

# Allen Cognitive Levels and Modes of Performance and Level of Care

## **ACL 0: Coma**

### *0.8: Generalized Reflexive Actions*

## **ACL 1: Awareness**

Global cognition is profoundly impaired. Person responds to internal cues only. A change in level of arousal is a specific response to an external stimulus that produces pain or has an instinctive survival value.

*Total Assistance* is needed when therapists introduce external stimuli that elicit automatic actions such as swallowing or looking toward auditory stimuli.

### *1.0: Withdrawing from Noxious Stimuli*

24-hour nursing care for artificial feeding and turning to maintain skin integrity

### *1.2 Responding to Stimulation*

(Same care as 1.0)

### *1.4: Locating Stimulation*

24-hour nursing care to feed regular diet and initiate rolling bed for skin care

### *1.6 Rolling in Bed*

24-hour nursing care to feed regular diet and initiate rolling bed for skin care

### *1.8: Raising Body Parts*

24-hour nursing care to place cup and spoon in hand and sustain eating, establish route for voiding, and bathe

## **ACL 2: Gross Body Movements**

Global cognition is severely impaired. Person's awareness is limited to own postural actions (proprioceptive cues) to move body in space or overcome effects of gravity. There is a lack of awareness of the effects that actions have on objects or other people.

*Maximum Assistance* is needed when therapists demonstrate actions or use proprioceptive stimulation to elicit postural actions.

### *2.0 Overcoming Gravity*

24-hour nursing care to transfer from bed to chair, provide food, and do bathroom activities

### *2.2 Righting Reactions*

24-hour nursing care to prevent standing if unable to weight-bear, transfer on sliding board or a pivot transfer, provide food, and do bathroom activities

### *2.4 Aimless Walking*

24-hour nursing care to initiate and assist with all activities of daily living and to prevent wandering and getting lost

### 2.6 *Directed Walking*

24-hour nursing care to restrict walking to even surfaces in safe locations such as a room, building, or yard

### 2.8: *Grabbing*

24 hour nursing care to stabilize grab bars, rails, furniture, point out stairs, edge of bathtub, provide food, and bathe

## **ACL 3: Manual Actions**

Global cognition is severely impaired. Persons perform spontaneous manual actions in response to tactile cues. Repetitive actions demonstrate an awareness of material objects but lack of awareness of cause and effect, end product, or goal. Attention span is short (maximum 30 minutes) and actions are unpredictable.

*Moderate Assistance* is needed when therapists re-focus attention to sustain/complete simple, repetitive actions safely. One-to-one assistance is required to halt perseveration and to prevent unsafe, erratic, or unpredictable actions that interfere with appropriate sequencing.

### 3.0 *Grasping Objects*

24-hour nursing care to elicit habitual motions for activities of daily living and to complete motions for an acceptable level of hygiene

### 3.2 *Distinguishing Objects*

24-hour nursing care to place objects needed to do the activities of daily living in front of person and to complete motions for an acceptable level of hygiene

### 3.4 *Sustaining Actions on Objects*

Close supervision to place objects needed to do activities of daily living in front of person and sequence through the necessary steps to achieve acceptable results. One caregiver can supervise three persons at a time.

### 3.6 *Noting Effects on Objects*

Close supervision to provide the materials needed for activities of daily living, to remind person to finish necessary steps, to check results, and to remove access to dangerous objects.

### 3.8 *Using All Objects*

Close supervision to get materials out that are needed to do activities of daily living, to check results, and to remove dangerous objects.

## **ACL 4: Familiar Activity**

Global cognition is moderately impaired. Person is aware of tangible cues (see and touch) and understands visible cause-and-effect relationships. Goal-directed actions demonstrate an awareness of a familiar end-product but fail to solve new problems, anticipate, or correct mistakes. There is no independent new learning and they cannot invent new motor actions.

They do not recognize errors unless clearly visible, and may request help when mistakes are noticed. Attention span is usually good for up to one hour.

*Minimum Assistance* is needed when therapists set up goal-directed activities with tangible results. Help is needed to correct repeated mistakes, to check for compliance with established safety procedures, and to solve problems presented by unexpected hazards. Extensive, situation specific training is required to learn new activities, with no expectation for generalization of learned techniques.

#### 4.0 *Sequencing*

Close supervision to remove dangerous objects and solve any problems occurring through minor changes in routine. Person may fix self a cold meal or snack and make small purchases in the neighborhood.

#### 4.2 *Differentiating Features*

Close supervision to remove dangerous objects outside of the visual field and to solve any problems arising from minor changes in the environment. Person may spend a daily allowance, walk to familiar locations in the neighborhood, or follow a simple, familiar bus route.

#### 4.4 *Completing Goal*

Person may live with someone who does a daily check on the environment and removes any safety hazards and solves any new problems. Person may be left alone for part of the day with procedure for obtaining help by phone or from a neighbor. Person may manage a daily allowance and go to familiar places in the neighborhood.

#### 4.6 *Personalizing*

Person may live alone with daily assistance to monitor personal safety. May manage a daily allowance. Bills and other money management concerns require assistance. Person may require reminders to do household chores, to attend familiar community events, or to do anything in addition to daily household routine.

#### 4.8 *Rote Learning*

Person may live alone with daily assistance to monitor safety and check problem-solving methods. Person may get self to a regularly scheduled community activity or succeed in supportive employment with a job coach.

### **Level 5: Learning New Activity**

Global cognition is mildly impaired. The person is able to learn new ways of doing things through trial-and-error problem solving. The person detects the best effect by exploring distinctive properties of objects and trying different actions. They exercise poor judgment with no symbolic thought to plan actions or anticipate potential mistakes. They may make hasty or impulsive decisions or make abrupt changes in their course of action. The determination of what is best may be made according to personal preferences or social standards. The person can imitate a series of new directions; new learning is recognized and repeated during the process of doing an activity.

*Standby Assistance* is needed when therapists adapt a new activity for safe and effective performance because errors and a need for safety precautions are not always anticipated. Persons may also need memory and planning aids to effectively function at a desired standard.

#### 5.0 *Continuous Neuromuscular Adjustments*

Person may live alone with weekly checks to monitor safety and check problem-solving methods. Person may succeed in supportive employment with a job coach and get to regularly scheduled valued community activity.

#### 5.2 *Discriminating Between Parts of an Activity*

Person may live alone with weekly checks to monitor safety and examine potentially dangerous effects of impulsive behavior. Person may succeed in supportive employment with a job coach and participate in valued community events.

#### 5.4 *Self-directed Learning*

Person may live alone and work in a job with a wide margin of error. Person may not be safe in jobs with a high potential for industrial accidents.

#### 5.6 *Considering Social Standards of Context*

Person may respond to supervision that identifies hazards occurring as secondary effects of their actions. Person may be relied upon to follow safety precautions consistently.

#### 5.8 *Consulting with Others*

Person may benefit from assistance in planning for the future. Person may benefit from discussion of complications such as fatigue, joint protections, functional positioning, etc.

### **ACL 6: Planning New Activity**

No global cognitive impairment. Person anticipates errors and plans actions to prevent errors. Attention span is defined by desires and priorities. Spoken/written instructions, visual images, diagrams, and drawings are what the person pays attention to. Spontaneous motor actions are preceded with a pause to think. Verbal instructions can be given without a demonstration. Persons consider new information, imagine and reflect on possibilities, reconsider, and exhibit original approaches to task performance. Trial-and-error problem solving may be covert, and “good judgment” is demonstrated.

*No supervision required.* Therapist serves as a collaborative consultant in the treatment process, providing new information to adjust to a physical disability. New motor learning can be done safely and consistently. Hazardous situations are anticipated and avoided, or help is sought when needed. Mobility, communications, and maintenance of adaptive equipment is self-monitored.

#### 6.0 *Planning without Objects*

Person may consider several hypothetical plans of action and establish abstract criteria for selecting the best plan.