

GERINOTES

Academy of Geriatric Physical Therapy, American Physical Therapy Association

President's Message

Editor's Message

Dementia and Cognitive Issues:
A Continuing Education Initiative for *GeriNotes*

Continuing Education Module:
Dementia & Cognition in the Aging Adult

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Submission Form for CE Credits

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Screening for Delirium in Older Adults

Slow and Low; My Patient Has Dementia

Cognitive Bell Curve

Pain Assessment and Management in People
with Advanced Dementia

Policy Talks About Medicare and Patients with Cognitive Disorders

Giving Up the Keys...

WCPT Congress May 2015

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IN HONOR/MEMORIAM FUND

Each of us, as we pass through life, is supported, assisted and nurtured by others. There is no better way to make a lasting tribute to these individuals than by making a memorial or honorary contribution in the individual's name. The Academy of Geriatric Physical Therapy has established such a fund which supports geriatric research. Send contributions to:

The Academy of Geriatric Physical Therapy | 3510 East Washington Avenue | Madison, WI 53704

Also, when sending a contribution, please include the individual's name and any other person you would like notified about your contribution. If you are honoring someone, a letter will be sent to that person, and if you are memorializing someone, the surviving family will be notified of your contribution.

In the field of geriatric physical therapy, we receive many rewards from our patients, associates, and our mentors. A commemorative gift to the Academy of Geriatric Physical Therapy In Honor/Memorial Fund is a wonderful expressive memorial.

PRESIDENT'S MESSAGE: NATIONAL QUALITY FORUM AND DEMENTIA

William H. Staples, PT, DHS, DPT, GCS, CEEAA



This spring I had the pleasure of being asked to serve on the National Quality Forum's Alzheimer's Disease and Related Dementias (ADRD) Com-

mittee for a meeting in Washington, DC. This was a multi-stakeholder meeting to receive input on priority setting for health care performance measurement. This committee was set up to help establish some broad priorities in health care policy for diagnosis and treatment for people with dementia. In addition to myself, the committee consisted of several physicians (mostly neurologists); researchers from various arenas including geropsychology and public health; nurse practitioners; and representatives from the AARP, pharmaceutical companies, and the Alzheimer's Association. Members from Health and Human Services (HHS) were also in attendance as visitors.

Even the thought of having a physical therapist at the table to discuss dementia was something new for this group. It was a pleasure to represent physical therapists at this meeting, especially those involved in caring for those with dementia. The goal was to prioritize measurement gaps by adding expertise to help identify existing research, measures, and resources to (1) identify what performance measure gaps exist, (2) provide feedback on a conceptual framework to assess measurement needs, and (3) provide recommendations for prioritizing performance measurement efforts related to the ADRD population and their caregivers. The performance measures were to be large community type outcomes, not individualized measures. For example, when we discussed "memory care," there are no distinct

researched measures or deliverables, meaning how would a person discern that one facility or method of care for a person with dementia is better than another. Recommendations will eventually be sent to HHS to help set policy guidelines.

The multi-stakeholder group had many lively discussions on areas of importance to each participant. The physicians were strongly sided on the idea that early diagnosis is of utmost importance. They want to create a standardized core dementia work-up or assessment for those people who show signs and symptoms of dementia. The non-physicians at the table added that diagnosis was a starting point and that many issues were close behind, including safety, which is an item that I strongly pushed as an overlying concept. Safety issues that need to be addressed and measured included caregiver training and support, advocacy, shared decision making, caregiver burden and capacity, community resources, community and home environmental safety, and risk for abuse including physical, sexual, and/or financial. These are great ideas with which to start the process of measuring these issues. Committee members stressed the importance of experience of care measures and the need for systematic assessment of the person with dementia and the family/caregiver in the early stages of dementia. We also discussed the lack of willingness and/or capacity of the current health care system to provide quality care for the ADRD population. The role of health literacy and cultural competency was also discussed in relation to engaging families and caregivers.

The concept of "dementia capable" health care systems and communities was reiterated throughout the meeting as an aspirational goal for the future of health care and community systems. One great example is the *ACT on Alzheimers* that is a volunteer driven, state-

wide collaboration preparing Minnesota for the impact of Alzheimer's disease and related dementias (See <http://www.alztonalz.org/toolkit>). I would recommend that people review this site to see where their state stands in comparison. I will also have the Academy send out a blast email for those of you involved with Alzheimer's care when the draft report and the accompanying environmental scan of measures for the "Prioritizing Measure Gaps for Alzheimer's Disease and Related Dementias" project is available on the National Quality Forum web site for public comment.

Compassion for people with dementia was quite apparent throughout the two-day inter-professional meeting. I was glad to get out of my physical therapy "silo" and listen to other health care professionals give their thoughts and ideas about how to make dementia care better. But best of all, it was great to be included.

EDITOR'S MESSAGE

DEMENTIA AND COGNITIVE ISSUES: A CONTINUING EDUCATION INITIATIVE FOR *GERINOTES*

Meri Goehring, PT, PhD, GCS



Each year, the *GeriNotes* Editorial Board meets to decide upon content initiatives for the following calendar year. We have our previous editor, Melanie

Sponholz to thank for starting up the continuing education module for our members. This has been a well-received benefit for our members who may wish to apply for continuing education units. Please see the following pages for information on how to apply for continuing education credit.

The topic of dementia and cognitive issues is important to our members and the patients and/or clients they serve. This is specifically why the *GeriNotes* Editorial Board chose this topic for the November 'focus' issue where continuing education credit is offered. When your patients have memory loss or dementia, their perceptions, relationships,

and priorities inevitably shift. However, certain types of dementia can be treated or reversed if caught in time. To properly treat patients, we need to understand what is and what isn't normal memory loss, the causes of cognitive decline, and how to identify the different types of dementia. The more you understand about dementia, the more you can do to improve your patients' outcomes and help them preserve their sense of control. This issue attempts to address some of these issues. Certainly, there is more information than can possibly be included in this issue, so don't expect this to be a complete review of cognition and dementia in the older adult. It is simply a collection of articles written by therapists in the field who have chosen to review certain areas of this topic. I think they have done a wonderful job.

I welcome your thoughts and look forward to the input of those who choose to apply for continuing education units. The examination questions were developed by the authors of the articles in this issue, so please carefully

read the articles presented before you attempt to take the examination.

Our editorial board will be meeting at the Combined Sections Meeting in February in Indianapolis, so if you have ideas for further focus issues and/or continuing education topics, please let me know. November and December holidays offer a time for reflection, so I hope you will consider what you would like to see in future *GeriNotes* issues. As this issue brings to a close my first full year as editor, and as I embark on a new year in 2015, your feedback is needed and appreciated.

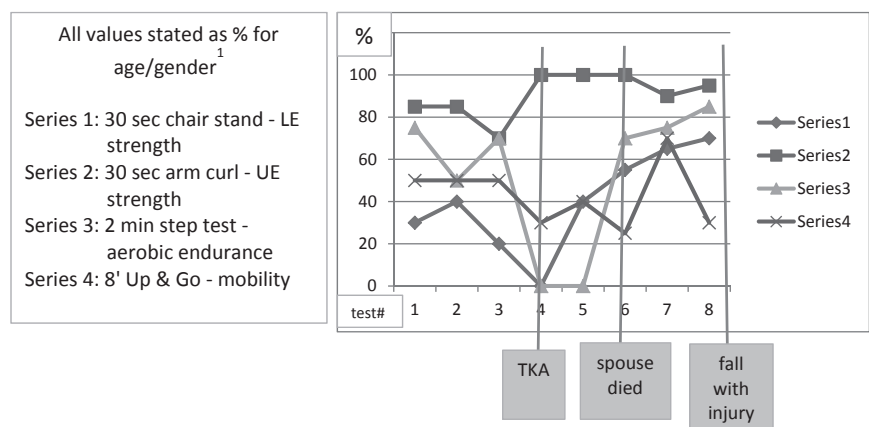
I wish everyone who is a member of the Geriatric Academy a joyful and safe holiday season!

Meri Goehring is an Assistant Professor in the Physical Therapy Program at Grand Valley State University and works as a clinician at Spectrum Center for Acute Rehabilitation at Blodgett Hospital in Grand Rapids, Michigan.

ERRATA

In the September 2014 issue of *GeriNotes*, the article, Fitness Maintains Function with Changes in Health Condition and Stress: A Case Study by Kathryn K. Brewer, PT, GCS, Med, CEEAA included the following table. Unfortunately, the side box with the series definitions was truncated and only 2 of the 4 were printed. Please find the complete table below; we apologize for the error.

Table 2. Summary Data



DEMENTIA AND COGNITION IN THE AGING ADULT: A CONTINUING EDUCATION MODULE FOR THE ACADEMY OF GERIATRIC PHYSICAL THERAPY

OVERVIEW

Physical therapists and physical therapist assistants who work with the aging adult population will encounter many patients who may have some form of cognitive change and/or dementia. These patients may or may not have a definitive diagnosis regarding the type of dementia and/or cognitive change. Physical therapy professionals working with these patients may need to perform certain tests and measures, and work with other health care professionals to best serve these clients. This continuing education module includes information for physical therapy professionals regarding the various forms of cognitive problems that may occur, and some of the methods of evaluation and/or treatment of these individuals.

MODULE CHAPTERS

- I. Screening for Delirium in Older Adults
- II. Slow and Low; My Patient Has Dementia
- III. Cognitive Bell Curve
- IV. Pain Assessment and Management in People with Advanced Dementia
- V. Policy Talks About Medicare and Patients with Cognitive Disorders
- VI. Giving up the Keys

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REFERENCE LIST

References can be found at the end of each chapter in the module.

OBJECTIVES

The reader will be able to:

1. Identify the predisposing and precipitating risk factors for delirium in older adults.
2. Describe the clinical presentation of delirium and dementia in older adults.
3. Differentiate between the signs of delirium and dementia.
4. Describe a valid clinical screening tool for delirium.
5. Implement communication and care strategies into treatment interventions.
6. Understand some of the issues regarding Medicare payment for individuals with cognitive problems.
7. Know some of the important issues regarding driving safety in the older adult.

TARGET AUDIENCE

Physical Therapists and Physical Therapist Assistants

CONTACT HOURS/CONTINUING EDUCATION UNITS

Completion of the CE Module is equivalent to 4 contact hours, which converts to .4 Continuing Education Units.

CONTINUING EDUCATION CERTIFICATE OF COMPLETION

A Continuing Education certificate will be provided to each participant after successful completion of the course requirements (post-test and module evaluation) and payment of a processing fee. The Geriatric Academy of Physical Therapists is a recognized component of the American Physical Therapy Association. The Geriatric Academy has not

applied to any state licensure agency for prior approval of this course. The module has all the components (content, objectives, qualified instructors, reference lists, and post-test) that will allow participants to submit the certificate of completion to meet CEU requirements in most states. Please seek individual approval for this course from the states of Texas, Ohio, Oklahoma and Nevada.

HOW TO SUBMIT CEUS

To obtain CEUs for this continuing education module, participants must complete the post-test as well as the evaluation forms on the following pages. A processing fee of \$40.00 for Geriatric Academy members and \$80.00 for non-members is required. To apply for CEUs, send the post-test and the evaluation form to the Academy of Geriatric Physical Therapy along with payment. Applications must be postmarked no later than March 31, 2015. Upon submission of materials and a passing score of 80% or higher on the post-test, the Academy will mail you a continuing education certificate for .4 CEUs. Those with incomplete submissions will be notified via email and given the opportunity to re-take the exam.

Dementia and Cognition in the Aging Adult:

A Continuing Education Unit Post-test

Instructions: To obtain CEUs for this continuing education module, participants must complete the post-test as well as the evaluation form on the next page. See specific instructions for submission of the completed post-test on the next page. Please circle the correct answer for each question. There is only ONE correct answer for each question.

1. Which of the following is a predisposing factor for delirium in older adults?
 - A. Surgery
 - B. Sleep deprivation
 - C. Visual impairment
 - D. Constipation
2. Which of the following clinical features assessed on the Confusion Assessment Method (CAM) would be most helpful in differentiating delirium from dementia?
 - A. Disorientation
 - B. Memory impairment
 - C. Perceptual disturbance
 - D. Acute onset
3. What is a key feature of the hyperactive subtype of delirium that differentiates it from the hypoactive subtype?
 - A. Psychomotor agitation
 - B. Inattention
 - C. Disorientation
 - D. Altered sleep-wake cycle
4. With which delirium subtype are older adults more likely to present than younger adults?
 - A. Hyperactive
 - B. Hypoactive
 - C. Mixed
 - D. There is typically no difference in clinical presentation between younger and older adults
5. Which of the following statements about the Confusion Assessment Method (CAM) is true?
 - A. The CAM is a valid screening tool for both delirium and dementia
 - B. The CAM should only be administered by trained psychiatrists
 - C. The CAM can be used by physical therapists to diagnose delirium
 - D. The CAM should be completed based on observation of the patient during a structured interview
6. Which of the following are tools used to stage individuals with dementia:
 - A. Allen Cognitive Level Screen
 - B. Global Deterioration Scale (GDS)
 - C. Senior Gems
 - D. All of the above
7. What is the latest stage of dementia in which patients can still demonstrate carryover of new information?
 - A. Stage 2 because they are frustrated and mask everything
 - B. Stage 3 because they get lost frequently
 - C. Stage 4 because their brain cells have significantly deteriorated
 - D. Stage 6 because they wander away and have outbursts of frustration
8. Select the common symptom of dementia.
 - A. Language
 - B. Memory Loss
 - C. Motor Control
 - D. All of the above
9. One of the first most common signs of dementia is:
 - A. Abnormal gait
 - B. Hallucinations
 - C. Memory loss
 - D. Non compliancy

10. The most common type of dementia is:
 - A. Alzheimer's
 - B. Lewy Body
 - C. Vascular
 - D. None of the above
11. What effective treatment strategies will most benefit residents with dementia?
 - A. Avoid distractions
 - B. Offer only two choices and no more
 - C. Talk to them, not at them
 - D. All of the above
12. If a patient does not understand what you are asking,
 - A. Allow patient 90 seconds to process
 - B. Give up and let someone else try
 - C. Repeat the information again
 - D. Talk into patient's ear so they can hear better
13. What is the key to a family member's ability to care for a loved one with dementia?
 - A. Accept the disease
 - B. Discuss your feelings with your friends
 - C. Join a support group
 - D. Scream at the person until they get it
14. Communication is crucial for patients with dementia. The best way to approach a dementia patient is:
 - A. From the back and tap them on the shoulder, then turn them around to see you
 - B. From the dominant side and talk close to their ear so they can hear you better
 - C. From the front, low, with a smile and speaking clearly
 - D. From the side while grasping their hand
15. The severity of symptoms displayed by patients with dementia depends on which part of the brain is affected. Which part of the brain shows the least effects?
 - A. Frontal
 - B. Hippocampus
 - C. Parietal
 - D. Temporal
16. A Pain Assessment in Advanced Dementia (PAINAD) score of 1/10 indicates:
 - A. Pain is not likely present
 - B. Pain is very mild
 - C. One pain behavior is observed
17. Of the following, which behavior category is not represented on the PAINAD:
 - A. Breathing
 - B. Verbalization
 - C. Facial Expressions
 - D. Avoidance Behaviors
 - E. Consolability
18. Which is not a common pain site in all adults:
 - A. Head
 - B. Chest
 - C. Abdomen
 - D. Back
 - E. Foot
19. The statement, "payment may not be made under [Medicare] part A or part B for any expenses incurred for items or services – which are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member." comes from:
 - A. The APTA Code of Ethics
 - B. The Federation of State Boards Model Practice Act
 - C. The Social Security Act

20. The Jimmo versus Sebelius lawsuit was brought by 4 individuals and 5 organizations alleging that Medicare:
- Wrongly denied their benefits based on a lack of improvement
 - Wrongly denied their benefits because they wouldn't pay for physical therapy services
 - Wrongly denied their benefits because they didn't pay for home health aides
21. The settlement between the Court and Centers for Medicare and Medicaid Services (CMS) expanded the Medicare benefit by adding a new category of covered services.
- True
 - False
22. Maintenance therapy is defined as:
- Skilled therapy services necessary for the performance of a safe and effective maintenance program
 - Skilled therapy to maintain the patient's current condition or prevent or slow further deterioration
 - Both A & B
23. Skilled therapy services are defined as:
- A service that is so inherently complex that it can be performed safely and/or effectively only by or under the general supervision of a skilled therapist.
 - The development, implementation, management, and evaluation of a patient care plan based on a physician's orders
 - Activities that require the specialized skills, knowledge, and judgment to ensure the effectiveness of treatment goals and ensure medical safety
 - A and B
 - A and C
 - All of the above

Dementia and Cognition in the Aging Adult

CE UNIT EVALUATION FORM

Please rate the following questions 1= strongly disagree 5= strongly agree

1. The course material met the stated objectives	1	2	3	4	5
2. The information will be useful in my practice	1	2	3	4	5
3. The articles were well written and informative	1	2	3	4	5
4. The authors were knowledgeable for this topic	1	2	3	4	5
5. I am satisfied with this module as a CE course	1	2	3	4	5
6. I would like future CEU courses in <i>GeriNotes</i>	1	2	3	4	5

Please offer any additional comments below: _____

Submission for Continuing Education Credits

To obtain CEUs for these continuing education participants must complete the post-test as well as the evaluation form on this page. Return pages 6-8 with a processing fee of \$40.00 for AGPT members and \$80.00 for non-members. Submission must be post-marked no later than March 31, 2015. Upon submission of materials and a passing score of 80% or higher, the Academy will mail you a CEU certificate for .4 units. Those submitting incomplete material will be contacted via e-mail. (please print)

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SCREENING FOR DELIRIUM IN OLDER ADULTS

Laura White, PT, DScPT, GCS

LEARNING OBJECTIVES

The reader will be able to:

1. Identify the predisposing and precipitating risk factors for delirium in older adults.
2. Describe the clinical presentation of delirium in older adults.
3. Differentiate between the signs of delirium and dementia.
4. Describe a valid clinical screening tool for delirium.

INTRODUCTORY CASE

Mrs. Johnson is a 79-year-old woman who resides in a long-term care (LTC) facility. Three days ago, Mrs. Johnson fell while walking in her room and she fractured her left radius. She was hospitalized for two days, during which time she received medical and orthopedic evaluations. She was diagnosed with dehydration and given fluids intravenously. Mrs. Johnson was prescribed hydrocodone as needed for pain. Her left forearm, wrist, and hand were immobilized in a splint, and she was discharged back to her residence. You have been asked to evaluate and treat Mrs. Johnson due to her current decline in mobility. Past medical history includes mild dementia due to probable Alzheimer's disease, glaucoma, and hypertension. Current medications include hydrocodone (as needed), rivastigmine, metoprolol, and furosemide. The nursing staff reports that Mrs. Johnson has slept most of the time since her return from the hospital. She was easily aroused this morning and ate her breakfast, but has since fallen asleep again. When attempting to perform the physical therapy (PT) evaluation with Mrs. Johnson at mid-morning, you note that she is difficult to arouse and quickly falls asleep if auditory and tactile stimulation cease. During the brief period of time in which Mrs. Johnson is aroused, you are able to determine that she is disoriented to person, place, and time. As the primary physical therapist in this facility, you are familiar with Mrs. Johnson's daily routine and note

that she is typically active at this time of the day. You question if this change in arousal level might be a side effect of the pain medication. You and the registered nurse (RN) check the medication record and note that she has not been given hydrocodone since her discharge from the hospital one day ago. You begin to wonder if Mrs. Johnson is experiencing an episode of delirium.

Questions To Consider:

1. Other than a change in level of consciousness and disorientation, what are the signs and symptoms of delirium?
2. What are the risk factors for delirium with which Mrs. Johnson presents?
3. How are the signs and symptoms of delirium and dementia different?
4. What clinical tools can be used to screen for delirium?

OVERVIEW OF DELIRIUM IN OLDER ADULTS

Delirium is a serious neuropsychiatric syndrome that is quite prevalent in older adults. The prevalence of delirium varies among older adult populations, with acutely ill and frail older adults being most affected.¹ Prevalence ranges from 10% in community-dwelling adults aged 85 years and older without dementia to 70% to 87% in older patients in intensive care units.¹⁻³ Despite the high prevalence, delirium remains undiagnosed or misdiagnosed in many cases. Lack of diagnostic accuracy in delirium in older adults is a serious problem, as delirium is often caused by a serious underlying medical condition, with further diagnostic workup indicated in persons who present with signs of delirium.² Furthermore, duration and severity of delirium are associated with significant negative patient outcomes, including increased risk for death, institutionalization, and dementia.^{2,4}

Clinical Presentation

Physical therapists who work with older adults should have sufficient

knowledge of the clinical presentation of delirium in order to recognize the signs and symptoms in their patients and make appropriate referrals when delirium is suspected. Although the clinical presentation of delirium can be quite varied, the key clinical features include acute and fluctuating changes in cognitive function, level of consciousness, and attention.^{5,6} An individual with delirium often presents with fluctuations in level of consciousness that may range from hyper-alert (ie, overly sensitive to environmental stimuli) to coma (ie, unarousable). Inattention refers to a decreased ability to sustain or alternate attention to external stimuli. Acute changes in cognition often include disorganized thinking, in which the patient presents with speech that is incoherent, illogical, or switches from subject to subject. An individual with delirium also frequently presents with disorientation, memory impairment, psychomotor agitation or retardation, and perceptual disturbances that may fluctuate throughout the day.^{5,6}

Delirium is classified into 3 clinical subtypes based on motoric signs: hyperactive, hypoactive, and mixed.^{7,8} The hyperactive subtype is characterized by psychomotor agitation, defined as excessive and purposeless mental and motor behaviors. Examples of such behaviors include restlessness, frequently changing positions, constantly tapping fingers, and combativeness. The hypoactive subtype is characterized by psychomotor retardation, defined as general slowing of mental and motor behaviors. Individuals with hypoactive delirium typically present with slowed or absent responses to verbal stimuli, generalized slow movement, and staring into space. Individuals with the mixed subtype fluctuate in their mental and motor behaviors, demonstrating features of both hyperactive and hypoactive subtypes. Older adults are more likely to present with the hypoactive subtype of delirium than younger adults.⁷ Geriatric physical therapists should be very knowledgeable of the characteristics of this subtype, as

hypoactive delirium may not be as easily identified as the hyperactive subtype. Unfortunately, health care providers may mistakenly attribute the signs of hypoactive delirium to normal aging, sensory loss, or a disease process.

Risk Factors

The risk factors for delirium may be classified as either predisposing or precipitating factors. Predisposing factors are intrinsic characteristics that increase an individual's vulnerability to develop delirium.⁹ Examples of predisposing factors in older adults are pre-existing cognitive impairment, hearing impairment, and immobility. Precipitating factors are temporal events that increase the vulnerable individual's risk of developing delirium. Examples of precipitating factors are infection, hypoxia, and alcohol withdrawal. See Table 1 for lists of other predisposing and precipitating factors. Because delirium results from an interaction between predisposing (vulnerability) factors and precipitating (clinical) factors, physical therapists and other health care providers should identify those patients who are predisposed to develop delirium and attempt to prevent the occurrence or severity of precipitating factors in these individuals, if possible.

DELIRIUM SCREENING

Because delirium is often under- or misdiagnosed in older adults, physical therapists should not assume that their older patients with delirium would have already been diagnosed at the time of the

physical therapy examination, regardless of the setting. Physical therapists should screen for delirium in their older patients who are at high risk based on the information provided in the medical chart and patient/caregiver interview. For example, in the introductory case, Mrs. Johnson is considered at high risk for developing delirium, as she presents with at least 3 predisposing factors (ie, advanced age, dementia, and visual impairment) and 3 precipitating factors (eg, pain, narcotic drug use, and dehydration). Patients who do not have a significant number of predisposing and precipitating factors, but who demonstrate any signs consistent with delirium, should also be screened. In the case of Mrs. Johnson, even if she did not have multiple predisposing and precipitating factors, examination findings such as stupor and disorientation should be "red flags" to the physical therapist that further screening for delirium is indicated.

Standardized delirium screening tools have been validated for use in several geriatric health care settings.^{6,10,11} One of the most commonly used tools is the Confusion Assessment Method (CAM), which was developed for use by trained non-psychiatric clinicians.⁶ The CAM can be used for both screening and diagnosis of delirium, but should not be used as a measure of delirium severity. The CAM is a brief screening tool that can be completed in 5 minutes based on observation of the patient during a structured interview. The tool includes two parts: an assessment instrument that contains items related to 9 clinical

features of delirium and a diagnostic algorithm that focuses on the 4 features that have the greatest ability to differentiate delirium from other psychiatric diagnoses (eg, depression and dementia). These 4 differentiating features are: (1) acute onset and fluctuating course, (2) inattention, (3) disorganized thinking, and (4) altered level of consciousness. The diagnosis of delirium based on results of the CAM requires the presence of *both* features 1 and 2, and *either* feature 3 or 4. Although interprofessional health care teams may choose to screen and diagnose for delirium using a variety of methods or protocols, the physical therapist can screen for delirium by administering the assessment instrument section of the CAM and reporting the findings to the medical specialist, who would then use the criteria of the diagnostic algorithm to determine the diagnosis. See Table 2 for the list of 9 clinical features of delirium assessed on the CAM.

Delirium and dementia

A complex relationship exists between dementia and delirium. Pre-existing cognitive impairment is a predisposing factor for delirium, and a history of delirium increases the older adult's risk of developing dementia.^{6,12} Signs and symptoms of delirium and dementia may overlap in a patient with both neurologic disorders. Differentiating between the signs and symptoms of delirium and dementia can be challenging and requires the physical therapist to perform a thorough examination of the

Table 1. Common Predisposing and Precipitating Factors for Delirium

Predisposing Factors	Precipitating Factors
Age ≥ 65 years	Surgery (eg, orthopedic, cardiac)
Pre-existing cognitive impairment	Infection
Sensory impairment	Dehydration
Immobility	Hypoxia
Decreased oral intake	Drugs (eg, sedative hypnotics, narcotics, drug or alcohol withdrawal)
Use of multiple psychoactive drugs	Pain
	Primary neurologic disease (eg, stroke, meningitis)
	Prolonged sleep deprivation

Table 2. Delirium Clinical Features Assessed in the Confusion Assessment Method (CAM)

Clinical Features
Acute Onset
Inattention
Disorganized Thinking
Altered Level of Consciousness
Disorientation
Memory Impairment
Perceptual Disturbances
Psychomotor Retardation
Altered Sleep-Wake Cycle

patient's mental status, including a complete history. Memory loss and disorientation are common to both conditions.¹² However, an acute onset with fluctuating course is a unique feature of delirium that differentiates its clinical presentation from that of dementia. It is important to note that, although diagnosis of delirium and dementia are outside the scope of physical therapy practice, the physical therapist should be vigilant in identifying any significant change in mental status in any patient, regardless of baseline function. A thorough understanding of the clinical presentation of both delirium and dementia will aid the physical therapist in determining when changes in mental status warrant referral to another health care provider.

Case of Mrs. Johnson

In the introductory case, Mrs. Johnson presents with disorientation and an altered level of consciousness. Upon further examination of the patient's mental status, the physical therapist should determine if Mrs. Johnson has a history of disorientation due to her pre-existing dementia. Altered level of consciousness is not a typical sign of early dementia, so Mrs. Johnson's clinical presentation of stupor should be assessed further. Mrs. Johnson has several predisposing and precipitating factors for delirium, so formal screening with a standardized tool such as the CAM is warranted to identify and describe all of the clinical features of delirium with which Mrs. Johnson presents. Results of the screening should be communicated to the patient's other health care providers so that further diagnostic testing and intervention strategies can be initiated.

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BONE MINERAL DENSITY AND T-SCORE

Everyone knows that a T-score is used to determine whether or not someone has normal bone mineral density, osteopenia, or osteoporosis. T-scores are shown below:

+1 to -1 Normal
-1 to -2.5 Osteopenia
Over 2.5 Osteoporosis

But, what does the T stand for in T-score?

Go to page 26 for the answer.

SLOW AND LOW; MY PATIENT HAS DEMENTIA

Nancy Stuhler, PTA

LEARNING OBJECTIVES

After reading and reviewing this article, you will be able to:

1. Define dementia and identify the types.
2. Describe the symptoms of dementia.
3. Discuss the stages of dementia
4. Implement communication and care strategies into treatment interventions.

INTRODUCTION

I have gained a strong passion for my patients with dementia and want to advocate for them. I hope you will learn some new information and strategies to use in caring for your patients with dementia. This article was written primarily for therapists, nurses, and CNAs, but any caregiver could benefit.

In 2005, approximately 16 million Americans had dementia. Approximately 5% to 13% of Americans over 65 years of age had Alzheimer's disease and half of all people over 80 years of age develop Alzheimer's disease. Alzheimer's disease causes 50% to 60% of all dementias. Dementia is considered the seventh leading cause of death.^{1,2}

DEFINITION

In Latin, dementia means "away mind."³ Dementia develops when the parts of the brain that are involved with learning, memory, decision making, and language are affected by one or more of a variety of infectious diseases.² Dementia is a broad term that refers to loss of the brain's ability to function in multiple ways in a person who is otherwise awake and alert.⁴ Generally, dementia is the loss or impairment of the ability to think, reason, or remember. Dementia can mean different things to different people. To the patient, it can mean frustration. To the family of a loved one with dementia, it can mean pain, loss, and heartache.

TYPES OF DEMENTIA

Dementia is a global term, as there are several types of dementia. This article will address the most common types of dementia that I have experienced in my 18 years in PTA practice. I have learned that the different types of dementia all have the same basic deficits in memory, speech, and coordination, but the effects may be different for each person.

I have also learned that some types of dementia can be treated, such as dementia caused by substance (drugs and alcohol) abuse, medications, vitamin deficiency, thyroid issues, and tumors. These types of dementia have treatment interventions that can have a good prognosis. Severe depression can cause dementia type symptoms. However, individuals with the dementia diagnosis that I am discussing in this article do not have a good prognosis and results in death. Unfortunately, although the progress of some types of true dementia can be slowed, for some, there is no cure at this time.²

Alzheimer's disease

Approximately 50% of dementia cases are of the Alzheimer's type.^{1,2} Alzheimer's disease was named after a German physician, Alois Alzheimer, in 1907.³ Alois identified that initially only memory loss was noticeable, followed by difficulties with language, word finding, and the ability to learn new skills, especially math. Although reading might have been one of the patient's passions, he/she began to avoid reading or watching TV because it was difficult to comprehend what was being read or to understand what was going on in his/her favorite TV show. Family members have a difficult time relating to these changes. As time progresses, so does the lack of motor control, further impacting the patient's gait, putting them at risk for falling. The patient begins to shuffle, stoop, and then becomes clumsy. In ad-

dition, patients at this point often get lost easily and become more forgetful.

Toward the later stages of Alzheimer's disease, patients become incontinent, frequently fall, no longer recognize familiar people, and only speak with a minimal vocabulary. Generally speaking, changes related to the onset of Alzheimer's disease are noted over a 6-month to one year period and lasts approximately 8 to 12 years; however, some individuals may progress as quickly as 3 to 4 years or as slowly as up to 15 years with plateau throughout.^{1,3} Most individuals are often not diagnosed with dementia until the later stages, as the initial small changes of dementia are often missed by physicians and families who may consider them part of the aging process. Alzheimer's disease is diagnosed through observation of symptoms, computerized tomography (CT) scan, and/or magnetic resonance imaging (MRI). It is confirmed with an autopsy. The cause is unknown, there is no way to stop its progression, and there is no cure.

Vascular Dementia

Approximately 20% of individuals diagnosed with dementia have vascular dementia. Vascular dementia is more common in men and is caused by multiple large or small strokes. Strokes can cause a decrease in the volume of oxygen to the brain resulting in brain damage and a functional decline of the individual. The severity of the strokes depends on how much oxygen reaches the brain and the length of time the brain was without the oxygen.⁴ The part of the brain affected will determine what function, memory, speech, and/or coordination that is lost. Vascular dementia is characterized by a sudden onset and can be diagnosed by an MRI. Vascular dementia impacts the vascular system causing changes, such as high blood pressure, frequent falls, and behavioral changes. The level of functional decline and prognosis for recovery with this

type of dementia varies depending on its severity. Vascular dementia generally occurs in a “step-like progression,” versus gradually like other types of dementia. A patient may experience a plateau followed by another stroke resulting in a significant functional decline.^{1,3} However, if the multi-strokes can be stopped, decline can be limited. Sometimes the progression of the disease cannot be stopped. Patients with vascular dementia have good days and bad days marked by shifting energy levels and emotional instability. Years ago, vascular dementia was considered “hardening of the arteries” of the brain. After years of medical research through autopsies, this has been proven wrong since there was no evidence that circulation was an issue.³

Lewy Bodies

Lewy Bodies dementia represents about 10% of dementia cases and is marked by abnormalities in the brain that can only be confirmed during autopsies. It was first described in 1923 by Fredrich Lewy. However, it was not linked with dementia until 1961. Lewy Bodies dementia has a gradual progress causing stiffness, rigidity, slow movement patterns, poor balance, and general dementia symptoms resulting in frequent falls. Patient symptoms often mimic that of Parkinson’s disease and tend to be accompanied by nightmares or insomnia. Depression is also common along with fine motor problems that impact a patient’s swallowing and use of hands.³ At this point in the disease process, a patients’ abilities start to fluctuate. What they could do yesterday, they might not necessarily remember or be able to do today.⁵

PARTS OF THE BRAIN

Frontal

The frontal lobe of the brain is considered the “Executive Control Center.” The frontal lobe controls the ability to make choices. Patients with dementia are challenged with being able to multi-task and starting and stopping an activity.⁶ They display signs of impulsive behavior along with loss of control of generally acceptable behavior. A patient will begin to say and do things that are totally unexpected. They may be rude, mean, or just make generally odd statements. They become inappropriate with their conversations and/or actions relating to food, drink, sex, and emotions in general.^{1,5} I have heard family members

make statements like, “that is not my mother.”

Temporal Lobe

The temporal lobe of the brain controls language. The impact on this area of the brain causes many challenges for the patient because so much is lost. The left side of the brain is affected more than the right. The left side controls formal language skills, word finding, definitions, etc, while the right side is responsible for creating social chit chat, forbidden words, along with music and rhythm.⁷ When the temporal lobe is affected, patients are no longer able to read and comprehend language. Stories from family members no longer make any sense to them. They cannot find the words they want to say, therefore, they state what they think is correct. However, to others it appears as though they are selecting totally random words. Although you might experience patients who are able to clearly state curse words, you might also experience those who become fixated on a few key phrases or who speak clearly, with an increasing use of more nonsense words.^{5,6,8}

Hippocampus

The hippocampus is the learning and memory center of the brain. When this area is damaged, it is not only difficult to remember things; it is difficult to learn new things.^{6,7} I have learned that anything new must be introduced no later than Stage 4 on the GDS scale, which will be discussed in more detail later in this article.

Occipital Lobe

The occipital lobe is the vision center of the brain. When this portion of the brain is affected, it decreases a patient’s ability to relate vision to what they know.⁶ I have seen a patient unable to accurately pick up a brush to brush his/her hair, and grab the TV remote instead. The peripheral vision can be impacted resulting in patients being apprehensive about someone approaching them from the side because they cannot see the person coming.⁵

Sensory and Motor

The sensory and motor section of the brain is valuable for safety. When patients are unable to control their senses, they are placed in jeopardy. These pa-

tients may not know that a cup of tea is too hot for them to drink. They could also burn themselves during a shower. It may also cause changes in their gait pattern resulting in them trying to step over things that to them look like a step down, but is really only a change in the pattern of the floor. The reverse could also occur. They might think it is just a change in the pattern of the floor, but is actually a step down, which could result in a fall and a potentially broken bone. When the brain is no longer able to process what is happening, these patients need constant supervision.

BEHAVIORS-SYMPTOMS

Behaviors are not always under control in a patient who has dementia. Dementia damages the brain, so the person cannot make sense out of what he sees and hears.^{3,8}

Some general behaviors are common with most patients. They:

- will respond with a “no” if they don’t remember or understand something
- will try to mask their symptoms because they are frustrated that they can no longer manage their daily routines
- will frequently get angry and blame others, stating that someone else “took” their glasses and that they did not misplace them
- will become skillful at hiding their memory loss until a crisis occurs
- will feel lost, worried, or anxious
- will be set in their routines

Outbursts of frustration and forgetfulness are the first behaviors the family sees. I try to reassure the patient that I understand he/she is not just being stubborn. Things that once were familiar now feel unfamiliar. These behaviors day in and day out can be extremely upsetting and exhausting to both the patient and the caregiver. All behaviors have an underlying reason. My goal is to get to that reason, address it, and continue on. If I can stop the behavior by managing the triggers, the situation could be less

stressful for everyone. As medical professionals, we need to assess every situation from the patient's point of view.^{3,7}

In summary, most variations of dementia have similar symptoms of memory loss, language issues, and motor control. Quite often, patients may experience hallucinations and delirium. Hallucinations are sensory experiences that seem real to the person having them but that others do not experience. They tend to see and hear things that are not there, but they truly believe they are there.³ They become fearful and paranoid. Perhaps, if they were bitten by a dog as a child and now they believe they see a dog in the room, they may have an outburst. A delusion is an untrue idea held by one person. The challenge to the caregiver comes because patients with dementia may repeatedly remember a false idea, but they are unable to remember real information.³ There are many causes of these conditions, but the most common are reactions to medications; medical issues such as blood sugar, thyroid, stroke, and heart attack; postsurgery infections; and withdrawal from alcohol and drugs.

Wandering is a true concern for all involved. Patients may have no idea where they are, and once they realize they are lost, fear and anxiety take over. Patients often wander because they are experiencing boredom, general restlessness, or they are searching for exercise.³ For the most part, they need to be stimulated.⁸ If a patient can still understand, create a card with instructions to remain calm and call home. Remember to include important phone numbers. If a loved one is at that level, provide a bracelet including "memory impaired" with the name and emergency number on it.³

CAREGIVER

Advice for family caregivers:

- take care of yourself
- maintain good nutrition and exercise
- know how you feel and understand why you feel that way
- manage anger, stress, and frustration
- ask others for help
- seek support groups
- take one day at a time
- discuss your feelings with family, friends, and professionals, if needed
- accept the disease
- spend time with friends without guilt
- laugh and enjoy life

COMMUNICATION

Communication starts as you begin to approach the person with dementia. Your nonverbal body language, facial expressions, and attitude can set the tone for each interaction you have with a person with dementia. It is not just what you say, but how you say it.^{6,8} Build a relationship with that person. Remember that the person is going through some challenging changes in his/her life and is frightened. Remain calm and patient. Make eye contact, offer your hand, and shake firmly grasping his/her hand with yours. Speak slowly and smile. Allow the person time to process what you have just said. Eliminate distracting noises or activities so the patient may focus on you. The patient may be able to repeat what is said, but often is unable to retain the information.⁸ Ask simple questions, but do not keep repeating the same question as it may create increased frustration for both you and definitely the patient.^{5,8} Never be condescending to the patient because he/she is frustrated enough.⁵

To connect with a person with dementia, use other senses as well. Show – tell – touch.^{5,8} By visually showing the person what you are sharing, verbally telling about it, and physically touching it, you are creating a more relaxed encounter. As these senses diminish, more safety issues occur. For example, patients who cannot see or smell well could be caught in a room with a fire, and might not know how to respond because they do not know they are in jeopardy.

Do not argue with patients. Being right does not create a good outcome. Telling them that "it's okay" might not be effective. To them it is not okay, their

whole life is changing. Acknowledge the difficulty without belittling them. Validate what they are telling you, but do not correct them. Repeat the instructions more than one time and then rephrase them with gestures.⁵ Reassure dementia patients that you understand their difficulty and you are there to help. Try engaging patients in activities they liked years ago.³ Try locating their favorite childhood music. Many times, they may not talk, but they will sing. You will find that patients will communicate better when they are relaxed.^{5,7} Patients will start to repeat the same thing. Try distracting them; change the subject or sing a familiar song.

Word Finding

Word finding deficits can create some safety issues if patients use a word that could change the context of what they are trying to say. They will frequently lose their train of thought during conversations. Quite often, they will respond to you in the way they truly believe is correct, but it may make no sense to you. Patients with dementia do not comprehend correctly since they may only grasp every fourth word, and your speech to them is unclear. This becomes frustrating to both patients and caregivers.^{5,7,8} When struggling to locate a word, patients will try to substitute a word that sounds similar. They may try to describe what the item looks like or what it does. In trying to describe a "hat," they may call it a cat, while describing it as something they wear on their head as they are pointing to their head. At times, it is easier to just supply the word; however, use care. Do not interrupt the patient, be calm, and allow as much as 90 seconds for them to process their thoughts. If you know the patient does not get upset if you correct them, do so. If you know what the patient means and the patient still is getting upset, it might be wise to not correct them. Some questions to ask the patient would be, "Can you tell me a little about it?" or "Can you show me what you do with it?"⁵

UNDERSTANDING STAGES

The stages of dementia cover a span of 8 to 10 years. None of the stages are concrete and patients can fluctuate between stages throughout the progression. There are several tools that can

stage a patient with dementia. They are the Allen Battery, BCRS, FAST, BCAT, MOCA. In this article, I focus on the Allen Scale, the Global Deterioration Scale (GDS) for staging, and Teepa Snow's Senior Gems staging.

GDS Stage 1, Allen Stage 6

During this stage, there is basically no memory deficit on the clinical interview. No signs indicating an evaluation or diagnosis for dementia yet. This could be any of us on any given day that we forget our keys or do not remember if we shut the iron off. It is not consistent and does not affect ongoing activities.

GDS Stage 2, Allen Stage 5, Senior Gems Sapphire:

During this stage, patients believe they are aging, not changing. They are functioning at 14 to 17 years of age. They are aware of their cognitive and decision making problems, but mask them. There is no deficit with activities of daily living, social, or employment situations. They may become moody or angry, but they are still functional.^{5,8} Think of a teenager who wants to drive, but does not care about any of the responsibilities that go along with driving.

GDS Stage 3, Allen Stage 5, Senior Gems Diamond

During this stage, patients are starting to understand the first signs that they are not functioning normally. They are functioning at 7 to 13 years of age. Denial begins with increased masking. At this stage, patients begin to blame everyone else, they become rigid with their routines, and they do not remember things. They are easily distracted and social isolation begins because they are frustrated that they have difficulty understanding and processing. These people start getting lost in unfamiliar locations. Not many patients are in therapy. Those patients who are may refuse therapy due to the unfamiliarity of what is going on. At this time, families need to be educated about their loved ones' needs and seek help from an appropriate health care provider.^{5,8}

When a loved one begins to experience coordination issues such as shuffling or falls, it would be wise to get some memory testing done. They might have forgotten about safety, where they put things, or just generally how to safely walk from one room with a wood

floor to another with carpeting. It is important to make sure to avoid clutter and keep the home environment organized. Be sure to keep medications in a safe place. They may forget if they took them or not, and that could create problems. Keep valuable items in a safe place. My suggestion would be to also check the trash cans regularly for items that might randomly be placed there. One of the most important things to strive for is to decrease distractions that hopefully will increase their attention and result in increased safety.

GDS Stage 4, Allen Stage 4, Senior Gems Emerald

These patients are functioning at about 4 to 6 years of age. These patients need a structured day and lots of visual cues, such as signs in the patient's rooms, etc. They are poor historians and have poor safety awareness. They should not be driving. Everything they need to learn takes 3 to 4 weeks of constant repetition using constant cueing. This is the last stage for being able to learn new things. If your goal is to help these patients walk with a walker, cane, or other assistive device, they must be taught now, or it will not be effective in later stages. They realize they have deficits, yet want control; allow as much control as possible with safety.^{5,8}

As caregivers, including therapists, nurses, aides, and family members, it is time to assess the safety issues in their environment. These people with dementia may be unable to be managed at home. Visual cues are a priority now for safety and for word finding. Avoid reasoning with them and encourage patients to ask for help. Assist them with continuing to follow a calendar and schedule if they have managed that in their life before.^{5,8}

GDS Stage 5, Allen Level 3, Senior Gems Amber:

These patients are functioning at the level of about 18 months to 3 years of age. Caregivers are crucial during this time. Would you leave a toddler alone? Patients cannot survive without assistance. They have no safety awareness. They can follow some direction, but with little or no carryover. These patients tend to be back in time, believing they are about 20 to 40 years old. They are impulsive, impatient, paranoid, and suspicious. Everything sounds garbled to

them creating a decreased understanding of situation. At this time, there is minimal initiation, but they will engage in activities they like. Search out activities they have enjoyed in the past. These patients develop "tunnel vision." They should be approached low and from the front to decrease their fear and anxiety levels. Since they have decreased or no peripheral vision, it can be scary not knowing someone is approaching.^{5,8}

As a caregiver, you will be using max cues and you will need to provide additional time for processing. Always allow patients to see you first; smile, offer your hand, and match the patient's mood. Keep your communication simple and avoid abstract words. Encourage interactions with others.^{5,8} When assessing the safety of a patient's environment, perhaps try using a contrast for safety. Placing colored tape on the wheelchair arm rests, or even on the toilet seat may enhance the ability to safely transfer preventing falls.

GDS Stage 6, Allen Level 2, Senior Gems Ruby

These patients are functioning at about 9 to 23 months of age. These patients tend to wander without boundaries. They may recognize family members, but quite often may not remember names. They are unable to recognize everyday objects or sequences during their activities of daily living. Patients tend to layer clothing because they feel cold. At this time, the fine motor control stops, and delusions and hallucinations along with anxiety, agitation, and violent outbursts become a part of their lives. At this stage, patients often remove dentures, glasses, and hearing aids, and then forget where they put them. These patients may also mix up their days with their nights. They will also be at greater risk for falls due to decreased step length and shuffle type gait pattern. Patients may sit in a nontraditional way such as leaning to the side or flexing forward because of their tunnel vision. Some patients may have decreased ability to weight shift; to adapt, try incorporating music.^{5,8}

As caregivers, we need to anticipate all needs. Caregivers for patients at this level should be consistent. Find the most effective way to redirect a patient to a safe environment. Continue to monitor for any changes in weight, a key way to determine if the patient is remembering to eat.

GDS Stage 7, Allen Level 1, Senior Gems Pearls:

These patients are functioning as infants at about 0 to 12 months of age. They are dependent for activities of daily living and all functional activities. They are no longer eating or drinking well, and their muscles are getting very tight. Patients should not be eating in their beds due to poor positioning and the inability to swallow safely. They may just stop eating, which could be the cause of a decrease in weight. Their communication will decrease to just moaning. Although this stage is very challenging, these patients should be treated and respected as the individuals they are.⁸

As a caregiver, you will be providing total care, along with sensory stimulation. It is extremely important to maintain skin management, proper positioning, weight, and prevention of contractures.

CARE STRATEGIES

The most effective way to treat a person with dementia is to develop a relationship with the person. Approach them from the front, slow and low.^{5,8} Greet them with a smile and give only your name; they will not remember where you are from and it may be confusing for them to try to remember. Compliment them positively. Focus on what is right, not what is wrong. Talk

to them, not at them. Be aware that quite often the patient may already feel useless, unneeded, and as a failure. Treat them with respect and dignity. Treat them the way you would like to be treated. Imagine the patient's feelings. The patient's short-term memory is what is challenged. Do not ask questions that they cannot answer. Do not ask, "Don't you remember?" Speak slowly and clearly using visual prompts and cues.^{5,8}

To achieve maximum response from patients, treat them in an area where it is calm and relaxing. Avoid distractions. Use calm soft music. Avoid giving the patient caffeinated beverages since that may cause agitation to a person with dementia.⁴ Present instructions as simple as can be. Use one-step directions and break a task into simple steps. Ask one question at a time and give the patient time to process. Offer only two choices. If you offer more than two, they will probably just say "no" because it is too much for them to comprehend; therefore, it is easier to just decline. If the patient becomes unable to understand and agitation increases, redirect and distract.^{3,5,6,8} Take a break and let the patient rest. Allow them to be heard and be respectful of them.⁷ Try to get to the underlying issue. Detachment is the key. Some questions you might ask to them are, "Can you show me what you do with it?" Also, maybe say, "Tell me more

about it." They may be able to describe it, but just can not think of the words that go with it.⁵ Do not argue, criticize, confront, or correct the patient. Accept the person as he or she is.⁷

Try to determine what each patient enjoys and focus your task on that. The person will become more trusting and more willing to work with you. Try to simplify the task, but do not change the task.^{3,5-8} The person might already feel tense and embarrassed that they are not able to complete the task as they used to. Provide positive experiences.

As a caregiver, you may need to try new things to adapt to the patient's needs because their lives are constantly changing. Reduce demands on their damaged abilities; work on one task at a time. Be resilient. Listen to the heart and tone of the patient's voice. Remember that dementia patients often withdraw from activities that previously gave them pleasure due to the loss of memory.^{5,7} Soft music can be soothing. The best tools to use are common sense and imagination. Enjoy the moment, whether good or bad, and grow with the patient. Have a sense of humor. Provide freedom of environment with these patients while keeping safety in mind.

In closing, I would like to include from the Alzheimers Reading Room, something we all should consider:

Dotty's Ten Tips for Communicating with a Person Living with Dementia

1. You know what makes me feel safe, secure, and happy? **A smile.**
2. Did you ever consider this? **When you get tense and uptight, it makes me feel tense and uptight.**
3. Instead of getting all bent out of shape when I do something that seems perfectly normal to me, and perfectly nutty to you, why not just smile at me? **It will take the edge off the situation all the way around.**
4. Please try to understand and remember it is my short term memory, **my right now memory**, that is gone -- don't talk so fast, or use so many words.
5. You know what I am going to say if you go off into **long winded explanations on why we should do something?** I am going to say **No**, because I can never be certain if you are asking me to do something I like, or **drink a bottle of castor oil**. So I'll just say **No** to be safe.
6. Slow down. And **don't sneak up on me and start talking**. Did I tell you I like smiles?
7. **Make sure you have my attention before you start blabbering away.** What is going to happen if you start blabbering away and you don't have my attention, or confuse me? I am going to say **No** - count on it.
8. My attention span and ability to pay attention are not as good as they once were, **please make eye contact with me before you start talking**. A nice **smile** always gets my attention. Did I mention that before?
9. **Sometimes you talk to me like I am a child or an idiot.** How would you like it if I did that to you? Go to your room and think about this. Don't come back and tell me you are sorry, I won't know what you are talking about. Just stop doing it and we will get along very well, and probably better than you think.
10. **You talk too much -- instead try taking my hand and leading the way.** I need a guide not a person to nag me all the time.⁹

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COGNITIVE BELL CURVE

Alvin N. Helge, Jr, LPTA

Let me start out by explaining that I have been working full-time as a Licensed Physical Therapist Assistant ever since I graduated in the spring of 1986 from Austin Community College. At that time, I had already been working at an in-patient facility (hired in 1976) and continued working there until 1997. This particular facility is where I learned a lot about behavior modification and working with difficult patients. It was originally part of the Brown Schools, but the ownership changed as time went by and so did their type of clientele. It was essentially a psychiatric facility with a psychiatrist as the medical director (at the time I began my employment there) with long-term in-patients such as adolescents and young adults with behavioral problems, for example, anti-social behaviors, schizophrenia, and head injuries. All of the programming they developed for those with cognitive issues originated from dealing with that type of patient. The clientele/patient case loads currently still have adolescents, but have evolved into including more and more geriatric patients with their attending co-morbidities. They now treat a variety of patients with diagnoses such as traumatic brain injury, stroke, multiple sclerosis, Parkinson's disease, respiratory failure, diabetes, amputations, orthopedic disabilities, and other neurological diagnoses.

After 1997, I worked in various locations through contract type work, home health, nursing homes, and a one-year stint at a chiropractor's clinic. Currently, I am working at another in-patient facility where I have been for the past 6 ½ years. This facility has mostly geriatric patients where I have been applying my previous experiences and adapting them to this setting. So, this article primarily focuses on the cognitive issues presented with these in-patients during physical therapy treatment sessions and possible ways to show success with increasing

patient participation and therefore show progression toward their physical therapy goals.

For a background scenario description, this in-patient rehabilitation facility (IRF) is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and a majority of these patients are funded by Medicare. As per the Department of Health and Human Services Centers for Medicare and Medicaid Services (CMS), 60% of the patient case mix must include up to 13 of the medical conditions (the CMS 13) as they have described in their "Elements of the IRF Prospective Payment System." The 13 diagnoses/medical conditions are: stroke, spinal cord injury, congenital deformity, amputation, major multiple trauma, fracture of femur (hip fracture), brain injury, neurological conditions (including multiple sclerosis, motor neuron diseases, polyneuropathy, muscular dystrophy, and Parkinson's disease), burns, knee or hip joint replacement, and 3 qualifying conditions where the severity/complexity can vary significantly: severe or advanced osteoarthritis, systemic vasculidities, and active polyarticular rheumatoid arthritis. Whereas at least 60% of these IRF patients are within the CMS 13, then 40% are of other diagnoses, which are too numerous for a succinct listing. Examples of the medical conditions (with cognitive issues) at this facility have included: depression, metabolic encephalopathy, ETOH, drug/medication overdose, vitamin (B12) deficiency, sepsis infections (UTI), dementia, Alzheimer's disease, anesthesia effects postsurgery, schizophrenia, and the list goes on.

In an attempt to summarize and describe the cognitive status of these IRF patients, I will venture to say that they have been mostly within their age-appropriate mental functioning status. It seems that this majority could be visually described as fitting into a graph

shaped as a bell curve. Hence, the name of this article: "Cognitive Bell Curve." On the fringes of this bell curve, (the minority) have been the "difficult to work with patients." So, you could imagine a graph that goes from one extreme to the other where some patients may be very difficult cognitively to work with (in the physical therapy setting), some may be moderately difficult cognitively to work with, or some may be slightly difficult cognitively to work with. Even within the bell curve majority, there have been patients who presented with mental issues that eventually brought them to this rehabilitation hospital. For example, consider someone with poor sensation (peripheral neuropathy) and poor safety awareness that has fallen and sustained an injury (hip fracture or head injury or other). This person could have had some cognitive deficits that led to an injury, but then could be one of the nicest and sweetest persons to ever work with in the Physical Therapy setting.

The trouble usually begins within a short time after admission or after the therapist's evaluation. A patient has been designated as "difficult to work with." Right away the course of action is to review the medical chart and talk with the hospital staff who have had contact with that patient. In other words, learn all you can about the patient before you meet him/her. This is a fairly typical strategy to follow for all of your patients. So, the first rule of thumb is to "know your patients." This strategy should be followed during their entire stay at the hospital as patients change their behavior and/or progress with therapy.

Realizing that a patient could have multiple co-morbidities, a long list of diagnoses, and many barriers to overcome, what a therapist needs to do is cut to the chase and approach each patient as a whole person. Treat them with kindness and respect as if they were your own mother or father, which is a potentially

frustrating task to do, even if the patient is angry or even screaming at you.

Nonetheless, finding out why the patient is angry could be the road toward complaisance. For example, pain complaints (and pain could make someone angry, frustrated, etc) are common and the temporary or partial solution could be pain medication or positioning their body for comfort. Maybe the patient is really angry with his friend or family member and not you. In that case, a session with the psychologist may be the ticket to smooth those ruffled feathers. The end result could be a non-angry patient who will participate in that therapy session after all (or, at least, until the pain meds wear off). Brainstorming with your fellow workers is paramount to figuring out exactly what constitutes a barrier, as well as how to help a patient overcome it.

Many different barriers could thwart patient participation and each one should be addressed in some fashion. Barriers could be prioritized and approached accordingly. For example, once the complaint of pain has diminished, then perhaps poor sleep hygiene or poor diet could be improved and the patient could then be a non-angry patient who participates more in therapy and also is more alert than prior to the intervention. How would “you” address the following barriers (not an inclusive list): hard of hearing, aphasia, foreign language, apraxia, impaired vision, high or low blood pressure, high or low blood sugar, over bearing (dominant) family interventions, lack of family interventions, lethargy, decreased range of motion, decreased endurance, decreased balance, weakness, over confidence (poor safety awareness—poor motor planning), under confidence (timid to participate—fear of falling), confused, dialysis effects, medication side effects, sundowner’s syndrome, lack of orientation, depression, going through the 5 stages of loss. Note that each of the above barriers could explain how or why a patient behaves the way they do to interfere with their participation in therapy and improving the barriers could result in increased participation in physical therapy.

There are multiple techniques to use during the physical therapy sessions. Step one is to get a verbal “yes” commitment from the patient that he will agree to participate in the session. This

is similar to a contract and the patient should inwardly feel compelled to follow through with that agreement. Along the same line, a therapist should be careful about following through with any agreements that they themselves have promulgated. Mutual respect for each other will be gained if you “do what you say you will do.”

As a therapist is in the process of learning about a particular patient and their barriers, then one could begin individualizing the approach toward that patient. When dealing with the “difficult” patient who has cognitive issues, it is important to use appropriate body and verbal language. Open and obviously non-threatening body postures should be the norm. The style and content of your verbalizations would depend on the cognitive status of the patient. Verbal instructions given to patients must be geared to their ability level to follow those instructions. For example, one patient may be able to perform multiple exercises after given one demonstration while another may express frustration/anger when given the same demonstration and not able to perform. The second patient might have more success if given instruction and/or demonstration for one exercise at a time, for example.

The session should be chock full of successes for the “difficult” patient. One way is to instruct the patient to perform tasks (functional, therapeutic exercise, or games, for example) in an incremental fashion. Each little task toward the final goal is designed with the expectation that the patient will succeed, thereby feeling good about having completed that particular task. Not only can the task itself be designed incrementally, but the verbal instruction(s) could also be spoken in the same manner all while using appropriate voice inflection and volume.

Social rewards may have a major impact on some patients where they really appreciate the acknowledgements by others after successfully completing their task or exercise. It is the basic praises with smiles, laughter, hand claps, and verbal “good job” that some people crave. In fact, some patients actually come out of their shell and do better when performing within a group setting. Family support is very important for some patients who perk up and try their best when family members are present,

either observing or even participating in the activities.

Unfortunately, not all of the “difficult” patients will succeed within the in-patient milieu and may very well do better at another facility or home. The average length of stay for patients at the facility where I work is close to two weeks. This just might not be enough time for some patients despite all the valiant efforts of the therapist and the team members at the facility. What is important is that an attempt was made and the patient was given a fair chance to participate with physical therapy and improve their health and well-being.



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PAIN ASSESSMENT AND MANAGEMENT IN PEOPLE WITH ADVANCED DEMENTIA

Lise McCarthy, PT, DPT, GCS

The age structure of our society is rapidly changing due to an old age population explosion that started in 2011 and that will continue well beyond 2050. Today, 10,000 baby boomers (people born between 1946 and 1964) will reach age 65 every day, and children born in developed countries are projected to have an average life span expectancy of over 90 years.¹ In less than 6 years, in 2020, the world will experience its largest ever acceleration of seniors reaching age 65, and the oldest of the old (people 85 years and older) will reach 7 million in the United States.¹

With advancing geriatric age, the cause and effect relationships between impairments, functional limitations, and diseases are increasingly intertwined. Current demographic trends and projections show that nearly half of all people age 85 or older have significant impairments in strength, balance, and/or cognition (eg, approximately half of them have dementia).¹ This population also has the greatest difficulty with effective daily self-care management of pain which is associated with an increased risk for falling, depression, and disability.²

Common pain sites for all adults are the head, abdomen, back, and chest. The population of young adults experiencing pain in these areas ranges from 7% to 20%, while 20% to 65% of people age 50 to 65 years and 20% to 60% of people age 85 years or older report pain in these areas.² The occurrence of pain in these 4 sites remains essentially stable in old middle age and old-old age. However, pain caused by degenerative joint disease (DJD) does not remain a stable occurrence in middle and old age. Rather, DJD-related pain exponentially increases with advancing age.²

Besides pain, old age is also a factor that exponentially impacts movement, limits function specific to transfers and walking, and contributes to rising fall risk and an increased need for more

supportive and skilled care. People aged 75 to 84 years who fall are 4 to 5 times more in need of long-term care than younger seniors, while those age 85 years or older are 8 to 10 times in need of long-term care.³ Eighty percent of old-age fallers with dementia require nursing home environments, and up to 80% of all people living in these environments suffer persistent pain.⁴

A large majority of people who are severely dependent and old, and have dementia, also have pain. The severity of their dependency and dementia symptoms (eg, anxiety, agitation, confusion) increases when pain is present.^{4,5} Yet for people with dementia, across all settings (ie, homes, acute care hospitals, rehabilitation centers, convalescent hospitals), pain is under-assessed, under-diagnosed, and under-treated.^{4,5} However, people with dementia can still detect pain. Unfortunately, they often cannot articulate the source of their pain and instead typically express their pain through pain behaviors and pain responses to specific stimuli.

Medications across multiple drug categories, but primarily psychoactive drugs and medications with sedating and anticholinergic properties, are linked as major contributors to increased fall risk and up to 30% of all hospitalizations of our elders.^{2,4} These medications can also mask possible pain behaviors and further blunt pain responses (eg, facial expressions, autonomic responses) in people with advanced dementia who cannot articulate or discriminate the source of pain but who can still feel painful stimuli that can limit function and negatively impact quality of life, and increase caregiver burden and depression.⁶

The scope of a physical therapy practice is well-suited to make significant contributions to primary, secondary, and tertiary care management of pain in older people and in all settings. As of 2014, patients in all 50 states can direct-

ly access physical therapy services, and these services are covered by Medicare when deemed medically reasonable and necessary. The need for physical therapists and physical therapist assistants to be able to assess and monitor pain in their patients with advanced dementia in all settings is paramount. Many tools are available to assess pain in nonverbal adults with and without dementia, and no one tool has been identified as the standard.⁷ In this new age of big data collection and increased demand for quality care and functional outcome measures in different populations of people, effective use of time spent on patient care management is mandatory for the financial health of Medicare and all physical therapist practice settings.

This article highlights the pain assessment tool: Pain Assessment in Advanced Dementia (PAINAD) as part of the physical examination and fall risk management of a patient with advanced dementia. The PAINAD was adapted from the Discomfort Scale-Dementia Alzheimer Type (DS-DAT), and Face, Legs, Activity, Cry and Consolability Behavioral Scale (FLACC); these two tools assess behaviors related to discomfort and pain in nonverbal adults with Alzheimer's disease and nonverbal young children.⁸ The PAINAD requires assessment of 5 behaviors up to 5 minutes or more during and immediately following movement.⁹ The categories are breathing, negative verbalization, facial expression, body language, and consolability. The breathing quality assessment considers mechanical effort, sound, rhythm, coordination, and speed and shallowness of chest movements. The negative verbalization assessment considers the quality of speech, vocalization, sound, tone, volume, and frequency of speech and vocalization. The facial expression assessment considers the up or down turn of the corners of mouth, brightness of the eyes, openness of the eyes, presence of

tears, and brow and forehead wrinkles. The body language assessment considers general muscle tone quality, repetitious rubbing/rocking/grinding movements, positions of the jaw/trunk/limbs, and fight or flight responses. The consolability assessment considers the ability of the evaluator to reduce any of the above behaviors through touch or voice.

The PAINAD takes up to 5 minutes to complete. Scores range from 0 to 2 for each behavior category with a total possible score of 10. Clinicians can be trained to use the PAINAD in less than 5 minutes and astute caregivers can be trained in as little as 15 minutes. Clinicians can train caregivers to effectively use the PAINAD to track pain behaviors as a means to help identify and determine the effectiveness of non-medicinal and medicinal interventions over time. It has been found to be a reliable and valid tool. It has demonstrated strong inter-rater reliability reports across 5 studies, strong test-retest reliability in 3 studies with r 's ranging from 0.88 to 0.90.⁷ It has shown moderately good concurrent validity across tool correlations ranging from 0.65 to 0.95, and moderately good internal consistency with correlations ranging from 0.69 to 0.85.⁷ However, it does not include more subtle pain behaviors (eg, changes in activity level, mental status, inter-personal relationships).⁸ Also, there is limited data on individuals from different races; however, it has been translated for use in different countries (eg, Singapore, Belgium, Germany, Italy, Netherlands) and variations among these cultures have been tested.⁷ It has been tested on men and women in old age, and on people with and without dementia.⁷ It has been tested for use in different settings (eg, acute hospital, rehabilitation centers, nursing homes).⁷ Initially, it was thought that higher PAINAD scores correlated well with greater pain severity. However, further research has shown that the PAINAD can only selectively differentiate between the presence of any of the 5 pain behaviors, and any changes in these 5 specific pain behaviors.¹⁰ A score of two or more indicates pain is probably present, but the severity of pain cannot be correlated to the PAINAD score.¹⁰

As with any examination performed by a physical therapist, a review of systems, medical conditions, and medica-

tions is highly instructive in identifying underlying factors that can contribute to impairments, functional limitations, and disabilities. When assessing people with dementia, consideration of the severity of cognitive, vision, and hearing impairment is within the scope of physical therapy practice and is critically necessary in order to gauge the type of communication support needed and the accuracy of the information being exchanged during the examination process. Vital sign measures at rest, with position changes, and after functional tasks can rule in or out physiological factors affecting comfort and movement quality. Visual, auditory, and touch inspection of body parts can help identify injuries, mechanical abnormalities, and sensation impairments, as well as provoke pain behaviors and pain responses related to passive and active range of motion, and open- and closed-chain movements.

Case Example: A quiet woman, age 92, named Jane, is living in the locked dementia unit of an assisted living community. She suddenly stopped walking and 3 caregivers are now required to assist her with all transfers because she becomes combative when they physically assist her to stand up. Staff deny she has had any falls. They report she is sleeping well, normally moving her bowels, and appears to be content when sitting or lying down, but she has stopped using her right dominant arm. She does not appear to those who know her to be ill and there are no reports of a fall. The staff are concerned that she and they are now at higher risk for injury during transfers, and they are at a loss to explain why she stopped walking. Her physician examined her and thinks Jane may have had a stroke.

Using the Disablement Model, Jane's situation can be described as follows:

IMPAIRMENTS: cognition, vision, hearing, balance, strength, endurance

FUNCTIONAL LIMITATIONS: great difficulty with weight-bearing so that 3 caregivers must now assist her with all transfers; stopped walking one week ago; previously had required one caregiver to provide hand-held assist during transfers, and contact-guard assist when walking 600 feet or more at one time with her walker.

DISABILITY: currently chair-bound

and bed-bound; requires 3 caregivers to assist with transfers since the assisted-living facility will not allow a mechanical lift on the property.

UNDERLYING MEDICAL CONDITIONS/PATHOLOGY: dementia, osteoporosis, osteoarthritis.

PRECAUTIONS: high fall injury risk, high risk for further functional decline, high risk for social disengagement.

You, her physical therapist, consider these relationships within the context of her environment, her health-related quality of life, and her overall quality of life, as you begin your investigation. You perform a medication review and realize Jane has an order for Tylenol 325 mg every 6 hours as needed for pain, but she has not been given any pain medication for several months. You assess Jane's communication support needs. You determine that Jane can visually track in all directions and she has the ability to read large, bold printed text when she is wearing her glasses. You perform a hearing assessment with and without a Pocket Talker, and you find Jane is noticeably more accurate and faster in responding to your verbal requests when the Pocket Talker is used. You identify that Jane has about a 20-second auditory processing delay so you time your verbal cues accordingly to allow Jane the time she needs to become more fully engaged in the examination process. With orientation, reorientation, encouragement, and by silently observing Jane's need for increased processing time (ie, OREO-cuing), Jane allows you to take her vital signs and perform a physical exam. Her resting vital signs are normal: BP 142/80, PR 82, O₂ sat 94%, RR 14. Jane's head, neck, trunk, and limbs are visually inspected as you gently touch and then firmly palpate and move each body part. Through this physical process, you eliminate potential pain sources that could be limiting her functional movements. You find two suspect pain sources: right anterior shoulder at the bicipital groove with passive external and internal humeral rotation, and right anterior calcaneus tenderness with deep pressure. You determine her PAINAD score is 4/10 because when these areas are skillfully palpated, Jane immediately and repeatedly grimaces and loudly says "Oh! Oh!" There are no physical signs suggesting an acute injury or a possible

arthritic flare; however, elevation of the right upper extremity elicits stronger pain behaviors, the plantar fascia is non-tender when plated, and when you assist her to stand, she shifts her weight to her left foot. You are feeling more confident that Jane may not have had a stroke, but may be experiencing pain when using her right side limbs.

You contact Jane's primary care physician (PCP) to discuss your clinical findings and conservative recommendations for a standard trial of "round-the-clock acetaminophen"¹¹ and a bone spur heel cup to reduce weight-bearing pressure to the painful heel. A radiograph of the heel is also discussed and ordered to help determine if a cortisone injection into her heel might be a good long-term treatment choice. You mark the dime-sized spot with a black Sharpie ink pen before taking a picture of her heel with your iPad camera to support your documentation and facilitate communication with her PCP, if needed. The radiograph shows a 1 cm heel spur. Three days into the acetaminophen trial, you observe Jane using her right arm to catch a balloon during group exercise; her PAINAD score is 0/10. You decide not to intervene further for the time being and instead instruct her caregivers to encourage her to actively use her right upper extremity during group exercise activities. One week following the cortisone injection with lidocaine into her right heel, you return to observe Jane again; she is now transferring with "nudging" physical assistance from one caregiver who then provides only contact-guard assist and verbal encouragement through Jane's Pocket Talker as they walk down the hallway together. You continue to observe Jane on a monthly basis over this first quarter, first to ensure that she maintains the gains she has made, and then to monitor for signs of change as the acetaminophen is withdrawn. The total number of visits you spend in the first quarter is 7 visits; for the second quarter you visit her twice to ensure her functional mobility gains are maintained, that no further interventions are warranted, and that Medicare's requirement for the functional G-code reporting period every 60 days are met.

This case example illustrates how pain can be effectively assessed in people with advanced dementia using the PAINAD as an objective tool to iden-

tify and monitor pain behaviors to help determine the efficacy of a treatment intervention. The number one modifiable risk factor for dementia is physical inactivity,¹² and since pain acts as a barrier to physical activity in people with dementia, this case also underscores how the skills and knowledge of the physical therapist are well-suited to assess, diagnose, and conservatively manage pain that affects functional mobility while promoting a higher quality of life for this population of people and lessening caregiver burden. As the need for Medicare-covered services increases and as our Medicare system matures in its ability to collect and assess population data, greater care in the allocation of resources is necessary for the sustainability of this system. Medicare recognizes that cost-effective management of pain and fall risk requires involvement from multiple stakeholders who include patients, their various caregivers, and all involved health care professionals across all care settings. Physical therapists have much to offer the geriatric community as primary, secondary, and tertiary care experts in pain and fall risk management of people with dementia.

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POLICY TALKS ABOUT MEDICARE AND PATIENTS WITH COGNITIVE DISORDERS

Ellen R. Strunk, PT, MS, GCS, CEEAA

October 22, 2012. What does that date mean to you? Maybe not much, but for those who watch Medicare rules and regulations, it was a day that will be remembered. Why?

This was the day the federal government decided to settle a class-action lawsuit challenging the so-called “Medicare Improvement Standard.” With this issue of *GeriNotes* focused on the subject of cognitive disorders and dementia, it is relevant to look at this lawsuit, the allegations brought against the Centers for Health and Human Services, and what the settlement means to the practice of physical therapists and physical therapist assistants.

I. What Is The “Medicare Improvement Standard”?

Most therapists are all too familiar with the statutory language that defines the services Medicare was intended to pay for. Specifically, the Social Security Act §1862(1) states in part, *“payment may not be made under [Medicare] part A or part B for any expenses incurred for items or services – which are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member.”* In other words:

In order to be paid by Medicare Part A or Part B...

- the service must be reasonable and necessary...
- to the treatment of a illness or injury...

Using reverse analysis, if the service is reasonable and necessary to treat an illness or injury, there must be something special and/or unique about that service, therefore implying that it is a “skilled service.” To further define what is or is not a “skilled service,” one can look at the Medicare regulations for a set of defined medical necessity criteria known as the “reasonable and necessary criteria.”¹

Medicare contractors have used this language and other interpretations of various Medicare coverage regulations to impose what providers often refer to as an “improvement standard.” Essentially, if the Medicare provider does not provide adequate documentation and objective information to prove that the patient’s condition will ‘materially’ improve as a result of the skilled services billed, the services will be denied.

II. What Was The Lawsuit About?

The lawsuit was filed on January 18, 2011, by the Center for Medicare Advocacy (CMA) on behalf of 4 individuals and 5 organizations. The 4 individuals were from Vermont, Connecticut, Rhode Island, and Maine. The 4 individuals contended that services provided to them by home health agencies and billed to Medicare had been wrongly denied. The 5 organizations joining the lawsuit were the National Committee to Preserve Social Security and Medicare; the National Multiple Sclerosis Society; Parkinson’s Action Network; Paralyzed Veterans of America; and the American Academy of Physical Medicine and Rehabilitation.

Their lawsuit pointed out the conflict in two provisions of the Medicare home health coverage regulations:

“(iii) The determination of whether skilled nursing care is reasonable and necessary must be based solely upon the beneficiary’s unique condition and individual needs, without regard to whether the illness or injury is acute, chronic, terminal, or expected to last a long time.”² and;

“(iii) There must be an expectation that the beneficiary’s condition will improve materially in a reasonable (and generally predictable) period of time based on the physician’s assessment of the beneficiary’s restoration potential and unique medical condition, or the services must be necessary to establish a safe and effective maintenance program required in connection with a specific disease, or the skills of a therapist must be necessary to perform a safe and effective maintenance program. If the services are for the establishment of a maintenance program, they may include the design of the program, the instruction of the beneficiary, family, or home health aides, and the necessary infrequent reevaluations of the beneficiary and the program to the degree that the specialized knowledge and judgment of a physical therapist, speech-language pathologist, or occupational therapist is required.”³

The plaintiffs in the lawsuit contended that the “improvement standard” was used as a “covert” condition of coverage which deprived beneficiaries of coverage to which they were entitled while at the same time denying them the ability to appeal.

They asked that the District Court assume jurisdiction over the issue and declare that the Medicare “improvement standard” violates the Medicare statute, the Administrative Procedures Act, the Freedom of Information Act, and the Due Process Clause of the Fifth Amendment. They also requested that the court grant a permanent injunction against the Secretary of the Department of Health and Human Services and her successors from ever applying such a standard in coverage decisions in the present and future.

Over 12 months, the suit progressed through the courts. On January 24, 2013, the U. S. District Court for the District of Vermont approved a settlement agreement. The settlement agreement set forth a series of specific steps the Centers for Medicare & Medicaid Services (CMS) had to undertake, including issuing clarifications to existing program guidance and new educational material on this subject.

III. What is the Significance of the Lawsuit and the Settlement?

The lawsuit itself was significant in that there were several organizations and beneficiaries who were willing to file a lawsuit against such a revered institution. The Obama administration even weighed in, urging the judge to dismiss the lawsuit. The settlement, however, made national news because of its “David versus Goliath” image.

It is important to say, however, that:

1. The Court never ruled on the validity of the *Jimmo vs Sebelius* plaintiff’s allegations.
2. CMS denied every establishing an improper rule-of-thumb “improvement standard.”
3. The settlement did not expand, contract, or modify the existing eligibility requirements for receiving Medicare coverage.
4. The settlement did not modify the requirement that a service must be “skilled” and “necessary” in order to be a covered benefit by the Medicare program.

IV. How Does the Settlement Impact My Practice of Physical Therapy?

How often do you see patients with chronic disease? How often do you see patients with progressive neurological conditions? Have you ever found yourself looking at the diagnosis of patients and making assumptions about their rehab prognosis before you have thoroughly evaluated them?

If you answered “yes” to any of these, then the settlement may impact your practice. The goal of this settlement agreement was to ensure that claims are correctly adjudicated in accordance with existing Medicare policy, so that Medicare beneficiaries receive the full coverage to which they are entitled.

Since January 2013, CMS has completed several activities they were required to do by the settlement agreement, including updating their program manuals and completing an educational campaign to inform contractors, adjudicators, and providers/suppliers of the policy clarifications and answer any questions. Lastly, CMS is required to undertake accountability measures to ensure contractors are making claims determinations in accordance with the principles set forth in the agreement.


V. What Do I Need To Know?

Physical therapists and physical therapist assistants should keep in mind two important things the settlement did not do and one important thing it did do.


1. The settlement did not expand, contract, or modify the existing eligibility requirements for receiving Medicare coverage.
2. The settlement did not modify the requirement that a service must be “skilled” and “necessary” in order to be a covered benefit by the Medicare program.

But the settlement did throw an old familiar word back into the daily conversation: “Maintenance therapy.” Sound familiar? Yes, the term maintenance therapy—long thought taboo and ‘bad’—is now back in the manuals as a term that is actually a subset of skilled services.

The modifications to the policy manuals⁴ attempted to provide clarity to two ‘kinds’ of skilled therapy services:



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Restorative/Rehabilitative therapy	Maintenance therapy
<ul style="list-style-type: none"> • Therapy “whose goal and/or purpose is to reverse, in whole or in part, a previous loss of function” • “Consider the beneficiary’s potential for improvement from the services” • “...such a consideration must always be made in the IRF setting, where skilled therapy must be reasonably expected to improve the patient’s functional capacity or adaptation to impairments in order to be covered.” 	<ul style="list-style-type: none"> • “...skilled therapy services are covered when an individualized assessment of the patient’s condition demonstrates that skilled care is necessary for the performance of a safe and effective maintenance program” • “Even if no improvement is expected” (under the SNF, HH, and OPT coverage standards) • A maintenance program may be necessary <ul style="list-style-type: none"> —“to maintain the patient’s current condition or —prevent or slow further deterioration. • or the complexity of the therapy procedures require skilled care.”

VI. Be Careful What You Wish For:

The truth is, that despite the big news the settlement made and the frequently asked questions by patients, their caregivers and employers, the fundamentals of Medicare covered services stands:

Services must be reasonable and necessary to the patient’s condition.

Services must be considered as accepted standards of medical practice.

Services must require the skills of a therapist or therapist assistant.

So, if your patient or your patient’s family meets you at the front door and says “You never have to stop seeing Dad! Medicare now covers PT maintenance services!”what will you say?

All decisions to continue services and/or discharge require careful consideration. In some cases, it might be easier to say “No progress? Then I discharge.” But that may not always be fair to the beneficiary. Instead, a therapist must consider, “Are there any other skilled services the patient requires?” The answer to that question may not be as clear-cut and requires clinical assessment and analysis of the findings.

Let’s look at how the different Medicare manuals define skilled therapy²:

Setting	Statement	Reference
Skilled Nursing Facility	<i>The services must be of a level of complexity and sophistication, or the condition of the patient must be of a nature that requires the judgment, knowledge, and skills of a qualified therapist.”; and “...or, the services must be necessary for the establishment of a safe and effective maintenance program; or, the services must require the skills of a qualified therapist for the performance of a safe and effective maintenance program.</i>	Pub 100-2; Chapter 8; Section 30.4.1.1
Home Health	<i>“The service of a PT, SLP, or OT is a skilled therapy service if the inherent complexity of the service is such that it can be performed safely &/or effectively only by or under the general supervision of a skilled therapist.”; and “The development, implementation, management, and evaluation of a patient care plan based on the physician’s orders constitute skilled therapy services when, because of the patient’s clinical condition, those activities require the specialized skills, knowledge, and judgment of a qualified therapist to ensure the effectiveness of the treatment goals and ensure medical safety. Where the specialized skills, knowledge, and judgment of a therapist are needed to manage and periodically reevaluate the appropriateness of a maintenance program, such services would be covered, even if the skills of a therapist were not needed to carry out the activities performed as part of the maintenance program.”</i>	Pub 100-2; Chapter 7; Section 40.2.1
Outpatient Therapy (Part B services provided in the SNF, clinic, assisted living or patient home)	<i>“A service is not considered a skilled therapy service merely because it is furnished by a therapist or by a therapist/therapy assistant under the direct or general supervision, as applicable, of a therapist. If a service can be self-administered or safely and effectively furnished by an unskilled person, without the direct or general supervision, as applicable, of a therapist, the service cannot be regarded as a skilled therapy service even though a therapist actually furnishes the service. Similarly, the unavailability of a competent person to provide a non-skilled service, notwithstanding the importance of the service to the patient, does not make it a skilled service when a therapist furnishes the service. Skilled therapy services may be necessary to improve a patient’s current condition, to maintain the patient’s current condition, or to prevent or slow further deterioration of the patient’s condition.”</i>	Pub 100-2; Chapter 15; Section 220.2

More than 5 million Americans are living with Alzheimer's disease and millions more with other cognitive disorders. Most individuals with Alzheimer's disease are Medicare beneficiaries age 65 and older and are high users of health care and long-term care services.⁶ Since Alzheimer's disease is a progressive disorder, many persons are unlikely to improve. However, physical therapy and other rehabilitation services can help persons with Alzheimer's disease. As professionals, we have a responsibility to insure that our patients are treated with the highest clinical standards using effective and cost-effective treatment approaches, while at the same time adhering to our responsibility to abide by Medicare payment regulations.

This author would like to acknowledge APTA President, Paul Rockar's February 8, 2013, Statement on the Settlement of Medicare "Improvement standard" Class Action Lawsuit from which some references were taken. Located at: <http://www.apta.org/Media/Releases/Legislative/2013/2/8/> Accessed February 10, 2013.

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3. 42 CFR §409.44(c)(2)(iii).
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ANSWER to Bone Mineral Density and T-score

T-score stands for the STUDENT'S T-test. Student was the name of the person who developed the statistical analysis but, his real name was William Sealy Gosset. Gosset worked as a chemist at the Guinness Brewery in Dublin. He used the pseudonym, Student, because Guinness did not allow anyone to publish their confidential data.

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GIVING UP THE KEYS...

Patrice Antony, PT, GCS

Deciding when to stop driving is one of the most difficult decisions that seniors have to make. Driving is a profound quality of life issue—really the ultimate form of independence. Unfortunately, many of the cities and urban areas in this country fail to provide adequate public transportation—let alone transportation that seniors are able to access. When seniors are forced to give up driving, the result is people literally becoming prisoners in their own homes unless they have adequate family/neighbor support. Getting to and from grocery stores and doctor appointments can be challenging at best. Maintaining any kind of social life with friends and peers becomes nearly impossible.

Many seniors argue that they have better driving records than younger drivers. It is true that older drivers have fewer accidents. Drivers age 55 and older are 25% of the driving population, yet they only have 18% of the accidents. But this is because they drive fewer miles. If accidents for miles driven are considered, we get a different picture. For example, people older than 75 have accident rates per mile equal to or greater than rates for teenagers, who are the most dangerous drivers. At about 85 years of age, the rate starts to skyrocket.

What are some of the warning signs that a driver is getting to be unsafe?

- Moving too slowly on the highway
- Failing to come to a full stop at stop signs
- Being inattentive
- Making erratic moves
- Reacting too slowly
- Being honked at by other drivers
- Missing traffic signals or signs, or being uncertain of what they mean
- Becoming anxious at busy intersections, being unsure what to do, or being afraid to drive
- Upsetting passengers to the extent that they start refusing to ride in the car

There are many common factors/pathologies that can affect an elderly person's ability to drive. These may include:

- Vision changes (eg, macular degeneration, glaucoma, cataract, depth perception changes, visual field perception)
- Hearing deficits
- Memory loss
- Arthritis (eg, limited range of motion, pain)
- Diabetes (can have sensory deficits in feet and hands; fluctuating blood sugars can lead to loss of consciousness or altered mentation)
- Medications (eg, can induce drowsiness, blood pressure changes)
- Stroke (eg, paralysis or delayed reflex on one side)
- Parkinson's disease (reduced range of motion and reflex time)
- Cardiac arrhythmias (irregular heart beat can result in momentary loss of consciousness)

Any of these conditions can render an elderly driver extremely unsafe. So what is the answer?

First of all check with the doctor.

Just because you or your loved one has some of these listed medical risk factors does not mean that the keys have to be given up. If the medical conditions are stabilized and well managed, older drivers can compensate and still be safe on the road.

Consider a referral to a driving evaluation specialist. These driving specialists are usually trained medical professionals (often occupational therapists) who are skilled in working with physically impaired individuals. The driving evaluation done by such a specialist will be quite extensive at measuring and quantifying the conditions under which a driver is safe or unsafe. For example, many times older

drivers are safe to drive in familiar places and under good driving conditions (eg, good weather, low traffic, easy parking, etc.), but extremely unsafe in adverse conditions (eg, rain, merging into heavy traffic, following directions in unfamiliar places). The driving specialist can provide a quantifiable assessment of exactly what conditions a person is safe to drive in. They can also clearly show when that same driver is unsafe. The specialist can also help by recommending equipment that can improve safety (ie, special mirrors, steering wheel adaptors for arthritic or one handed drivers, alarms to warn when the driver is backing up, etc).

There are many advantages to having an assessment done. First of all, **it is fair and objective.** This can take the volatility out of an emotionally charged issue. Second, it can **provide excellent alternatives** to what seems to be an all or nothing situation. Most seniors appreciate the objective information and take it to heart. If a driver is found to be completely unsafe, the driving evaluator is required to report this to the Division of Motor Vehicles (DMV) and this usually results in suspension/revocation of the driver's license. The driver can only get a license reinstated if a subsequent retest provides different results and the driver's doctor verifies medical stability to drive. That same driver needs to be counseled in transportation alternatives—not just left “high and dry.”

What can a senior do to be a safer driver?

- Have your vision and hearing tested regularly.
- Know your medications—carry a list of them with you at all times.
- Stay physically fit.
- Check your blood sugar levels before getting behind the wheel.
- Drive under less stressful conditions (check the weather in advance, avoid rush hours, avoid driving after dark).

- Plan your route in advance (drive to your appointment the day before so you know exactly where you are going, get good directions).
- Update your vehicle (make sure all the lights are working, that the mirrors are big enough and appropriately adjusted).
- Update your driving skills (taking older driver courses offered through AARP).
- Avoid driving distractions (eg, eating, drinking, talking on cell phone, talking to passengers, etc.).
- NEVER drink alcohol and drive (alcohol can take longer to clear the system of an elderly person).

If a senior has to give up driving, consider hiring a driver. Hiring a driver who comes on particular days and times can take care of a lot of issues. This will take some advance planning on your part (ie, scheduling appointments and activities appropriately). Many companion agencies provide nonmedical personnel who can assist with driving as well as errand running, grocery shopping, meal preparation, and laundry services. This type of help varies in cost depending on regional locations, but is usually very reasonable given what they can do. You can also make arrangements with taxi services to have the same driver available. Many taxi companies provide greatly discounted rates for frequent riders.

Research public transportation. Even though the United States is very deficient in this area overall, some areas have special services available for transporting seniors (and the disabled) to appointments. It is highly advisable to research what is available in your area. You may be surprised. **Check with your church.** Many church organizations have transportation options available for their congregation members.

What if an unsafe driver refuses to stop driving?

- Report the driver to the DMV.
- Disable the car if necessary (taking off the distributor cap, unplugging the spark plug wires, removing the battery).
- Move the car to a secured location or sell it if possible.
- Hide the keys.

- Call the police whenever the driver is seen driving the car. Be sure that the local police are aware of the danger. Older people can and should be arrested for driving without a valid license. Getting arrested usually convinces the stubborn, unsafe driver to quit.

Understand that taking away the keys puts more responsibility on the family to provide for that senior's needs. Most families are quick to agree that a parent needs to stop driving, but very slow to realize the implications of picking up the slack as a result. The whole driving issue takes careful planning and coordination. The conversation about the process needs to start early. If the family (including the affected senior) starts planning early and defines the criteria of how and when the driving will stop, the emotional piece of this process is much less traumatic for everyone.

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WCPT CONGRESS MAY 2015

Lisa R. Dehner, PT, PhD

Think globally, act locally. As physical therapists, we see our impact on quality of life patient by patient. But there is also a call for us to think beyond our day-to-day to learn from other physical therapists and to move the profession forward, everywhere. I went to my first WCPT Congress in 2011, in Amsterdam, Netherlands, and very much like the feeling I got after going to my first CSM, I was changed forever. That first CSM (I will decline to mention the year, lest I age myself) was amazing. Of course, I knew intellectually how many physical therapists there were in the United States but being in a huge convention center with all the thousands of people around me being MY people was overwhelming in the most wonderful way. Everyone was speaking my language, and it was inspiring. You mean all this programming is just for me?! That's also how I felt after WCPT 2011 Amsterdam, but the feeling was even more profound because everyone was speaking *different* languages and yet they were all still MY people. Like that first CSM, I sort of wandered around with a deer-in-the-headlights look trying to take it all in as I attended seminars and talked to so many different physical therapists.

The programming at WCPT is incredibly exciting and diverse. Optional pre- and post-congress courses give attendees a deeper (usually day-long) education on a particular topic. The primary reason I attended my first WCPT was that I was presenting a post-congress course (which also could explain some, *but not all*, of the overwhelmed feeling). There are Focused Symposia (like our educational sessions) presented by international teams of experts; the folks who keep coming up in your Medline and PTNow searches. Networking Sessions are a great way to immediately connect with therapists with similar interests and can lead to great friendships and collaborations after the Congress. Similar to our

conferences, there are plenty of Poster Sessions to explore and Platform Presentations of varying lengths to attend to get the latest information. An interesting addition to the concept of the poster presentation is the Poster Walk, where individuals are led by an expert facilitator to a small number of related posters for discussion. There are also schedule Discussion Panels, made up of experts on a particular topic. Finally, because treating patients is what we all have in common, the Congress offers local Clinical Visits. Attendees are shuttled to facilities (varied settings and patient populations) to learn about physical therapy in Singapore. In addition to all the typical social programming (Opening/Closing Ceremonies), the Congress also offers sightseeing tours of the local area, which is great for those on a short stay. Who doesn't have fun on a bus full of physical therapists? The Congress is presented in English, so do not worry about ordering Rosetta Stone. However, it should be noted that WCPT is based in England, so get used to the Queen's spelling of words like 'programmes,' and terms like 'focused symposia.' Just think of it as charming. So, all-in-all, it is an awesome spectacle and worth every minute. I left WCPT 2011 in Amsterdam drained, as is typical after a conference, but also motivated. I also happened to pick up a little brochure at the exhibit hall describing an organization called IPTOP, or the International association of Physical Therapists working with Older People. And that brochure led me here, writing to you about attending WCPT as the IPTOP liaison to AGPT.

Attending conferences can be difficult for many of us, with the cost and the time away from work and home as barriers. So to ask you to attend a conference in a very far away place is a challenge. The WCPT understands this and only offers this Congress every 4 years (quadrennial—I googled it). I like to

think of it as the 'Olympics' of Physical Therapy. It's PT on a world stage, and I encourage each of you to save your pennies and go to Asia in search of that amazing overwhelmed and inspired feeling. I will see you there. I will be the one on the bench to your right, looking up, all deer-in-the-headlights.

Links for more information:

<http://www.wcpt.org/congress>

http://youtu.be/COhj_-5Dpk0

<http://www.geriaticsppt.org/about-section-on-geriatrics/iptop/>

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