

## Rancho Los Amigos Levels of Cognitive Functioning Scale

The Rancho Los Amigos Scale (RLAS), also known as the Ranchos Scale, was originally developed by the head injury team at the Rancho Los Amigos Hospital in Downey, California, to assess patients emerging from a coma. It is a widely accepted medical scale used to describe the cognitive and behavioral patterns found in brain injury patients as they recover from injury. It is often used in conjunction with the Glasgow Coma Scale during the initial assessment of a brain injury patient. However, the RLAS is used throughout the recovery period and is not limited to the initial assessment. The RLAS takes into account states of consciousness as well as the patient's reliance on assistance to carry out their cognitive and physical functions.



PLAY PICMONIC

### Total Assistance

#### Level I - No Response

##### No Speech-bubble Response

In Level I, the patient requires total assistance. The patient will appear asleep and have no response to external stimuli. They will have a complete absence of observable change in behavior when presented with visual, auditory, tactile, proprioceptive, vestibular, or even painful stimuli.

#### Level II - Generalized Response

##### General Speech-bubble Response

In level II, the patient requires total assistance. The patient demonstrates a generalized reflex response to painful stimuli. Responses may be significantly delayed but can respond to repeated auditory stimuli with increased or decreased activity. The patient may respond to external stimuli with physiological changes, body movements, and/or not purposeful vocalization. However, responses may be significantly delayed.

#### Level III - Localized Response

##### Localized Speech-bubble Response

In level III, the patient requires total assistance. At this level, the patient may respond to some people (especially family and friends) but not to others. The patient may demonstrate withdrawal or vocalization to painful stimuli. The patient may respond to discomfort by pulling tubes or restraints. The responses are directly related to the type of stimulus. The patient will respond inconsistently to simple commands. The patient may turn toward or away from auditory stimuli, blink when strong light crosses the visual field, and follow a moving object passed within the visual field.

### Maximal Assistance

#### Level IV - Confused/Agitated

##### Agitated Confucius

In level IV, the patient requires maximal assistance. The patient is alert and in a heightened state of activity. The patient can make purposeful attempts to remove restraints or tubes or crawl out of bed. They may also cry out or scream out of proportion to stimulus even after its removal. Patients may perform motor activities such as sitting, reaching, and walking, but without any apparent purpose or upon another's request. The patient presents an absence of short-term memory and has very brief and usually non-purposeful moments of sustained alternatives and divided attention. May exhibit aggressive or flight behavior. The mood may swing from euphoric to hostile with no apparent relationship to environmental events. The patient is unable to cooperate with treatment efforts, and the verbalizations are frequently incoherent and/or inappropriate to activity or environment.

## **Level V - Confused, Inappropriate Non-Agitated**

### **Confucius Inappropriately Using Apple**

In level V, the patient requires maximal assistance. The patient is now alert and not agitated. However, the patient may become agitated in response to external stimulation and/or lack of environmental structure. Verbalizations about present events become inappropriate and confabulatory when external structure and cues are not provided. The patient is able to converse on a social, automatic level for brief periods of time when provided with external structure and cues. The patient may wander randomly or with a vague intention of going home. The patient is not oriented to person, place, or time. The patient displays frequent brief periods of non-purposeful sustained attention. A patient in this level will have severely impaired recent memory, with confusion of past and present in reaction to ongoing activity. Additionally, the patient has absent goal-directed, problem-solving, self-monitoring behavior. They often demonstrate inappropriate use of objects without external direction. The patient may be able to perform previously learned tasks when structured and cues are provided. However, the patient is unable to learn new information. They are able to respond appropriately to simple commands fairly consistently with external structures and cues. However, responses to simple commands without external structure are random and non-purposeful in relation to the commands.

## **Moderate Assistance**

## **Level VI - Confused, Appropriate**

### **Confucius Appropriately Using Appropriate-Apple**

In level VI, the patient requires moderate assistance. The patient is inconsistently oriented to person, time, and place. They are able to attend to highly familiar tasks in a non-distracting environment for 30 minutes with moderate redirection. The patient's remote memory has more depth and detail than recent memory. They may have a vague recognition of some staff. The patient is able to use assistive memory aids with maximum assistance. There is an emerging awareness of appropriate responses to self, family, and basic needs. The patient may need moderate assistance to problem-solve barriers for task completion or may need supervision for old learning (e.g., self-care). They may show carryover for relearned familiar tasks such as self-care activities or may need maximum assistance for new learning with little or no carryover. Often, they are unaware of impairments, disabilities, and safety risks. However, they consistently follow simple directions and use verbal expressions that are appropriate in highly familiar or structured situations.

## **Minimal Assistance for Daily Living Skills**

## **Level VII - Automatic, Appropriate**

### **Automatic-robot with Appropriate-apple**

In level VII, the patient requires minimal assistance for daily living skills. The patient is not consistently oriented to person and place within highly familiar environments. Moderate assistance for orientation to time is needed. They are able to attend to highly familiar tasks in a non-distraction environment for at least 30 minutes with minimal assistance to complete tasks. The patient requires minimal supervision for new learning and demonstrates carryover of new learning. The patient initiates and carries out steps to complete familiar personal and household routines but has a shallow recall of what they have been doing. They require minimal supervision for safety in routine home and community activities and are able to monitor the accuracy and completeness of each step in routine personal and household ADLs and modify plans with minimal assistance. However, the patients have a superficial awareness of their condition and are unaware of specific impairments and disabilities that limit the ability to safely, accurately, and completely carry out their household, community, work, and leisure ADLs. The patient is unable to think about the consequences of a decision or action, and has unrealistic planning for the future and overestimates their abilities. They are unaware of others' needs and feelings. They display as oppositional/uncooperative and are unable to recognize inappropriate social interaction behavior.

## **Stand-By Assistance**

## **Level VIII - Purposeful, Appropriate with Stand-by Assistance**

### **Porpoise, Appropriate-Apple with Stand-by Assistant**

In level VIII, the patient requires stand-by assistance. The patient is now consistently oriented to person, place, and time. They independently attend to and complete familiar tasks for 1 hour in distracting environments. The patient is able to recall and integrate past and recent events. The patient also

uses assistive memory devices, such as "to-do" lists, to recall their daily schedule and record critical information for later use with stand-by assistance. The patient initiates and carries out steps to complete familiar personal, household, community, work, and leisure routines with standby assistance and can modify the plan when needed with minimal assistance. The patient requires no assistance once new tasks/activities are learned. They are aware of and acknowledge impairments and disabilities when they interfere with task completion but require stand-by assistance to take appropriate corrective action. The patient thinks about the consequences of a decision or action with minimal assistance. The patient overestimates or underestimates abilities but is able to acknowledge others' needs and feelings and respond appropriately with minimal assistance. The patient may be depressed, irritable, argumentative, self-centered, and have low frustration tolerance/easily angered. They are uncharacteristically dependent/independent but able to recognize and acknowledge inappropriate social interaction behavior while it is occurring and take corrective action with minimal assistance.

### Stand-By Assistance on Request

#### Level IX - Purposeful, Appropriate with Stand-by Assistance on Request

##### Porpoise, Appropriate-Apple with Stand-by Assistant on Request

In level IX, the patient requires stand-by assistance on request. The patient independently shifts back and forth between tasks and completes them accurately for at least two consecutive hours. The patient uses assistive memory devices, such as "to-do" lists, to recall daily schedules and record critical information for later use with assistance when requested. The patient 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. The patient is aware of and acknowledges impairments and disabilities when they interfere with task completion and takes appropriate corrective action, but requires stand-by assistance to anticipate a problem before it occurs and take action to avoid it. The patient is able to think about the consequences of decisions or actions with assistance when requested. They accurately estimate abilities but require stand-by assistance to adjust to task demands. The patient acknowledges others' needs and feelings and responds appropriately with stand-by assistance. Depression may continue, and they may be easily irritable or have low frustration tolerance. They are able to self-monitor the appropriateness of social interaction with stand-by assistance.

### Modified Independent

#### Level X - Modified Purposeful, Appropriate

##### Porpoise with Appropriate-Apple while Modifying with M

The patient can handle multiple tasks simultaneously in all environments but may require periodic breaks. The patient is able to independently use assistive memory devices and independently initiate and carry out steps to complete all tasks but may require more time. The patient thinks about the consequences of decisions or actions but may need more time. At this stage, the patient is able to recognize the needs and feelings of others and respond appropriately. They may experience periodic periods of depression, as well as irritability and low frustration tolerance when sick, fatigued, and under emotional stress. The patient's social interaction behavior is consistently appropriate.

### Mnemonic

#### No General Localizes Aggressively Inappropriate Apples Automatically on Purpose

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To recall the first 8 levels of the Rancho Los Amigos Levels of Cognitive Functioning Scale think of the mnemonic "No General Localizes Aggressively Inappropriate Apples Automatically on Purpose".