Rancho Los Amigos Cognitive Scale

What is it?
A tool that:
• Assesses the level of recovery of brain injury patients
• “Paints a picture” of what the patient’s abilities and impairments may be
• Helps the team to design a treatment program specific to the patient’s needs
• Describes 10 stages of recovery seen after a brain injury

Stages of Recovery
• Each patient progresses through the stages at his own rate
• A patient may remain at one stage longer than others
• Some patients demonstrate characteristics of more than one level
• Depending on the severity of the injury, patients may/may not progress to the later stages of recovery

Level I: No response: Total Assistance
• Complete absence of observable change in behavior when presented visual, auditory, tactile, proprioceptive, vestibular or painful stimuli.
• Change in behavior when

Level I: No response: Total Assistance
Coma:
• No response to stimuli (pain, sound, touch, light); lacks awareness
• No normal sleep-wake cycle, lacks wakefulness
• Does not demonstrate voluntary movement

Level I: No response: Total Assistance
Vegetative State:
• Progression from coma to a state of partial arousal rather than true awareness
• “Wakeful unconscious state”
• Lacks cognitive function
• Sleep wake cycle
• Reflex responses (blinks, move eyes, smile, reflexively move, cry)
• Some may minimally respond to stimuli
Persistent Vegetative State
• Terminology used if in vegetative state for greater than 4 weeks
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Level II: Generalized Response
- Demonstrates generalized reflex response to painful stimuli.
- Responds to repeated auditory stimuli with increased or decreased activity.
- Responds to external stimuli with physiological changes generalized, gross body movement and/or not purposeful vocalization.
- Responses noted above may be same regardless of type and location of stimulation.
- Responses may be significantly delayed.

Level III: Localized Response: Total Assistance
- Demonstrates withdrawal or vocalization to painful stimuli.
- Turns toward or away from auditory stimuli.
- Blinks when strong light crosses visual field.
- Follows moving object passed within visual field.
- Responds to discomfort by pulling tubes or restraints.
- Responds inconsistently to simple commands.
- Responses are directly related to type of stimulus.
- May respond to some persons (especially family and friends) but not to others.

Level IV: Confused, Agitated
- Alert and in heightened state of activity.
- Purposeful attempts to remove restraints or tubes or crawl out of bed.
- May perform motor activities such as sitting, reaching and walking but without any apparent purpose or upon another's request.
- Very brief and usually non-purposeful moments of sustained alternatives and divided attention.
- Absent short-term memory.
- May cry out or scream out of proportion to stimulus even after its removal.
- May exhibit aggressive or flight behavior.
- Mood may swing from euphoric to hostile with no apparent relationship to environmental events.
- Unable to cooperate with treatment efforts.
- Verbalizations are frequently incoherent and/or inappropriate to activity or environment.
- (Heightened state of activity; confusion; unable to do self-care; unaware of present events. Reacts to own inner confusion, fear, disorientation; excitable behavior may be abusive or aggressive.)

Level V: Confused, Inappropriate, Non-agitated
- Unable to learn new information.
- Able to respond appropriately to simple commands fairly consistently with external structures and cues.
- Responses to simple commands without external structure are random and non-purposeful in relation to command.
- Able to converse on a social, automatic level for brief periods of time when provided external structure and cues.
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Level V: Confused, Inappropriate, Non-agitated
- Verbalizations about present events become inappropriate and confabulatory when external structure and cues are not provided.

Level VI: Confused, Appropriate, Moderate Assistance
- Inconsistently oriented to person, time and place.
- Able to attend to highly familiar tasks in non-distracting environment for 30 minutes with moderate redirection.
- Remote memory has more depth and detail than recent memory.
- Vague recognition of some staff.
- Able to use assistive memory aide with maximum assistance.
- Emerging awareness of appropriate response to self, family and basic needs.

Level VI: Confused, Appropriate, Moderate Assistance
- Moderate assist to problem solve barriers to task completion.
- Supervised for old learning (e.g. self care).
- Shows carry over for relearned familiar tasks (e.g. self care).
- Maximum assistance for new learning with little or no carry over.
- Unaware of impairments, disabilities and safety risks.
- Consistently follows simple directions.

Level VII: Automatic, Appropriate: Minimal Assistance for Daily Living Skills
- Consistently oriented to person and place, within highly familiar environments.
- Moderate assistance for orientation to time.
- Able to attend to highly familiar tasks in a non-distraction environment for at least 30 minutes with minimal assist to complete tasks.
- Minimal supervision for new learning.
- Demonstrates carry over of new learning.
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Level VII: Automatic, Appropriate: Minimal Assistance for Daily Living Skills
- Superficial awareness of his/her condition but unaware of specific impairments and disabilities and the limits they place on his/her ability to safely, accurately and completely carry out his/her household, community, work and leisure ADLs.
- Minimal supervision for safety in routine home and community activities.
- Unrealistic planning for the future.

Level VII: Automatic, Appropriate: Minimal Assistance for Daily Living Skills
- Unable to think about consequences of a decision or action.
- Overestimates abilities.
- Unaware of others’ needs and feelings.
- Oppositional/uncoooperative.
- Unable to recognize inappropriate social interaction behavior.

Level VIII: Purposeful, Appropriate: Stand-By Assistance
- Consistently oriented to person, place and time.
- Independently attends to and completes familiar tasks for 1 hour in distracting environments.
- Able to recall and integrate past and recent events.
- Uses assistive memory devices to recall daily schedule, “to do” lists and record critical information for later use with stand-by assistance.

Level VIII: Purposeful, Appropriate: Stand-By Assistance
- Initiates and carries out steps to complete familiar personal, household, community, work and leisure routines with stand-by assistance and can modify the plan when needed with minimal assistance.
- Requires no assistance once new tasks/activities are learned.

Level VIII: Purposeful, Appropriate: Stand-By Assistance
- Thinks about consequences of a decision or action with minimal assistance.
- Overestimates or underestimates abilities.
- Acknowledges others’ needs and feelings and responds appropriately with minimal assistance.
- Depressed.
- Irritable.

Level VIII: Purposeful, Appropriate: Stand-By Assistance
- Aware of and acknowledges impairments and disabilities when they interfere with task completion but requires stand-by assistance to take appropriate corrective action.
Level IX: Purposeful, Appropriate: Stand-By Assistance on Request

- Independently shifts back and forth between tasks and completes them accurately for at least two consecutive hours.
- Uses assistive memory devices to recall daily schedule, “to do” lists and record critical information for later use with assistance when requested.
- Initiates and carries out steps to complete familiar personal, household, work and leisure tasks independently and unfamiliar personal, household, work and leisure tasks with assistance when requested.

Level IX: Purposeful, Appropriate: Stand-By Assistance on Request

- Aware of and acknowledges impairments and disabilities when they interfere with task completion and takes appropriate corrective action but requires stand-by assist to anticipate a problem before it occurs and take action to avoid it.
- Able to think about consequences of decisions or actions with assistance when requested.
- Accurately estimates abilities but requires stand-by assistance to adjust to task demands.

Level IX: Purposeful, Appropriate: Stand-By Assistance on Request

- Depression may continue.
- May be easily irritable.
- May have low frustration tolerance.
- Able to self monitor appropriateness of social interaction with stand-by assistance.

Level X: Purposeful, Appropriate: Stand-By Assistance on Request

- Able to handle multiple tasks simultaneously in all environments but may require periodic breaks.
- Able to independently procure, create and maintain own assistive memory devices.
- Independently initiates and carries out steps to complete familiar and unfamiliar personal, household, community, work and leisure tasks but may require more than usual amount of time and/or compensatory strategies to complete them.

Level X: Purposeful, Appropriate: Stand-By Assistance on Request

- Anticipates impact of impairments and disabilities on ability to complete daily living tasks and takes action to avoid problems before they occur but may require more than usual amount of time and/or compensatory strategies.

Level II: Generalized Response

- Limited, inconsistent, non-purposeful responses; first reaction may be to deep pain; may open eyes but will not seem to focus on anything in particular.

Level III: Localized Response: Total Assistance

- Inconsistent responses but purposeful in that reacts in a more specific manner to stimulus; may focus on a presented object; may follow simple commands.

Strategies:
- Introduce yourself.
- Explain what you will do.
- Normal tone.
- Short and simple.
- Gentile physical contact.
- Quiet room, 2-3 visitors.
- Orient.
- Allow time for response.
- Rest.
- Familiar activities.
- Be mindful of what you say.
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Level IV: Confused, Agitated
- Heightened state of activity; confusion; unable to do self-care; unaware of present events. Reacts to own inner confusion, fear, disorientation; excitable behavior may be abusive or aggressive.

Considerations:
- Limited attention span
- Poor reasoning
- Limited memory
- Difficulty understanding surroundings → agitation and restlessness
- Exacerbated with change (e.g. room/bed changes, caregiver changes)

Strategies:
- Allow as much movement as is safe.
- Always explain your intentions.
- Redirect to different activities if patient shows signs of becoming upset.
- Limit changes in environment and staff.
- Place near a window for orientation to day/night.
- Formally end your contact.

Level V: Confused, Inappropriate, Non-agitated
- Appears alert; responds to commands; follows tasks for 2-3 minutes but easily distracted by environment; frustrated; verbally inappropriate; does not learn new information.

Level VI: Confused, Appropriate, Moderate Assistance
- Follows simple directions consistently; needs cueing; can relearn old skills; serious memory problems but improving; attention improving; self-care tasks performed without help; some awareness of self and others.

Strategies: Noncompliance
- Unwillingness participate (e.g. in feeding, dressing) may be a result of confusion or being uncomfortable.
  - Determine the activity being refused, and try to understand why.
  - Redirect and move on to a different activity, come back to the initial activity later.
  - Provide choices.
- Bargaining
  - Reinforce activity
  - Provide a desirable activity at end of task
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**Strategies: Noncompliance**
- Written goals
  - For higher functioning patients
  - Can give a sense of control
- Checklists to be completed to encourage follow through
- Make tasks meaningful
  - Although may be relearning simple tasks – role are stepping stones to independence
- Provide positive feedback

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**Strategies: Temper Outbursts**
- Remain calm.
- Don’t take it personally.
- Look for trigger/stimulus and remove if possible.
  - If identified and eliminated, may prevent future outbursts.
- Reinforcement
  - For higher level patients, a reward system for decreasing episodes may positively impact frequency

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**Strategies: Socially Inappropriate Behaviors**
- Remain calm. Don’t take it personally.
- Limit or remove environmental triggers – crowds and multiple conversations taking place increase confusion and are more likely to trigger inappropriate comments.
- Redirect.
- Avoid reprimanding patient in front of others.
- Role modeling.
- Role playing – provide examples of more appropriate responses.

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**Strategies: Know what to Expect**
- RLA Scale provides a “snap shot” as to what to expect.
- Anticipate potential challenges related to the RLA level to guide treatment approach.
- Control the environment to the extent possible.
- A calm and flexible approach can minimize agitation and confusion.

**References and Resources:**
- [http://www.rancho.org/research/bi_cognition.pdf](http://www.rancho.org/research/bi_cognition.pdf)
- [http://www.waiting.com/rancholosamigos.html](http://www.waiting.com/rancholosamigos.html)

**Thank You**