

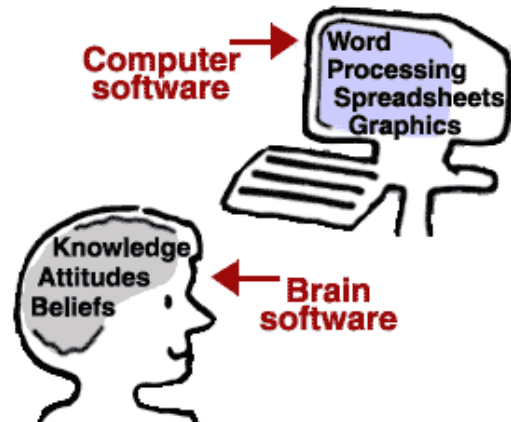
Information for Rehabilitation Professionals

Substance Use and Abuse After Brain Injury: A Programmer's Guide

Meet the Metaphor

Alcohol and other substance use after brain injury is a growing concern to many rehabilitation professionals. Studies of persons with brain injury confirm that use of alcohol and other substances interfere with optimum recovery, and may even lead to additional injuries and death. But for many of those we serve, "using" is part of their way of life. And even those who haven't used in the past

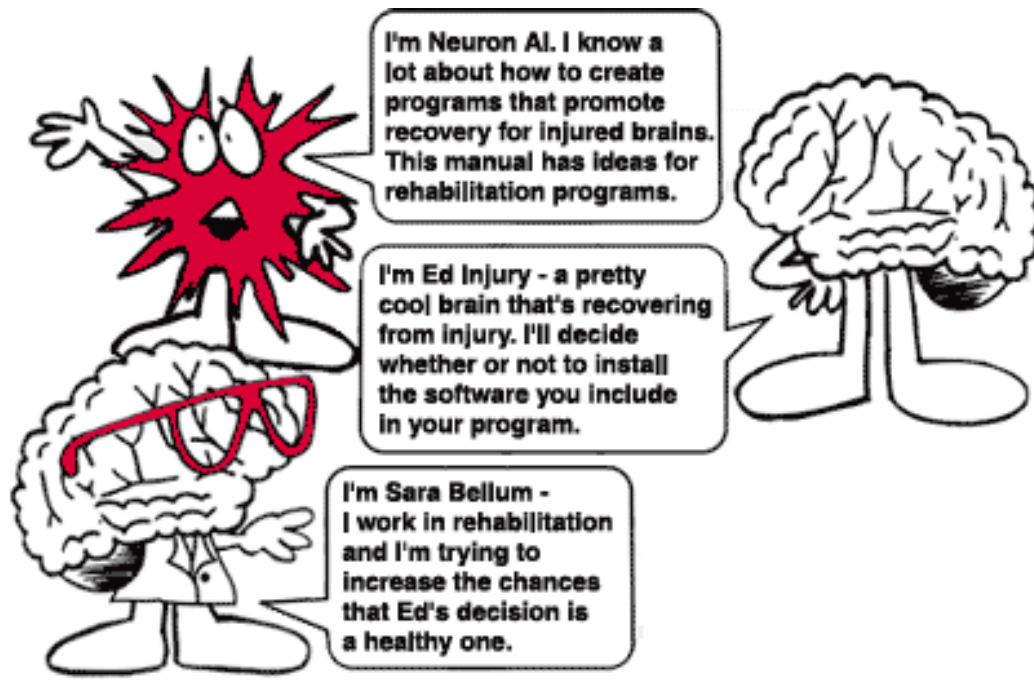
are vulnerable because of boredom, depression, and the heightened effects alcohol and other drugs after brain injury. The challenge is to educate persons with injuries, family member, and program staff about the dangers.



At the Ohio Valley Center, we use a metaphor in our educational programming, comparing the brain to a computer. The brain is the basic computer, and it operates using software that are the knowledge, attitudes and beliefs controlling behavior. After brain injury, new knowledge about the effects of alcohol and other drugs is needed. But, only the brain's operator can decide whether to install the new software. We give them the information and invite them to make the changes.

In preparing this Programmer's Guide, it seemed natural to extend the metaphor. Those of us in rehabilitation programs are like programmers - making software available to the computer (brain) operators. As developers of educational software, rehabilitation professionals need a systematic approach that provides "user friendly" programs so that the people we serve decide to avoid substance use and improve their recovery.

Purpose and Content of this Manual



As programmer's who create "use friendly" programs, there are some assumptions we have made:

1. All rehabilitation centers can offer some programming in prevention and intervention even without new resources. To develop programs, this manual describes three versions -- a minimum version and two "upgrades" that can be installed in a phased approach. The spreadsheet on pages 6 and 7 outlines the three versions of substance abuse programming: good, better, and best. All versions of the program provide prevention, intervention and treatment resources either within the facility or through community resources.
2. Regardless of a person's willingness to change behavior, programming can still work toward helping the person consider change. This manual includes information that rehabilitation professionals can use to work toward optimum recovery for the persons they serve, including:
 1. client and family education
 2. screening
 3. assessment
 4. stages of change
 5. motivational interviewing
 6. intervention activities
 7. referral
3. Any substance use following a brain injury is detrimental to recovery. Although light or occasional alcohol use is not seen as substance abuse in clinical terms, the risks and complications of trying to recommend a safe

amount to drink make it necessary to state that the only safe level is abstinence.

Definition of Terms

Substance Use: Due to the effects on the brain, any substance use following brain injury should be avoided, even if it does not lead to intoxication. Substance use includes the consumption of alcohol, other non-prescribed drugs and/or the misuse of prescribed medications.

Substance Abuse and Dependence: Substance abuse and dependence as used in this manual are consistent with definitions provided in the DSM IV. Substance abuse includes any of the following consequences happening within a year:

- Failure to fulfill major obligations at home, work or school
- Engaging in potentially hazardous behavior
- Legal problems
- Social or interpersonal problems

Substance dependence has more severe manifestations, particularly signs of physiologic dependence.

Prevention: Activities that motivate a person to choose not to use, or resume use, following brain injury.

Intervention: Activities that facilitate the acceptance of professional help for a substance use problem.

Treatment: Professional services that motivate a person with a substance use problem to consider, achieve and maintain abstinence.

Substance Abuse and Brain Injury Recovery

Substance abuse and brain injury has an unfortunate correlation. Here are the facts:

**There's no denyin',
this is a big problem
in rehab!**



- 67% of people in brain injury rehab have a history of substance abuse prior to their injury
- Persons who have sustained brain injury test positive for alcohol in two thirds of moving vehicle crashes and 60% of assaults. (Statistics do not include perpetrators' use of alcohol or other drugs.)
- Approximately 20% of persons who did not have substance abuse problems before their injury are vulnerable after brain injury.

Alcohol and other drugs not only contribute to causing brain injuries, they can seriously interfere with recovery. Educating families and persons recovering from brain injury about the effects of alcohol and other drugs is an important task for all rehab professionals. The User's Manual provides reasons why the use of alcohol and other drugs is incompatible with healthy recovery after brain injury. The reasons are summarized in the Top 10 List.

10. An individual who uses alcohol and other drugs after a brain injury will not recover as much or as fast as a person who does not use.

9. Problems of balance, walking and talking are exacerbated by alcohol and other drugs.

8. Problems of disinhibition are also exacerbated by alcohol and other drugs.

7. Difficulty with problem solving, memory, concentration and other thinking skills are made worse with the use of alcohol and other drugs.

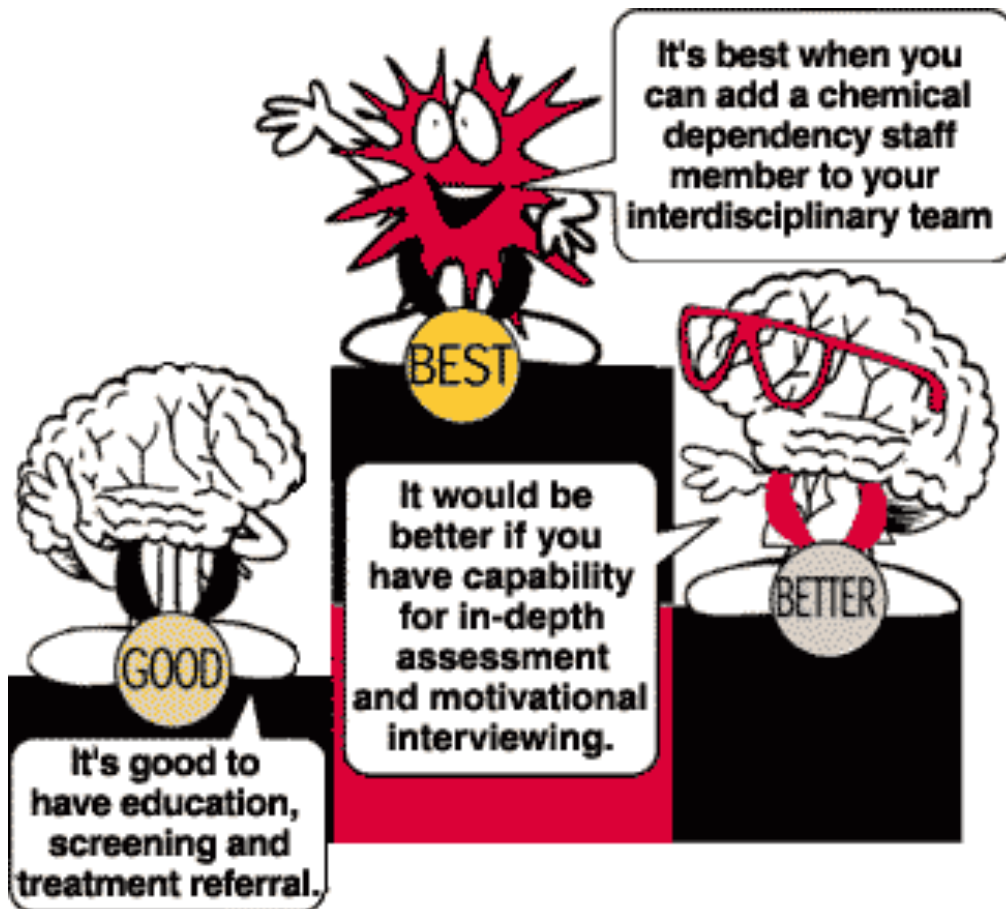
6. Alcohol and other drugs have a more powerful and quicker effect on a person after a brain injury.

5. Alcohol increases depression because it is a depressant drug.

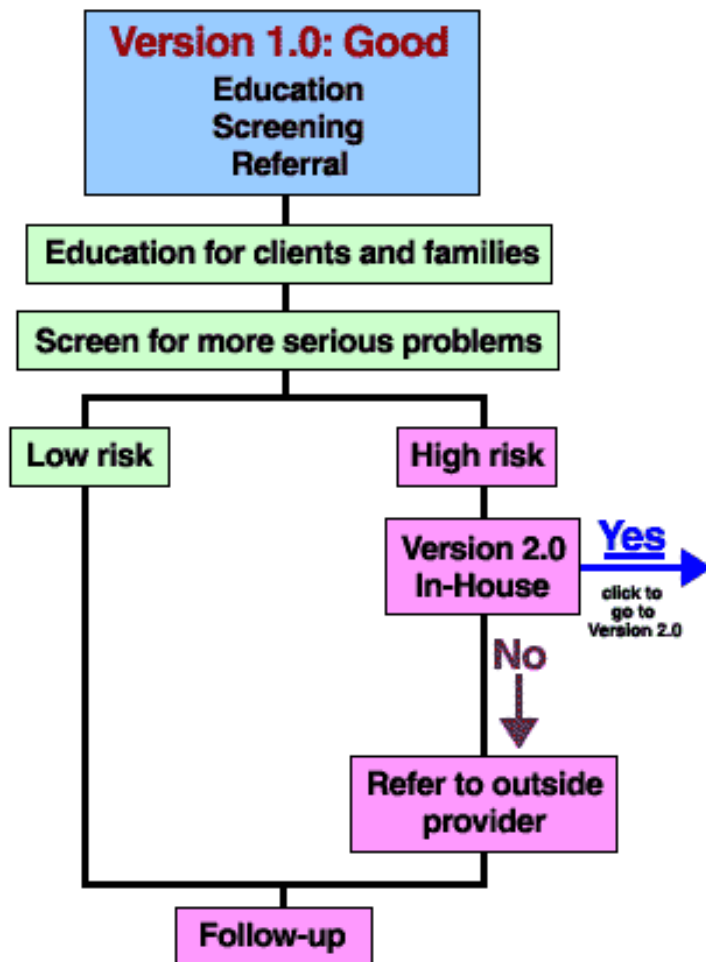
4. Alcohol and other drugs interact with medications often prescribed after a brain injury, especially those administered for seizure control, depression, anxiety or restlessness and pain.

3. Use of alcohol and other drugs after an injury increases a person's risk of another injury.
2. Alcohol is a drug. (That means beer, too!)
1. The cumulative effect of the other nine reasons.

Three Versions of Substance Abuse Programming in Rehab Centers

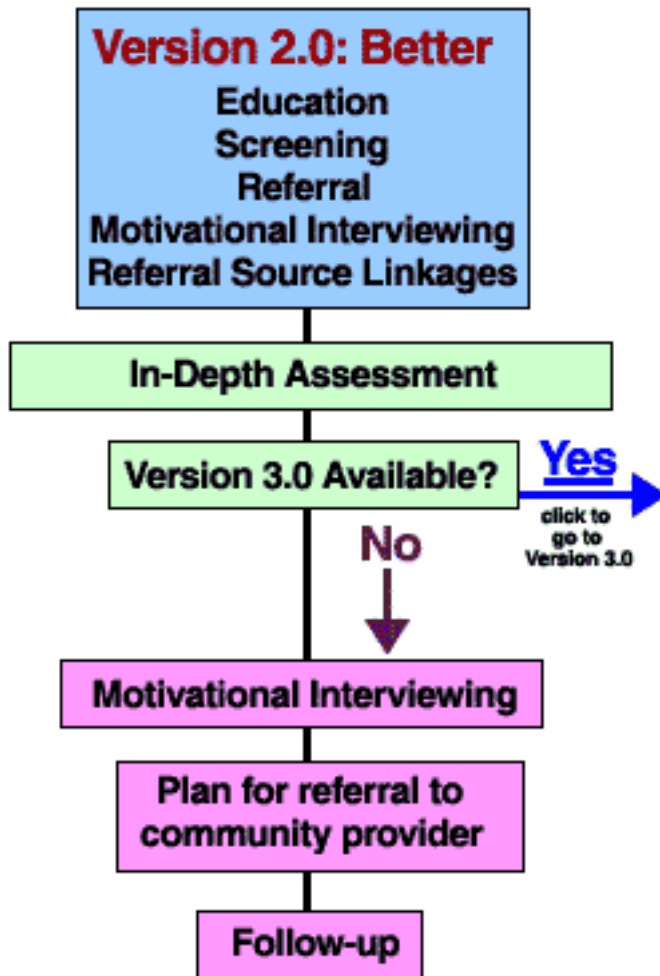


Version 1.0 - Good



Good programming provides basic education both for persons recovering from brain injury and their families or significant others. In addition, the program provides a general screening for the risk of substance abuse. This screening determines if a referral is indicated. Finally, all staff are trained in the need for a systematic approach to substance abuse prevention and have resolved personal issues involving substance use by survivors. Version 1.0 activities can be incorporated within existing programs without significant change.

Version 2.0 - Better



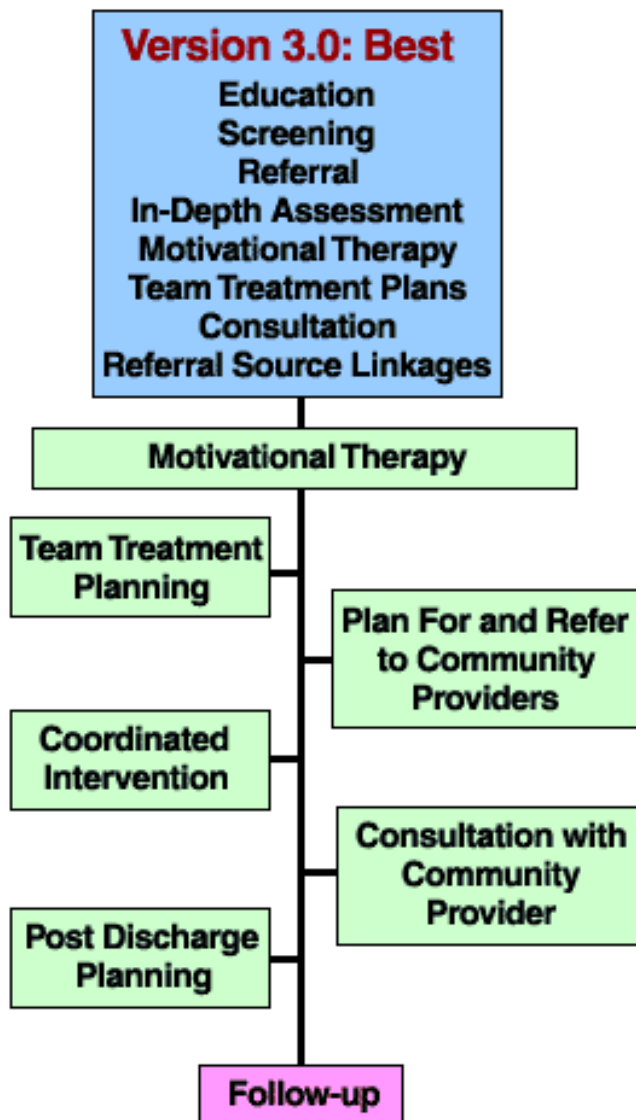
Better programming includes the education, screening and referral elements of Version 1.0, and adds additional capability for in-depth assessment and motivational interviewing. Adding these two features requires special training for staff and time set aside during the treatment programs.

In-depth assessment. The assessment conducted as part of Version 2.0 programming identifies strengths and needs in relation to substance use, a person's level of awareness, and the ability of the community environment to support their goals following rehabilitation. This information is used to plan for referrals to community-based resources. If a program provides Version 3.0, this assessment data also serves as the basis for the treatment team intervention.

Motivational interviewing. Version 2.0 also adds motivational interviewing for the person who will not be receiving additional intervention at the program. This approach is intended to increase the likelihood that persons served will follow through with community-based service providers. Motivational interviews typically can be completed in one or two sessions.

Referral source linkages. The third element in Version 2.0 is more aggressive identification and evaluation of community-based services. In most cases referral services need special preparation to work successfully with persons who have a brain injury. This bridging between person served and substance abuse treatment resources further facilitates successful referral, enhances continuity of services, and promotes successful recovery.

Version 3.0 - Best



Trained staff member. Best programming adds a staff member trained in chemical dependency treatment. Dedicating staff for this purpose significantly expands the capability

of the program to provide a holistic approach to substance use issues. A specially trained staff member has responsibilities for all activities previously described in Version 2.0, as well as expanding motivational interviewing to include additional sessions as indicated by the person's readiness to change. The treatment team at this level should create a unified treatment plan based on issues identified during assessment.

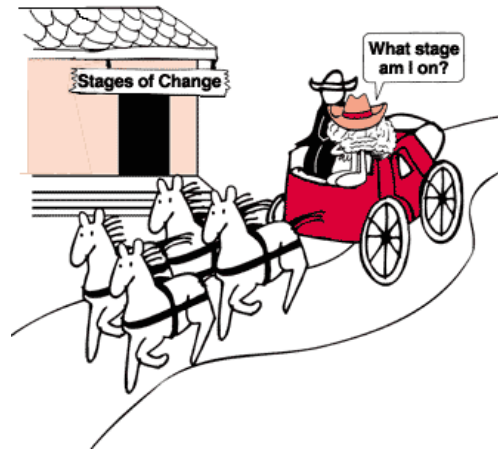
Consultation. Consultation of treatment team members with the chemical dependency professional is another feature of Version 3.0. A by-product of consultation can be adaptation of therapies to incorporate substance use issues (e.g., ways to reinforce messages from the motivational interviewing or strengthen self-motivation statements). The section addressing a Coordinated Team Approach (page 40), provides general suggestions of ways to incorporate prevention and intervention messages in the normal flow of other therapies.

Version 3.0 increases emphasis on developing the referral process and actively following-up with persons served to increase the likelihood of successful follow through with community-based service providers.

Stages of Change

Researchers have suggested that persons who use or abuse alcohol and other drugs (with or without brain injury) may be in one of five stages of change with respect to use.

1. First is the **Precontemplation** stage, when the individual has no awareness of the problem.
2. The second stage, **Contemplation**, is characterized by some awareness of a problem but ambivalence about the need to change.
3. At the **Preparation** stage, the individual begins to make plans and gather support for a change, but stops short of setting a specific goal.
4. Goals are set and changes made in the **Action** stage, incorporating the changed behavior into their lifestyle.

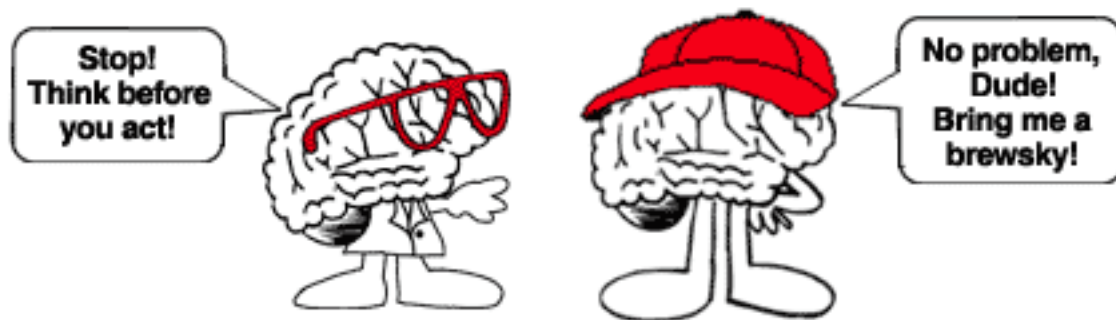


5. After six months of successful action, a person enters the **Maintenance** stage, when changed behavior has become a part of the regular routine and the focus is on future goals rather than the change itself.

At any point in the process, relapse may occur, bringing a person back to an earlier stage of change.

The person recovering from brain injury must consider lifestyle changes that exclude substance use. This is not easy; with or without a brain injury, changing substance use behaviors can present a challenge.

Awareness of Deficits



Persons with brain injury not only have to deal with the normal stages of change, but they may have limited awareness of their deficits. This means that the presentation of information and types of skills taught will vary based on the person's ability to self-reflect. When persons we serve have a limited ability to self-reflect, they will have difficulties understanding why they need to modify their substance use patterns. They will not be able to use coping strategies independently and the family will need to take more responsibility for providing cues and structuring the environment to promote sobriety. As individuals become better able to self-reflect and to anticipate future difficulties, they can become more independent in the use of strategies. There is more about levels of awareness in the Assessment section later in this manual.

Staff Training Issues

The use of substances after brain injury is inconsistent with healthy recovery, regardless of the staff's personal values and beliefs about alcohol and other drug use.

ALL staff need training about the effects of substance abuse and brain injury, not just substance abuse program staff. This means management, supervisors, direct care staff and support staff. This multi-level training is essential to develop a core knowledge-base and maintain a consistent message for persons with brain injury. Management needs training so the issue does not get lost in the midst of competing needs and agendas. Supervisory staff must ensure that existing and new staff include these issues in treatment plans. Direct care staff build awareness and understanding for persons with brain injuries and their family members. Support staff must ensure that they also give a consistent message.

The message is: **THE USE OF SUBSTANCES AFTER BRAIN INJURY IS INCONSISTENT WITH HEALTHY RECOVERY.** The message is valid regardless of staff's personal values and beliefs about alcohol and other drugs.

Training on the issue of substance use will create personal turmoil, ambivalence and resistance for some staff. This may be due to a variety of reasons, including a person's personal attitudes and behaviors or a family member's or significant other's behavior related to the use of alcohol and other drugs. This point should not be taken lightly. Because of issues that may be brought to the surface by training and insistence on a common message, preparations should be made to provide confidential professional counseling for those who identify an individual or family issue with substance abuse.

Successful programs make an ongoing commitment to training. Regular training helps maintain consistent understanding among new staff or staff with changing responsibilities. When developing the training, consider using outside resources, inservice trainings, reading materials, videos and sending staff to off-site training.

CAUTION:

Training creates ambivalence in some staff members because of their own use of alcohol and other substances.

Getting Started

There are four basic steps to getting started with a good program for addressing substance use in rehabilitation centers:



1. Identify other staff who would like to see a program started or improved.
2. Seek the support of management to initiate a program.
3. Evaluate current resources and needs.
4. Use in-service training to raise the awareness among other staff about the nature and severity of the problem.

In any rehabilitation setting there will be different levels of awareness and understanding about the need for substance abuse prevention, intervention and treatment. There will also be different levels of willingness to initiate programs to address this issue. For these reasons, "getting started" is about garnering as much support as possible from all levels of the organization. If you are a staff person with interest in this area, you may need to identify other staff that have similar interest, educate supervisory and managerial personnel and promote the issue with all staff. Most importantly, you will need to seek the support of management staff for a program. If you are in management, you may need to identify staff that have an interest, assess resources and initiate in-service trainings. Once enough interest is developed, a complete evaluation of resources should be made.

Assessment of resources should include:

- Evaluation of training received by staff and training need
- Evaluation of competencies and background of staff
- Evaluation of staff attitudes about substance use

The evaluation process will also identify key staff persons with the appropriate commitment, training and competency to organize and operate a program. In-service trainings should be used to raise staff awareness about the severity of substance abuse problems and the adverse effects on the recovery process that use of alcohol and other substances can have after a brain injury. All staff need to understand the undermining effect use can have on rehabilitation outcomes post-discharge.

An important note to remember is that whatever the level of awareness or programming an organization has at this point in time, this manual can be used to upgrade an existing program or help install a new program.