Recovery after brain injury is a process that occurs in stages. Some people move quickly through the stages, while others make slow, but steady gains.

The Rancho Los Amigos Revised Scale, also called the Ranchos Scale, is one scale that measures improvement. There are 10 stages. You may find this scale helpful to follow your loved one’s progress.

Progress through the levels may not happen all at once. A person may return to a lower stage because of fatigue, frustration or other changes during the day. Watch for changes towards the next higher stage. It may be frustrating when you do not see changes from day to day. Remember, gradual progress over time is more important.

Level 1: No Response: Total Assistance

- The person is in a coma and may appear to be asleep.
- The person may be restless.
- He or she does not respond to sounds, sights, touch or movement.

Level 2: Generalized Response: Total Assistance

- The person is semi-comatose.
- He or she begins to respond to sounds, sights, touch or movement.
- Response is slow, inconsistent or occurs after a delay.
- The person responds or mimics what is heard, seen or felt. Response may include: chewing, sweating, breathe faster, moaning, moving or increased blood pressure.

To help your loved one during level 1 and 2 recovery:

- Talk to the person about familiar items (people, places, activities) in a calm voice. Do not talk about his or her condition.
- Do not talk in front of the person as if he or she were not there. He or she may be able to hear you even if they do not respond.
- Keep messages short when talking to the person.
- Stimulate the person’s senses. Use touch, smell, light, sound and temperature for 5 to 15 minutes. Play his or her favorite music, television show and taped messages from family members. Bring in familiar, favorite items, such as cologne, flowers and scents from foods. Take breaks between stimulation bouts, so you do not overwhelm the person.
- Change the person’s surroundings to prevent too much stimulation or too little stimulation. For example, when visiting, turn off the TV. When no visitors are present, request that the nursing staff play favorite music or turn on the TV for short periods of time.
- Touch the person gently when talking.
- Tell the person who you are every time you enter or leave the room.
- If the person’s eyes are open, encourage eye contact.
Level 3: Localized Response: Total Assistance

- The person appears more alert. He or she may react to what is seen, heard or felt. For example, the person may follow you with his or her eyes or turn the head towards or away from a sound.
- When the person feels pain, an arm or leg may move, and he or she may cry out.
- The person may follow simple commands, like “close your eyes”.
- The person may show signs of knowing family or friends.
- The person may start to respond to discomfort by pulling tubes or drains.
- Responses are inconsistent.

To help your loved one:
- Try Level 1 and 2 activities.
- Call the person by name and introduce yourself to help orient him or her.
- Keep interaction simple. Use short and simple sentences.
- Encourage the person to do simple tasks, such as nodding the head to mean “yes or no”. Allow enough time for a response. Check back to make sure you understood movements correctly if the person cannot speak.
- Provide basic information. Keep the person oriented by stating the place, day of the week, time and daily activities.
- Give visual cues. Keep a clock and calendar nearby. Decorate the room with pictures of family, friends and pets.
- When interacting, reduce outside noise. Turn off the television or radio and pull the privacy curtain.
- Establish a routine for the person.
- Always give the person praise when progress is made.
- Allow the person scheduled and routine rest periods to support the sleep-wake cycle and to reduce over-stimulation.

Responses may not always be the same. The person may be able to follow a command or voice a response one day, but not the next day. Be patient. He or she may be as frustrated as you are.

Level 4: Confused/Agitated: Maximal Assistance

- This stage can be hard on families and friends.
- The person may not understand what is happening (gets confused) and be scared.
- He or she may try to remove all restraints, kick, hit or bite others, pull out tubes and crawl out of bed.
- The person may overreact due to confusion by screaming or say things that are not appropriate. He or she may make up stories to overcome internal confusion and fear, also known as confabulation.
- The person’s mood may swing from pleasant to aggressive without clear warning.
- Often, the person’s attention span is very short and he or she may lack short term recall. Memory may be limited only to past events.
- The person may be focused on basic needs like eating, going to the bathroom, or dressing and need help with these activities.

To help your loved one:
- Provide a calm, orderly, structured and consistent environment. Tell your loved one he or she is safe. Avoid bright lights and loud noises. Limit visitors to two people in the room at a time.
• Keep conversation and interaction simple. Keep messages short. The person's ability to stay focused and keep attention may be short.

• Frequently orient the person to place, date and time, and what is happening. Provide a written schedule of daily events, such as times for different therapies. Provide the person with a watch or clock. Hang a calendar in his or her room and keep it current. Decorate the room with familiar pictures.

• Help the person to remember past events as they happened.

• Allow the person simple choices, such as what clothing to wear or what food they want to order.

• If the person becomes upset or agitated, stop the interaction. If needed, change the subject or leave the room for a short time. It is safer to redirect the person that to try to reason or argue with them. If the person becomes aggressive, call the nurse for help.

• If the person has a safety belt on, do not untie or remove it. Often, safety belts are needed for the person's safety. Medicines may be used if the person is at risk of harming him or herself or others.

• Avoid upsetting the person. Do not yell or raise your voice to get his or her attention.

• Do not agree with confused statements. Direct the person back to reality. Give simple and clear information to aid in memory recall.

• Provide positive feedback and support. Give praise for tasks finished.

Level 5: Confused, Inappropriate Non-Agitated: Maximal Assistance

• The person is not as explosive or combative.

• The person is more alert and can follow simple commands most of the time.

• The person is still not consistently oriented to person, place or time.

• Complex or multiple step commands may lead to frustration. Attention to any task may be limited.

• Long term memory of past events may be better than short term recall of daily events. To fill in the gaps of memory, the person may make up stories.

• He or she may have confusion due to problems learning or organizing information.

• Most days, common activities of daily living, such as eating or dressing, can be done with few problems. However, the person may have a hard time starting an activity or get stuck on one step of a task. Step by step instructions for specific tasks are very helpful.

• The person is also seldom aware of his or her limitations. As a result, a person may not understand the purpose of rehabilitation. He or she is better able to understand physical injury than problems with thinking or memory. It is not uncommon to hear requests to leave the hospital or “go home”.
To help your loved one:

- Help write down daily events and ask questions about what has happened during the day (activities, feelings). Therapists may provide the person with a memory book to help.
- Practice new and old self care skills, such as dressing and combing hair.
- Practice memory exercises, such as reviewing family pictures. Repeat information to reduce confusion.
- Use simple, short, concrete sentences and directions. Help to get organized for each activity. Avoid treating the person like a child. For example, after setting out toothpaste and a toothbrush say, “John/Jane brush your teeth.”
- Encourage the person to make choices, especially with grooming, dressing and food.
- Limit the number of visitors and noise to reduce confusion and help with attention to interactions.
- Encourage the person to participate in leisure activities.

Level 6: Confused, Appropriate: Moderate Assistance

- The person’s behavior is more functional.
- He or she can remember time, events of the day and major life events.
- There is improvement in the care of basic needs and the person is showing more consistent orientation to time and place.
- The person can follow simple commands more consistently and can keep attention for 30 minutes on a task.

- It is easier to learn information at this stage, but details may be forgotten. For example, the person may remember talking with a family member, but forget what was said.
- Response time to finish activities may still be slow.
- The person may have trouble connecting thoughts with specific words or say things without thinking.

To help your loved one:

- Encourage independence in tasks. Limit the amount of help you give.
- Keep your conversation simple and short. Use clear directions for tasks.
- Use memory aids, such as a daily schedule, memory book and pictures. Use current events, such as the news or favorite TV shows to help with memory. Give help with memory as needed. Do not “drill” the person with memory questions.
- Problem solving may be a challenge. New situations or information can be stressful. Give positive support to encourage participation.
- Encourage the person to be active in rehabilitation. If the person does not understand limitations or problems, he or she may not participate.
- Follow a routine every day. Follow a schedule at home similar to the one in the hospital. For example, have meals and rest periods about the same time every day. Ask the staff about any restrictions or special instructions.
Level 7: Automatic, Appropriate: Minimal Assistance for Daily Living Skills

- The person is able to do most daily activities automatically when tasks have structure.
- Concentration, judgment and problem solving may be hard.
- Safety is a concern. The person may feel “better” but lacks judgment for some activities. For example, driving a car is not recommended.
- The person is likely unaware of others’ needs and feelings.
- When prompted, the person may refuse or not cooperate.
- When something is new, complex or different from the normal routine, it can cause frustration or anxiety.
- Learning new information takes time and practice to retain.
- Counseling before returning to work or school may be needed.

To help your loved one:

- **When home, provide a safe environment.** 24-hour supervision may still be needed. Discuss ways to help the person stay safe with the healthcare team, family, friends and the person.
- **Talk to the doctor about any restrictions**, such as driving, drinking, working or being left alone.
- **Encourage independence in all self-care tasks.** Practice simple household chores and tasks with structure and routine. Slowly add more tasks, allowing the person to make choices and decisions.
- **Interaction will be more normal.** Encourage social events for short times. Choose events that are less stressful. Be careful with slang or jokes as meaning can be missed and the person may become upset.
- **Encourage participation in a rehabilitation program.** Problems with behavior, memory and judgment may continue for several months or years.

Level 8: Purposeful, Appropriate: Stand By Assistance

- The person has purpose in daily living.
- He or she can recall and integrate past and present. Carryover for new learning is evident.
- The person may focus up to an hour in distracting environments.
- The person needs no supervision once activities are learned and can be independent at home and in the community. He or she benefits from external memory aids, such as schedules and to do lists to support role.
- The person may continue to show decreased abilities, reasoning, judgment, stress tolerance, and emotional and intellectual capacity compared to pre-injury, yet be functional in society.
- Depression and anxiety may be present.
Level 9: Purposeful, Appropriate: Stand By Assistance on Request

- The person is aware of and acknowledges limits when they get in the way of completing tasks. He or she may still need help to anticipate or prevent problems.
- The person can shift back and forth between tasks and complete accurately for longer periods of time. For example, the person may start laundry, address other household chores and remember to return to laundry.
- The person is able to think about consequences of decisions. He or she may still need help to make safe decisions.
- The person has increased awareness of social skills, manners and appropriate behavior returns.
- Low frustration tolerance and depression/anxiety may persist into this stage.

Level 10: Purposeful, Appropriate: Modified Independent

- The person is able to handle multiple tasks at the same time in any environment, but may continue to need breaks.
- The person can recognize the need to use memory aids, such as calendars and to do lists, without help.
- More time may be needed for problem solving.
- Socially, the person is appropriate in all settings.
- Depression and irritability may persist and be worse when the person is tired.

To help your loved one during levels 8-10 recovery:

- Encourage note taking, mobile device calendar alerts and medicine reminders, and other self help tools to improve daily function.
- Encourage decision making. Give help when needed but treat choices made as functional adult decisions.
- Talk with community resources or social workers about long term adjustment and lifestyle needs.
- Promote rehabilitation treatment as part of recovery, even after he or she feels able to function normally. It may benefit memory, thinking and judgment skills.
- Continue to give positive feedback and support.

Talk to your doctor or health care team if you have any questions about your care.

For more health information, contact the Library for Health Information at 614-293-3707 or e-mail health-info@osu.edu.

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