The Rancho Los Amigos Levels of Cognitive Functioning

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Onword Therapy

What are the Rancho Levels?
What are the Rancho Levels?

- Ten Levels of Cognitive Functioning
- Tool for Medical Management
- Indicator of Progress
- Necessary steps to Recovery

Objectives

- Identify some behaviors at each Rancho level
- Understand the Treatment Goal at each level
- Learn how Rancho Levels guide treatment and management for brain injury recovery
Let’s Get to Work!

Level 1 -

No response to external stimuli

Total assist

No observable wake sleep cycle, eye opening or purposeful movement.
Level 2 –
Generalized Response
Total assist

Signs of arousal emerge
- Eye opening
- Pupillary dilation - spontaneously or to stimuli
- Generalized reflexive response to stimuli
- Responds to repeated auditory stimuli with increase/decreased activity
- Responds to external/internal stimuli with physiological changes

Level 3 –
Localized Response
Total assist

Signs of awareness begin to emerge
- Withdrawal/vocalization to pain
- Turns head toward/away from loud noise
- Blinks with strong light
- Follows moving object passed within visual field
- Responds to discomfort by pulling tubes or restraints
- Inconsistent responses to simple commands
Guide for Levels 1, 2 & 3

- **Treatment Focus:**
  - Team Role:
  - Treatment Approach:
  - Treatment Goal:

- **Patient Protection**
  - Protect
  - Medical/Physical Management
  - Prevent Complications
  - Advance to Level 4

Level 4 – Confused/Agitated

Maximal assist

- Hyper alert
- Performs motor activities but behavior mostly non-purposeful
- Aggressive and combative behavior
- Paranoid behavior
- Delusions and hallucinations
- Hypersensitivity
- Disturbed wake – sleep cycle
Causes of Agitation and Confusion

Primary
- Disturbed neurochemical processes
- Disturbed cerebral blood flow
- Possible hydrocephalus
- Possible seizure disorder
- Injury/dysfunction of the frontal limbic system
- Frontal disinhibition

Secondary
- Adverse reaction to medication/drug interaction
- Return of volitional behavior with low level cognitive function
- Electrolyte imbalance
- Fever, Pain, Headache
- Other discomfort
  - Dehydration
  - Nutrition/Hunger
  - Sleep deprivation
  - Decreased endurance
  - Perceptual impairments
  - Cognitive impairments
  - Communication impairments
  - Emotional reactivity to situation
  - Restraints
  - Environment

Guide for Level 4

- Treatment Focus: Reduce Confusion/Agitation
- Team Role: Nurture
- Treatment Approach: Environmental Management
- Treatment Goal: Sense of Safety
- Advance to Level 5
Level 5 – Confused
Inappropriate, Non-agitated
Maximal assist

- Behaviors non goal directed, random and fragmented
- May wander aimlessly
- Agitated. Responses out of proportion
- Highly distractible. Requires continuous redirection to accomplish tasks
- Lacks initiation of functional tasks
- Inappropriate use of objects without cues
- Responds to simple commands fairly consistently
- Inappropriate and confabulatory
- Confusion between past and present

Level 6 – Confused
Appropriate
Moderate assist

- Does not wander.
- Beginning awareness of situation.
- Remote memory better than recent.
- Consistently follows simple commands.
- Demonstrates goal directed behavior
- Requires external cues for task completion.
- Max assist for new learning with little or no carry over
Guide for Levels 5 & 6

- Treatment Focus: Orientation
- Team Role: Support
- Treatment Approach: Patient and Environmental Management
- Treatment Goal: Awareness of Self and Environment

Advance to Level 7

Level 7 – Automatic Appropriate Minimal assist

- Attend to familiar tasks for at least 5 minutes.
- Able to use assistive memory device with assistance.
- Able to complete familiar personal and household routine.
- Unable to understand that impairments and disabilities exist.
- Unable to think about consequences of a decision/action.
- Overestimate abilities.
- Unaware of others’ needs and feelings.
- Oppositional/uncooperative.
- Unable to recognize inappropriate social interaction/behavior.
Guide for Level 7

- **Treatment Focus:** Self Management
- **Team Role:** Assist
- **Treatment Approach:** Behavior Management
- **Treatment Goal:** Awareness of Others

Advance to Level 8

Level 8 – Purposeful, Appropriate

Stand-by assist

- Independently completes familiar in a distracting environment for at least 1 hour
- Able to use assistive memory devices with intermittent assistance
  - to recall daily schedule
  - “to do” lists and
  - record critical information for later use
- Initiates and carries out steps to complete familiar routines and modify plan when needed - intermittent assistance
- Able to acknowledge impairments but not able to self monitor and recognize a problem while it is happening
- Able to think about consequences of a decision or action with minimal assistance
Guidelines for Level 8

- Overestimates/underestimates abilities
- Able to acknowledge others’ needs and feelings and respond appropriately with minimal assistance
- Depressed
- Irritable
- Low frustration tolerance/easily angered
- Argumentative
- Self-centered
- Uncharacteristically dependent/independent
- Able to recognize and acknowledge inappropriate social interaction behavior while it is occurring and take corrective action with minimal assistance.

Guide for Level 8

- Treatment Focus: Self Guidance
- Team Role: Coach
- Treatment Approach: Cognitive/Behavior Management
- Treatment Goal: Social Competence, Advance to Level 9
Level 9 – Purposeful, Appropriate

Stand-by assist on request

- Able to independently shift back and forth between tasks and complete them accurately for at least **two** consecutive hours
- Able to use assistive memory devices with assistance when requested
- Independently carries out familiar personal household, work and leisure tasks
- Intermittent assist for unfamiliar personal, household, work and leisure tasks
- Aware of and acknowledges impairments and disabilities when they interfere with task completion at the moment and takes appropriate corrective action
- Requires stand-by assist to anticipated a problem before it occurs and take action to avoid it
- Able to think about consequences of decisions or actions with assistance when requested

…and more on Level 9

- Accurately estimates abilities but requires intermittent assistance to adjust to task demands
- Able to acknowledge others’ needs and feelings and respond appropriately with intermittent assistance
- Depression may continue
- Irritable
- Low frustration tolerance
- Able to self monitor appropriateness of social interaction behavior with stand-by assistance
Level 10 – Purposeful, Appropriate

Modified independent

- Able to handle multiple tasks simultaneously - may require periodic breaks
- Able to independently maintain own assistive memory devices
- Independently complete familiar and unfamiliar routines
  - more time
  - compensatory strategies
- Anticipates impact of impairments on daily living tasks
  - takes action to avoid problems before they occur
  - more time
  - compensatory strategies

...more on Level 10

- Independently thinks about consequences of decisions or actions
  - more time
  - compensatory strategies
- Accurately estimates abilities
- Independently adjusts to task demands
- Able to recognize the needs and feelings of others and automatically respond in usual and customary fashion
- Periodic periods of depression may occur
- Irritability and low frustration tolerance when sick, fatigued and/or under emotional stress
- Social interaction behavior is consistently appropriate
## Guide for Levels 9 & 10

- **Treatment Focus:**
- **Team Role:**
- **Treatment Approach:**
- **Treatment Goal:**
  - Autonomy: Empower
  - Counseling/Training
  - Independence and Interdependence

### Level 7-10

<table>
<thead>
<tr>
<th></th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<tbody>
<tr>
<td></td>
<td>Attend to highly familiar task in non-distracting environment for at least 5 minutes</td>
<td>Complete familiar tasks in distracting environment for at least 1 hour</td>
<td>Shift back and forth between tasks and complete accurately for at least 2 hours</td>
<td>Handle multiple tasks simultaneously in all environments, requires periodic breaks</td>
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### Attention
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<tbody>
<tr>
<td><strong>Use assistive memory device (ie planner) with stand-by assistance</strong></td>
<td><strong>Use assistive memory device to recall daily schedule, “to-do” list, and record important info to use later with intermittent assistance</strong></td>
<td><strong>Use assistive memory device to recall daily schedule, “to-do” list, and record important info to use later with assistance as needed</strong></td>
<td><strong>Able to obtain, create and maintain own assistive memory device</strong></td>
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**Level 7-10**

**Short Term Memory**

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<tr>
<td><strong>Able to monitor accuracy and modify plan with minimal assistance</strong></td>
<td><strong>Initiates steps to complete familiar tasks, intermittent assistance to carry out and modify</strong></td>
<td><strong>Initiate steps for familiar tasks with assist as needed</strong></td>
<td><strong>Independently carries out familiar tasks but may require more time or strategies to complete</strong></td>
</tr>
<tr>
<td><strong>Unable to think about consequences of decision or action</strong></td>
<td><strong>Able to think about consequences with minimal assist</strong></td>
<td><strong>Able to think about consequences with assist as needed</strong></td>
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**Level 7-10**

**Problem Solving**
### Level 7-10

#### Awareness

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<tr>
<td><strong>Superficial awareness of condition</strong>&lt;br&gt;Cannot anticipate a problem&lt;br&gt;Overestimates abilities</td>
<td>Aware of impairments when they interfere with task, needs SBA to correct&lt;br&gt;Anticipates problem with minimal assist&lt;br&gt;Over/Under estimates abilities</td>
<td>Aware of impairments when they interfere and can take corrective action&lt;br&gt;Requires SBA to anticipate problem and take action to avoid&lt;br&gt;Accurately estimates abilities</td>
<td>Anticipates impact of impairments on ability to complete task and takes action to avoid problems before they occur&lt;br&gt;Accurately estimates abilities and independently adjusts to task demands</td>
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#### Pragmatics

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<tbody>
<tr>
<td><strong>Unaware of others’ needs and feelings</strong>&lt;br&gt;Unable to recognize inappropriate social interaction</td>
<td>Able to acknowledge others’ needs and feelings and respond with minimal assist&lt;br&gt;Able to recognize inappropriate social interaction while it is occurring and take corrective action</td>
<td>Acknowledges needs and feelings of others and responds appropriately with SBA&lt;br&gt;Able to self monitor appropriateness of social behavior, SBA to take corrective action</td>
<td>Able to recognize needs and feelings of others and automatically respond in appropriate manner&lt;br&gt;Social behavior is consistently appropriate</td>
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### Level 7-10

#### Emotional Status

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<tr>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>May have flat affect</td>
<td>Depressed</td>
<td>May exhibit depression and irritability and low frustration tolerance</td>
<td>May exhibit periods of depression, irritability and low frustration tolerance</td>
</tr>
<tr>
<td>Self-centered</td>
<td>Irritable</td>
<td>Self-centered</td>
<td>Self-centered</td>
</tr>
<tr>
<td>Low frustration tolerance</td>
<td>Argumentative</td>
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### Rehabilitation Continuum

<table>
<thead>
<tr>
<th>Rancho Level</th>
<th>Treatment Focus</th>
<th>Team Role</th>
<th>Treatment Approach</th>
<th>Treatment Goal</th>
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</thead>
<tbody>
<tr>
<td>1, 2 and 3</td>
<td>Patient Protection</td>
<td>Protect</td>
<td>Medical/Physical Management</td>
<td>Prevent Complications</td>
</tr>
<tr>
<td>4</td>
<td>Reduce Confusion and Agitation</td>
<td>Nurture</td>
<td>Environmental Management</td>
<td>Sense of Safety</td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td>Orientation</td>
<td>Support</td>
<td>Client &amp; Environmental Management</td>
<td>Awareness of Self &amp; Environment</td>
</tr>
<tr>
<td>7</td>
<td>Self Management</td>
<td>Assist</td>
<td>Behavior Management</td>
<td>Awareness of Others</td>
</tr>
<tr>
<td>8</td>
<td>Self Guidance</td>
<td>Coach</td>
<td>Cognitive/Behavior Management</td>
<td>Social Competence</td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>Autonomy</td>
<td>Empower</td>
<td>Counseling/Training</td>
<td>Inter-Dependence</td>
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Summary

- Rancho Scales are a valuable tool for health professionals and families to understand
- Rancho Scales guide how we manage our environment and what treatment choices we make
- Each level is a necessary part of recovery

Thank you!

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