

## **LEVELS OF COGNITIVE FUNCTIONING**

In order to better understand the process of recovery from head injury, we are including here the “Levels of Cognitive Functioning” from Rancho Los Amigos Hospitals. It is important to understand that these levels are offered as a guideline only. Head injured clients are by nature inconsistent and may vary in the behavior they exhibit from day to day. Also, some clients move through these levels very rapidly, while some may “plateau” at a certain level and then either move forward slowly or remain fixed at that level. Recovery from head injury is a long and slow process which may take months and years.

The eight stages of cognitive recovery from head trauma have been defined by staff at the Rancho Los Amigos Hospital. The stages are general approximations of how a head injured client may be behaving at any given time in the recovery process. Many clients will progress through these stages; some will not. All head injured people recover at different rates and to different degrees. Characteristics of more than one level are often present at the same time.

Included are both levels of cognitive recovery and some suggestions for the family for dealing with the client at each stage. It would also help greatly to get some suggestions from individual team members, that are more specific for your family member.

### **Level I: No response**

Client appears to be in a deep sleep and does not respond to anything, including pain, noise, odors or visual images.

#### **Family should:**

1. Carry on a normal conversation using familiar conversational topics and interests of the client.
2. Accompany conversation with touching.
3. Allow the client frequent rest periods. Consider alternating stimulation and rest periods.
4. Not expect the client to respond

## **Level II: Generalized Response**

Client appears to be asleep most of the time, but may react some of the time to stimuli, especially pain. When client does respond to stimulation, it will probably be delayed. Responses will be displayed in a very general, inconsistent manner.

### **Family should:**

1. Speak to the client in calm, slow, normal tone of voice.
2. Keep amount of time spent in stimulation of client brief. They also need rest periods.
3. Continually provide orientation to time, person, place and reason for hospitalization.
4. Give client sufficient time to respond
5. Give reassurance and tell the client that he is safe.
6. Continue to show affection in whatever way that you feel comfortable.

## **Level III: Localized Response**

The client appears to be more alert for several minutes at a time and responds more consistently to general stimulation. He/she is able to follow some simple commands some of the time but in a delayed manner. It is also common for a client to begin showing some agitated behavior at this stage.

### **Family should:**

1. Converse in normal tones about the client's interests.
2. Keep speech clear and concise.
3. Allow sufficient time for response
4. Continue to provide orientation, especially to things he/she has been aware of for a long time (i.e. names of family members, type of work, interests).
5. Limit visits to short periods of time, allow for frequent rest periods.
6. Ask client to follow one step commands, such as "close your eyes," "open your mouth," "wiggle your finger."

7. Reassure and calm client when showing signs of agitation.
8. Ask him/her questions that have “yes” or “no” answers.

#### **Level IV: Confused-Agitated**

The client may be displaying increased physical activity and may be acting strangely. It is common for him/her to be confused and to have trouble remembering dates, names of people or objects that were previously familiar. It will also be difficult to pay attention for more than short periods of time.

##### **Family should:**

1. Realize that the temper tantrums and/or verbal abuse that the client may exhibit are part of the recovery process. Do not take them personally. Family should remain calm and controlled and speak in a soothing, reassuring voice. Try not to look alarmed or frightened.
2. Try to create a calm, soothing and predictable environment.
3. Provide verbal and physical reassurance. Often the client is very frightened.
4. Briefly correct inappropriate or incorrect responses. If the client disagrees, change the subject.
5. Give gentle, sincere praise for what the client is able to do.
6. Continue to provide orientation to reality.

#### **Level V: Confused-Inappropriate - Non-agitated**

At this stage, the client will recognize family members and friends most of the time. He/she will have difficulty remembering some information and may get confused easily. He/she will be able to concentrate longer but may need to be redirected if attention wanders.

##### **Family should:**

1. Discuss problems that the client is having as a result of the injury. Often the client doesn't recognize these details.
2. Encourage the client to do what he/she can for himself/herself.
3. Review information about family and friends.

4. Allow client to participate in activities such as memory games, puzzles and simple card games (“war, fish”).
5. Emphasize what he/she is able to do and give praise at each step toward succeeding in a task. Be aware of his/her frustration tolerance and do not let task become too overwhelming.

### **Level VI: Confused-Appropriate**

It is at this stage that the patient begins to show an awareness of his/her situation. Because of this increase in awareness, the patient will be able to tolerate certain existing conditions such as tube feedings, restraints or daily schedule of activities. Because of memory problems, information may need to be repeated. The client’s attention can be held for longer periods of time.

#### **Family should:**

1. Let the patient do as much as he/she can for himself/herself. This will help increase independence.
2. Allow frequent rest periods.
3. Continue with crafts and activities that become more challenging.
4. Try to keep daily routine very structured.
5. Continue orientation as needed.

### **Level VII: Automatic-Appropriate**

Patient appears normal. He/she is fairly independent in self-care activities, follows daily schedule accurately and is oriented to staff and surroundings. However, it is evident by responses and actions that he/she doesn’t fully understand his/her present limitations. For example, the patient may try to stand up and walk unaided even after repeatedly being told that he/she still needs supervision. When asked how to solve a particular problem, the solution may be vague or incomplete.

#### **Family should:**

1. Discuss possible dangerous situations that may occur at home and have client tell how he/she would handle or avoid them.
2. Have him/her do as many daily activities as he/she can.
3. Give patient adequate time for slow responses.

4. Let him/her remain active in sports, crafts, hobbies, etc. that he/she can manage successfully. These should gradually be more complex activities involving planning, memory for details, problem solving and decision making.

### **Level VIII: Purposeful-Appropriate**

At this level, the patient is independent in many activities at home and in the community. He/she may or may not have physical impairments but ways to compensate for these deficits may be learned. Few reasoning and problem solving difficulties may remain so that the client may need assistance with major decision making or in emergency situations, but overall he/she is able to be independent and productive. New learning may take longer than it once did. Client's social, emotional and intellectual capabilities may continue to be at a lower level than before the injury.

#### **Family Should:**

1. Encourage maximum involvement in home, school or job.
2. Allow client to become involved in as many responsibilities as possible within his/her capabilities such as meal planning, organizing daily routines, checkbook balancing.
3. Encourage client to become more responsible for taking medications that he/she may be prescribed (the correct dosage at the proper time).

The above guidelines are provided by the New Medico Head Injury System