

RANCHOS LOS AMIGOS COGNITIVE SCALE
FAMILY GUIDE TO THE LEVELS OF COGNITIVE FUNCTIONING
FOR INDIVIDUALS WITH BRAIN INJURY

INTRODUCTION:

Cognition (basic thinking skills) includes our ability to pay attention and focus on tasks. It also affects ability to think, organize, discuss and remember things. These skills are needed for learning, solving problems, and making decisions. After a brain injury, problems with these mental skills may be seen. There are also changes in how a person acts. The way a person with a brain injury talks, acts or performs daily tasks may look confused, unusual, odd, childlike, or different than before their injury.

The Levels of Cognitive Functioning is a tool used by the therapy team. These levels help us to understand what each person is able to do. This helps the therapy team set goals that are within the person's current ability level. The levels also help us to track progress.

This information is to help you understand your family member's responses to what is happening around him/her. These levels also give you an idea of what to expect in the future. Each person will recover at their own speed. We know that you are worried about how much your family member will recover. We will provide regular feedback about their progress, that may be helpful in knowing what to expect in the future.

We are interested in you observations of your family member. We are interested in any information you may have and how you feel about what is happening. We consider you a member of our team and very important in your family member's rehab program.

LEVEL I – NO RESPONSE

No response to pain, touch, sound, or sight.

LEVEL II – GENERALIZED RESPONSE

Generalized reflex response to pain.

LEVEL III – LOCALIZED RESPONSE

Blinks to strong light. Patient turns toward/away from sound. Patient responds to physical pain. Patient follows some commands.

LEVEL IV – CONFUSED AND AGITATED

Patient is alert and very active. May show aggressive or bizarre behavior. Patient may move their arms and legs for no reason. Has short attention span.

LEVEL V – CONFUSED AND INAPPROPRIATE

Poor attention to the environment. Patient is distracted easily. Requires help to do everyday activities. It is hard for patient to learn new tasks. Easily angered by too much noise or light. May talk with friends and family, but say inappropriate things.

LEVEL VI – CONFUSED AND APPROPRIATE

Sometimes the patient may know where they are at and what time of day it is. Memory may be poor. May begin to remember the past. Follows simple commands. Can accomplish tasks with help.

LEVEL VII – AUTOMATIC AND APPROPRIATE

Completes daily activities in familiar surroundings in a robot-like manner. When the surroundings are not familiar, have trouble completing daily activities. Hard to plan their own future realistically.

LEVEL VIII – IX – X – PURPOSEFUL AND APPROPRIATE

Purposeful – appropriate

LEVEL I: NO RESPONSE

The patient looks like they are in a deep sleep. The patient does not wake up or move to pain, noise, smell or pictures.

LEVEL II: GENERALIZED RESPONSE

The patient looks like they are asleep most of the time. The patient may respond to pain. It may be a delayed response. They may not always respond.

FAMILY SHOULD (LEVELS I AND II):

1. Talk to the patient in a calm, slow voice.
2. Spend a short amount of time with the patient (30 minutes or less). Give the patient a lot of time to rest.
3. Limit the number of visitors to 2-3 at a time.
4. Tell the patient who you are, where they are, why they are in the hospital, and what day it is.
5. Give the patient a lot of time to respond.
6. Show affection in ways you feel comfortable.

LEVEL III: LOCALIZED RESPONSE

The patient looks like they are more alert for longer amounts of time. They respond more consistently to pain, noise, smell, and pictures. The patient is able to follow some simple commands and responds to questions "yes"/"no". The patient may take a while to respond. They may become easily angered.

FAMILY SHOULD (LEVEL III):

1. Talk normal about what the patient likes to do.
2. Talk clear and to the point.
3. Limit the number of visitors to 2-3 at a time (30 minutes or less). Give the patient a lot of time to rest.
4. Keep the room calm and quiet. Do not talk loud or have the radio on loud.
5. Tell the person who you are, where they are, why they are in the hospital, and what day it is.
6. Ask the patient to follow short, one-step commands. Examples are: "close your eyes," "open your mouth," "wiggle your fingers."
7. Ask the patient "yes" and "no" questions.
8. Give the patient enough time to answer. The answer may not be right or give you an answer at all.
9. Comfort and calm the patient when they become angry.

LEVEL IV: CONFUSED AND AGITATED

The patient may:

- be very confused and scared. They may not understand what they feel or what is going on around them. The patient may respond to what they see, hear, or feel by hitting, yelling, using bad words, or by being restless.
- not understand that people are trying to help them.
- be restrained so that they do not hurt herself/himself.
- think only of their basic needs (examples: eating, sleeping, bathroom, going home). The patient may only be able to pay attention for a couple of seconds at a time.
- have trouble following directions, knowing family/friends some of the time.
- need help to do easy, everyday things like eating, dressing or talking.

FAMILY SHOULD (LEVEL IV):

1. Know that the temper tantrums and/or yelling the patient may show are part of the recovery process. Do not take them personally. Family should remain calm and speak in a soft, calm voice. Try not to look surprised or scared.
2. Try to create a calm, quiet environment. For example, turn off the TV and radio, do not talk too much and use a calm voice.
3. Provide verbal and physical reassurance. Often the patient is very scared.
4. Do not spend a lot of time correcting the patient. If the patient disagrees, change the subject.
5. Give gentle praise for things the patient is able to do.
6. Keep telling the patient where they are, what month it is, what happened to them.
7. Bring in family pictures and personal items from home to make the patient feel more comfortable.
8. Give the patient a lot of breaks because they may easily become distracted, restless, or agitated.
9. Limit the number of visitors to 2-3 at a time.

LEVEL V: CONFUSED AND APPROPRIATE

The patient may:

- be able to pay attention for only a few minutes at a time.
- be confused and have trouble understanding things besides their own needs.
- not know the date, where they are, or why they are in the hospital--not be able to start or finish everyday activities like brushing their teeth. They may need step-by-step instructions.
- be easily overloaded and restless when they are tired or there are too many people around them.
- have poor memories. They may remember events that happened a long time ago better than events that have happened since their injury. They may make things up (confabulation) or get stuck on an activity or idea.
- may only focus on their basic needs such as eating, pain, going to bed or the bathroom, or going home.

FAMILY SHOULD (LEVEL V):

1. Talk about the problems the patient is having because of the accident. Often the patient will feel that they are not having any problems.
2. Talk about what the patient can do for herself/himself. Praise the patient at each step in completing a task. Make sure that the patient does not become too frustrated.
3. Repeat things as needed. Talk frequently about family and friends. Do not think the patient will remember what you tell them.
4. Tell the patient the day, date, where they are, why they are in the hospital when you see the patient and when you leave.
5. Play simple games or puzzles such as "War" or "Go-Fish".
6. Bring in family pictures and personal items from home.
7. Limit the number of visitors to 2-3 at a time.
8. Give the patient a lot of rest breaks when they have trouble paying attention.

LEVEL VI: CONFUSED AND APPROPRIATE

The patient may:

- begin to be aware of what is going on. Since they may be beginning to be aware of what is going on they may tolerate certain existing conditions such as tube feedings, restraints, or daily activities.
- be a little confused because of memory and thinking problems. They may remember the main point of a conversation, but forget about the details. For example, the patient may remember they had visitors in the morning, but forget what they talked about.
- follow a schedule with help. May become confused if schedule gets changed.
- know the month and year, unless there is a severe memory problem.
- be able to pay attention for about 30 minutes, but have trouble concentrating when it is noisy or there are too many steps in the activity.
- know when they need to use the bathroom.
- be able to brush their teeth, get dressed, feed herself/himself, etc with help.
- do or say things fast without thinking first.
- know that they are in the hospital because of an injury, but will not understand all of the problems they are having.
- be more aware of physical problems than thinking problems.
- think that their problems are because they are in the hospital and everything will be fine once they go home.

FAMILY SHOULD (LEVEL VI):

1. Let the patient do as much as they can for herself/himself. This will help make the patient more independent.
2. You will need to repeat things. Talk about things that have happened during the day a lot to help their memory.
3. Encourage the patient to participate in all therapies. The patient will not fully understand the extent of their problems and benefits of therapy.
4. Allow frequent rest breaks.
5. Keep telling the patient where they are, what happened, and the day/date as needed.

LEVEL VII: AUTOMATIC AND APPROPRIATE

The patient may:

- know who and where they are in familiar places, but may need help for orientation to time.
- overestimate abilities
- have trouble thinking about the consequence of a decision or action
- be able to do everyday care without help, if physically able. For example, they can dress or feed herself/himself without help. They may just need minimal supervision.
- demonstrate carry over of new learning -- need minimal supervision for new learning tasks.
- be unaware of other's needs and feelings and have trouble knowing when their interactions with others are not appropriate
- may be uncooperative
- have problems planning, starting, and following through with a task.
- have trouble paying attention when distracted. For example, family gatherings, work, school, church, or sports events.
- not realize how their thinking and memory problems may affect future plans. They may expect to return to their previous lifestyle or work. They may not fully understand their physical or thinking problems, therefore still needs supervision to be safe.
- think slower in stressful situations.
- be inflexible and may seem stubborn. These behaviors are related to the brain injury.
- be able to talk about doing something, but will have problems actually doing it.
- able to use assistive memory devices with minimal assistance

LEVEL VIII: PURPOSEFUL AND APPROPRIATE

A person at this level may:

- consistently know who they are, where they are, and aware of time
- realize that they have impairments and disabilities and that they may interfere in completing a task. They may need help to take appropriate corrective action.
- begin to make-up for their problems.
- acknowledge others' needs and feelings and respond appropriately with minimal assistance
- overestimate or underestimate abilities.
- think about consequences of a decision or action with minimal assistance.
- be able to learn new things, but at a slower rate. Requires no assistance once new tasks/activities are learned.
- Able to recognize inappropriate social interaction while it is occurring and correct it without assistance.
- still become overloaded with difficult, stressful, or emergency situations.
- depressed, irritable, argumentative, self-centered.
- use assistive memory devices for recall of information for later use with stand-by assistance.

LEVEL IX – PURPOSEFUL AND APPROPRIATE

A person at this level may:

- initiate and carry out steps to familiar activities independently and unfamiliar activities with assistance when requested.
- be aware of and acknowledge when impairments and disabilities interfere with completion of a task and takes appropriate action to correct it. Person may need stand-by assistance to anticipate a problem before it occurs and to take action to avoid it.
- able to think about consequences of decisions and actions independently.
- able to correctly estimate abilities
- acknowledges others' needs and feelings and responds appropriately with stand-

by assistance.

--be depressed, easily irritated, low frustration tolerance level

--uses assistive memory devices to recall information for later use with assistance when requested.

LEVEL X -- PURPOSEFUL AND APPROPRIATE

A person at this level may:

--be able to handle multiple tasks at once in all types of environments, but may need occasional rest breaks.

--able to independently use assistive memory device.

--independently initiate and carry out activities/tasks but may require extra time or use compensatory strategies to complete tasks.

--independently think about consequences of decisions or actions but may require more time or compensatory strategies to select the appropriate decision or action.

--accurately estimate abilities and adjust to task demands independently.

--able to recognize the needs of others automatically and respond appropriately.

--irritable and have a low frustration level when sick, fatigued and/or under emotional stress.

--consistently socially appropriate.

FAMILY SHOULD (LEVELS VII, VIII, IX, AND X):

1. Treat the patient as an adult by offering suggestions in decision making. Don't make decisions for them. Their opinions should be respected.
2. Talk with the patient as an adult. There is no need to try to use simple words or sentences.
3. Be careful when joking or using slang, because the patient may not understand the meaning. Also, be careful about teasing the patient.
4. Help the patient in familiar activities so the patient can see some of the problems they have in thinking, problem solving, and memory. Talk to the patient about these problems without criticizing. Remind the patient that the problems are because of the brain injury.
5. Strongly urge the patient to continue with therapy to help their thinking, memory and physical skills. The patient may feel that they are completely normal. However they are still getting better and may need continued treatment to keep getting better.
6. Ask the doctor about the patient's limit concerning driving, working, and other activities. Do not rely just on the patient for information since they may feel they are ready to go back to their previous lifestyle before the doctor says it is safe.

7. Discourage the patient from drinking or using drugs because it might cause medical problems.
8. Encourage the patient to use note taking as a way to help with their remaining memory problems.
9. Encourage the patient to carry out their self-care independently if possible.
10. Talk about what kinds of situations make the patient angry and what they can do in these situations.
11. Talk to the patient about their feelings.
12. Learning to live with a brain injury can be difficult. It may take a long time for the patient and family to get used to. The social worker and/or psychologist will give the family/friends information about counseling, resources and/or support groups.

Sources:

- Rancho Los Amigos Medical Center, Communication Disorders Department
- New Mexico Community Re-entry Center at Apple Valley (Chris Hagan, PhD)
- Rancho Levels of Cognitive Functioning – Revised (Chris Hagan, PhD)