](http://www.OhioValley.org)  
[www.Brainline.org](http://www.Brainline.org)



[www.SUBI.CA](http://www.SUBI.CA)



[https://www.yo  
utube.com/watc  
h?v=Rmu3fPhxa  
Gs](https://www.youtube.com/watch?v=Rmu3fPhxaGs)

## Managing Substance Use after Brain Injury

Online course offered by the Center for Addictions in  
Mental Health, Toronto Ontario.

Anticipated Launch, October, 2021

Email: [TEACH@camh.ca](mailto:TEACH@camh.ca) for more information and to  
be notified about registration.

## SUBI Group

