The following guide was taken from the *Activity Planning Book* by Kim Warchol, OTR/L, Caroline Copeland, OT/L, and Chris Ebell, OT/L. It will help you make a quick assessment of someone's cognitive performance when you're determining whether the person should attempt certain activities.

HOW TO ASSESS COGNITIVE FUNCTIONING TO DETERMINE DEMENTIA STAGE

In order to accurately adapt or grade an activity to the individual's cognitive ability level, the person must first participate in a cognitive assessment. I have routinely observed many activity personnel categorizing individuals with dementia in a dementia stage or level. However, when asked how the stage was determined, the response has been vague. Many times the staff member is simply using observation without any clear assessment criteria which can lead to inaccurate results and unsuccessful activity participation. Activity adaptation cannot be fully successful without an assessment of function based on clear criteria.

The activity analysis and gradation provided in this book, is based on the behaviors associated with each dementia stage as identified by Claudia Allen, OTR in her Cognitive Disabilities model and by Dr. Barry Reisberg, in his theory of retrogenesis. Both have designed functional cognitive assessment instruments to accurately determine the stage of dementia in which the individual is functioning. Claudia Allen designed "The Allen Battery" and Dr. Barry Reisberg designed the Functional Assessment Staging Tool (FAST).

Claudia Allen's Cognitive Disabilities model was loosely developed from the developmental theory, identifying abilities that remain at each stage, with a close relationship to chronological behaviors. The theory describes six levels of function with one being the lowest and six the highest. There are five performance modes within each level that further define the behaviors, identifying smaller changes in ability. The Allen Level is determined by administering a variety of battery (testing) tools from her theory. For those who have received training in the Allen theory and are competent in administering the testing tools, use this method to determine the person's dementia stage.

The FAST scale was originally designed by Dr. Barry Reisberg. I have included the Adapted FAST scale in this book, a version that Kim Warchol and Caroline Copeland have modified. This adapted version is more sensitive to behavioral changes and abilities seen at the lower stages. Dr. Reisberg's theory of retrogenesis, means "back to birth" and theorizes that Alzheimer's will cause the brain to deteriorate in an almost reverse order of how it once developed. Therefore, people with Alzheimer's disease can lose abilities in the reverse order that we once developed them from infant to adult. Hence, caregiving strategies and activity gradation can be designed around behavioral characteristics associated with developmental age, while factoring in adult dignity.

Accurate staging requires advanced skill. It is important to receive training on dementia staging in order to be competent and to be able to rule out factors that may interfere in accuracy.

There are two complicating factors that must always be recognized:

1. Individuals can fluctuate within the stages of dementia due to illness, stress, acute medical conditions such as sepsis, infection, vitamin imbalance, depression and others. This change in function may be permanent or temporary depending on the cause. Minor fluctuations in functional cognitive ability occur in all of us as our stress and fatigue levels change. It should be the role of the health care team, including the physician, to determine the extent of the change of function, the expected duration, and the underlying cause.

2. Function is comprised of emotional, physical and cognitive factors. All must be considered when determining the stage of dementia the person is functioning in. For example, an individual may have the ability to function in early stage but the abilities may be lying dormant because the motivation to participate in the activity does not exist due to depression.

CORRELATION OF DEMENTIA STAGES TO ALLEN COGNITIVE DISABILITIES THEORY, ADAPTED FAST SCALE AND DEVELOPMENTAL AGE

Dementia Stage	Allen Level	Adapted FAST Stage	Developmental Age
Early Stage	4.0 to 4.6	4 and 5	4 to 7/12 yr old
Middle Stage	3.2 to 3.8	6 (a through e)	18 month to 3 yr old
Late Stage	2.2 to 3.0	7	12 to 18 month old
End Stage	1.2 to 2.0	8	Infant

ADAPTED FAST SCALE

Adapted by Kim Warchol, OTR/L and Caroline Copeland, OTR/L 2001 from Reisberg, B. (1986). Geriatrics, 41:30-46. Stages 1-3 are direct quotes from the FAST scale developed by Barry Reisberg, M.D. Copyright 1984 by Barry Reisberg, M.D. ***The adapted FAST stage is the highest ordinally enumerated score as determined by caregiver interview and/or observation of performance in ADL and leisure activity.***

FAST Stage with Corresponding Behavioral Characteristics

Stage 1: No objective or subjective functional decrement.

Stage 2: Subjective deficit in recalling names or other word finding and/or subjective deficit in recalling location of objects and/or subjectively decreased ability to recall appointments. No objectively manifested functional deficits.

Stage 3: Deficits noted in demanding occupational and social settings (e.g. the individual may begin to forget important appointments for the first time; work productivity may decline); problems may be noted in traveling to unfamiliar locations (e.g. may get lost traveling by automobile and/or public transportation to a "new" location or spot).

Stage 4 (Early Stage): Deficits in performance of complex tasks of daily life or IADL's (e.g. paying bills and/or balancing checkbook; decreased capacity in planning and/or preparing an elaborate meal; decreased safety in using the stove/oven, decreased capacity in grocery shopping, such as correct purchase of grocery items, decreased capacity to take medications safely, decreased capacity to plan and structure the day, automobile driving capability becomes compromised, carelessness in driving an automobile and violations of driving rules observed). **Able to engage self in familiar recreational and basic ADL activities independently, with good quality-** noted difficulty learning a new activity.

Stage 5 (Early Stage): Deficit in performance in choosing proper attire, and assistance is required for independent community functioning – the spouse or other caregiver frequently must help the individual choose the appropriate clothing for the occasion and/or season (e.g. the individual will wear incongruous clothing); over the course of this stage some patients may also begin to forget to bathe regularly unless reminded. **Requires initial assistance to locate unfamiliar rooms and locations when walking or wheeling-** caregiver must provide training and cues to enable the person to locate rooms in unfamiliar locations (e.g. activity room in the assisted living facility). Able to learn to find unfamiliar rooms and locations with repetitive training. **Able to engage self in highly familiar recreational and basic ADL activities with assist for set-up of supplies and supervision, with fair quality-**understands the goal and object of a highly familiar activity.

Stage 6a (Middle Stage): Requires actual physical assistance in putting clothing on properly – the caregiver must provide increasing assistance with the actual mechanics of helping the individual clothe himself properly and completely (e.g. putting the clothing on in the proper sequence, tying shoelaces, putting shoes on proper feet, buttoning and/or zipping clothing, putting on blouse, shirt, pants, skirt, etc. correctly), with the patient able to assist by demonstrating the ability to use his or her hands to use and manipulate the ADL objects with sequencing assistance. **Requires consistent assistance to locate *unfamiliar* rooms and locations when walking or wheeling –** the caregiver must consistently direct the person to *unfamiliar* locations as the ability to use internal or external cues to self-direct or learn to find an *unfamiliar* location is significantly diminished. **Requires inconsistent cognitive assistance to locate *familiar* rooms and locations when walking or wheeling.** May be attempting to walk to a *familiar* identified location but may not find it (e.g. may lie down on another patient's bed, or sit on another patient's toilet). **Able to use hands to pick up and use ADL and leisure objects however is unaware of**

the activity goal and will need sequencing assistance, even if the activity is familiar– (e.g. can pick up and roll dice without awareness of the goal of the game).

Stage 6 b (Middle Stage): Requires assistance in bathing properly – the patient's ability to adjust bath water temperature diminishes; the patient may have difficulty entering and leaving the bath; there may be problems washing properly and completely drying oneself.

Stage 6c (Middle Stage): Requires assistance with the mechanics of toileting – may forget to flush the toilet and may begin to wipe themselves improperly or less fastidiously when toileting.

Stage 6d (Middle Stage): Urinary incontinence occurs in the absence of infection or other genitrourinary tract pathology; the patient has episodes of urinary incontinence. Frequency of toileting may mitigate the occurrence of incontinence somewhat.

Stage 6e (Middle Stage): Fecal incontinence occurs in the absence of gastrointestinal pathology, the patient has episodes of fecal incontinence. Frequency of toileting may mitigate the occurrence of incontinence somewhat. **Able to use hands to pick up ADL and leisure objects and use *for a very brief amount of time*. Is unaware of the activity goal and will need sequencing assistance, even if the activity is familiar**– (e.g. may pick up brush and put down, may pick up a crayon, touch it to paper and put it down).

Stage 7 (Late Stage): Speech limited to about 6 words in the course of an average day – during the course of an average day the patient's speech is primarily limited to single words such as "yes", "no", "o.k.", "please", or short phrases such as "please don't hurt me", "get away", "get out of here", "I like you", etc. **Ambulation ability diminished** – patients gradually lose the ability to ambulate independently and safely and may require some actual physical support to ambulate. **Requires maximum assistance for dressing, bathing, toileting, grooming** – patients at this stage will no longer reach out and manipulate and use ADL objects however they will assist the caregiver during dressing, bathing, toileting, and grooming by making gross body movements (e.g. standing up during toileting, lifting chin up during shaving, raising arm up during bathing and dressing, etc.). **Able to make gross body movements in leisure activities –** (e.g. hit a balloon, catch a ball, kick a ball).

Stage 8a (End Stage): Intelligible vocabulary limited to a single word, grunts or other sounds in the course of an average day – as the illness progresses the ability to utter even short phrases on a regular basis is lost so that communication becomes limited to a single word or sound as an indicator for all things (e.g. "yes", "no", "la-la", etc.). **Ability to sit up is lost** – the patient loses the ability to sit up without assistance (e.g. patient needs some form of physical brace or support – an arm rest, a belt, a chair back, or other special devices to keep them from falling or sliding). **Requires total assistance for dressing, bathing, toileting and grooming. Able to respond to sensory stimulation activity-** demonstrates subtle responses to stimulation such as breathing rate changes, blinking, turn of head, etc.

Stage 8b (End Stage): Ability to smile is lost – patients are no longer observed to smile although they do manifest other facial movements and sometimes grimace. **Ability to hold head up is lost** –patients may no longer be able to hold up their head unless the head is supported.