Functional Outcomes Improvement -Care Practice Application

MODULE 4



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Objectives

- Explore care practice application practices that will increase function.
- Review the Requirements of Participation as it relates to restorative therapy and functional outcome improvement.
- Describe care coordination and interdisciplinary approach to person-centered care.
- Discuss the quality initiatives.



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Personal Alarms for Resident Monitoring

- Alarms were introduced to skilled nursing homes in response to physical restraint reduction.
- Goal being- staff would have time to respond to positional changes by residents in time to offer assistance and reduce falls.
- However, while alarms may be an effective initial method of determining a new short stay resident's schedule (Cary MP et al, 2018), there is no data to support alarms in reducing falls.
- In fact, data suggests that removing alarms is associated with reduced falls.

(Crogan NL, Dupler, AE 2014)



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Why Do Personal Alarms Fail?

(Mileski M et al, 2019)

- Noise can cause agitation and exit seeking behavior
- Alarm fatigue among nurses and nurse aides who must navigate false alarms and cannot respond quickly enough. Leads to having the alarm notify staff that the resident is already on the floor.
- Alarms are ineffective as a stand-alone intervention.
- Challenges with set up and monitoring during shift.

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What Harms Do Personal Alarms Cause?

- · CMS has listed alarms as a restraint.
- When alarms are used to restrict mobility, they must be coded as a restraint in the MDS section P0100.
 - Alarms can cause residents to reduce self repositioning attempts due to fear of the noise or staff response thus leading to loss of free movement
 - Alarms can create anxiety and lead to psychological harm/learned helplessness due to fear





How Can You Reduce Personal Alarms?

- Crogan NL, Dupler, AE 2014 describe several steps in their successful program:
- Staff Education- outline an education program for alarm elimination that includes understanding culture change, safety, individualized assessment, interdisciplinary care planning and approach.
- Pick "easiest" person and assess for alternative approaches

 - Review pain, positioning and bathroom needs
 Review medications timing, dose and side effects
 Personalize approaches for engagement during "high risk" times including use of restorative nursing and activities
 - Reducing alarm times initially for pre-determined times, then increasing those times until no longer in use



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How Can You Reduce Personal Alarms?

- · Pioneer Network offers additional tips on their fact sheet f)
 - o Some of their recommendations include:
 - Address risks
 - Individualize care
 - Build mobility into daily routines
 - Root cause analysis of residents needs
 - "out of the box" thinking



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Hourly Rounding

(Mitchell MD et al, 2014)

- · Most data on hourly rounding is from hospital systems, although it's use is growing in skilled nursing facilities.
- · Hourly, while the resident is awake, someone checks in to see if the resident has any needs in the areas of the 4 P's:
 - o Pain control
 - o Proximity of personal items
 - o Positioning assistance
 - o Personal hygiene (need to use the restroom)





Case Study- Jewish Rehabilitation Center for the North Shore

- 45 bed unit in a not-for-profit facility providing sub-acute, long-term and dementia care.
- Staff already used consistent assignments and had regular fall team meetings to review resident fall related issues. However falls were consistently a problem.
- Of the 45 residents on one unit, 50% had bed/chair alarms
 - Falls committee felt that alarms were "reactive rather than proactive"
 - o Identified that the noise agitated residents
 - Many becoming passive to avoid activating the sound and may have led to declines in function so much so that other residents started encouraging those with alarms to stop moving.
 - https://hsag.com/contentassets/a7a32cd47a2945679fc18ef16b0d06c5/c2_ca se-study--nh-alarm-elimination-program_508.pdf



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Case Study- Jewish Rehabilitation Center for the North Shore

- · First- removed alarms from several residents who had not have any recent falls.
- Next- they identified people who may have had an episodic issue (medical condition, etc) that likely had resolved and reduced alarm use for those residents.
- Last- set a goal to remove all remaining alarms and use other "anticipatory" strategies for remaining individuals.
 - Department heads, therapists and administrator each took 3x/week (15 minutes) shifts as "hall monitors"
 Each unit designated 1 CNA monitored safety 6:45am-2:45pm shift

 - Evening and night shifts increased rounding and staff participating in activities on the unit



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Case Study- Jewish Rehabilitation Center for the North Shore

- Week 1- took off alarms during day shift, resumed use evening/night
- Week 2- took off alarms day and evening shift, resumed use nights
- · Week 3- discontinued all alarms on target unit
- · Week 4- sustained alarm free environment
- · Outcomes- less resident agitation
- Outcomes- staff reported less anxiety and "better workplace"
- Outcomes- falls decreased by 32% (quarterly average)
- · Outcomes- reduced number of pressure ulcers





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Falls: Importance

- A fall is an event in which a patient unexpectedly comes to rest on a lower level, including the ground or floor
- They are the leading cause of deaths to due injury, the leading cause of non-fatal injuries, and the most common trauma-related reason for hospital admission in older adults
 - ("Fall Risk Reduction in Older Adults")





Falls: Importance

Table 3. Nonfatal Falls Attributable Fraction of Expenditures and Associated Healthcare Spending According to Type of Service: 2011 Medicare Current Beneficiary Survey and 2015 National Health Expenditure Accounts

Service Type	Attributable Fraction, % (95% CI)	Healthcare Spending, \$ (95% CI)
Hospital ^a	4.4 (-0.6-9.3)	12.9 (-1.7-27.5)
Physician, other provider	5.7 (2.5-9.0)	10.8 (4.7-16.9)
Dental	1.6 (-3.0-6.2)	0.4 (-0.7-1.4)
Prescription drugs	2.0 (-1.1-5.1)	2.1 (-1.2-5.4)
Otherb	11.8 (2.3-21.4)	29.2 (5.6-52.9)
Total		55.4 (6.8-104.0)

Satistically significantly different from 0 at the 10% level.

*Includes other health, residential, and personal care; home health care; nursing care facilities and continuing care retriement communities; durable medical equipment, other nondurable medical products.

CI = confidence interval.

- In 2015, the total cost of falls totaled over 50 billion dollars
 - $\circ\,\text{Medicare and}$ Medicaid paid for 75% of these costs
 - (Florence et al 2018)



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Falls: Importance

- 1 in 4 older people falls each year, but only half tell their doctor
 - o Falling once doubles the chance of falling again
- Each year, 3 million older people are treated in the ER for fall injuries
 - o 95% of hip fractures are caused by falls
- · Many people who fall become afraid of falling
 - o Increases their risk of future fall
 - o Self limit activities



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Falls: Risk Factors

- Muscle weakness
- Arthritis
- History of falls
- Impaired ADL performance
- Gait deficit
- Depression
- · Balance deficit
- Cognitive impairment
- · Use of assistive device
- Age > 80
- Visual deficit
- Medication factors (polypharmacy, selected medications)
- Neurological factors (a variety of cognitive and sensory implications)
- Cardiovascular factors
 - ("Fall Risk Reduction in Older Adults")





Falls: Policy for prevention & management

- Facility Requirements
- Physical and Mental Assessment
- · Accident and Post Fall Assessment
- Drug Monitoring
- Programming/ Intervention

• (Yoon et al 2018)



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Falls Risk Factors & Policy Considerations: Your Impact

- Muscle weakness
- Arthritis
- · History of falls
- Impaired ADL performance
- · Gait deficit
- Depression
- Balance deficit
- Cognitive impairment
- · Use of assistive device

- Age > 80
- Visual deficit
- Medication factors (polypharmacy, selected medications)
- Neurological factors (a variety of cognitive and sensory implications)
- Cardiovascular factors
 - ("Fall Risk Reduction in Older Adults")



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Falls: Assessing & Addressing Fear

- Falls Efficacy Scale
- Activities-specific Balance Confidence Scale

• ("Fall Risk Reduction in Older Adults")





Specific considerations for fall risk reduction

- · Successful approaches:
 - o Are "multifactorial"
 - o Are sufficiently intense to improve muscle strength with specific exercise for the lower extremity and trunk/core
 - o Target dynamic balance improvement

("Fall Risk Reduction in Older Adults")



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Specific considerations for fall risk reduction

- Successful approaches:
 - o Address joint pain and instability
 - o Address postural faults
 - o Include gait training
 - o Culminate in a program that is easy to perform both in a facility and at home; encourage long-term participation

("Fall Risk Reduction in Older Adults")



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Total Health Status

- RoPs include restorative potential in the definition of total health status.
- §483.10(c) Planning and Implementing Care. The resident has the right to be informed of, and participate in, his or her treatment, including:
- §483.10(c)(1) The right to be fully informed in language that he or she can understand of his or her total health status, including but not limited to, his or her medical condition.
- "Total health status" includes functional status, nutritional status, rehabilitation and restorative potential, ability to participate in activities, cognitive status, oral health status, psychosocial status, and sensory and physical impairments.



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Step 1: Policies and Procedures

- Resident care policies should include ones for restorative/rehabilitation treatments/services
 - o Based on professional standards
 - In collaboration with MD, SN, PT, OT as appropriate





Step 2: Competencies

- §483.35 Nursing Services
- §483.35(c) Proficiency of nurse aides
- §483.65(b) Qualifications Specialized rehabilitative services



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Step 3: Resident Assessment

- §483.20 Resident Assessment
- The facility must conduct initially and periodically a comprehensive, accurate, standardized reproducible assessment of each resident's functional capacity.
- F636: Resident Assessment
- "The facility must conduct initially and periodically a comprehensive, accurate, standardized reproducible assessment of each resident's functional capacity."



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Step 4: Person-Centered Care Plans

- §483.21 Comprehensive Person-Centered Care Plans
- Based upon the comprehensive assessment, the resident's care plan must include specific interventions, exercises and/or therapy to maintain or improve....., or to prevent, to the extent possible, declines or further declines. The resident/representative must be included in the development of the restorative/rehabilitative care plan and provided the risks and benefits of the treatments.
- The decision on what type of treatments includes an evaluation of the cognitive ability of the resident to be able to independently participate, whether the resident requires assistance due to medical condition or cognitive impairments or loss of ability to follow treatment instructions. Care plan interventions may be delivered through the facility's restorative program, or as ordered by the attending practitioner, through specialized rehabilitative services.





Restorative Nursing Programs

 "Restorative nursing program refers to nursing interventions that promote the resident's ability to adapt and adjust to living as independently and safely as possible. This concept actively focuses on achieving and maintaining optimal physical, mental and psychosocial functioning."







CMS RAI Version 3.0 Manual; CH 3: 0-41

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Resources

• CMS RAI Version 3.0 Manual; CH 3: O-41

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What is a Scope of Practice

- A scope of practice is defined under state law.
 - o Generally define what someone specifically "can do" unique to their license
 - o Outside of this presentation to describe 50 state practice acts
- · Challenge is, in many cases, these have created arbitrary silos and a healthcare hierarchy that impact resident care.



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What is Person-Centered Care?

"Person-centered care means that individuals' values and preferences are elicited and, once expressed, guide all aspects of their health care, supporting their realistic health and life goals. Person-centered care is achieved through a dynamic relationship among individuals, others who are important to them, and all relevant providers. This collaboration informs decisionmaking to the extent that the individual desires."





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Essential Elements of Person-Centered Care

- An individualized, goal-oriented care plan based on the person's preferences
- Ongoing review of the person's goals and care plan
- Care supported by an interprofessional team in which the person is an integral team member
- 4. One primary or lead point of contact on the healthcare team
- Active coordination among all healthcare and supportive service providers
- Continual information sharing and integrated communication
- Education and training for providers and [others]
- Health education \dots supports informed decision-making and self-determination 8.
- Performance measurement and quality improvement based on person and caregivers feedback

Source: AGS, 2015





How to Break Down Silos

- · Improve communication and transparency
- Create a culture of gratitude
- Share organizational and resident stories

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Organizational Change -Jack Welch (Ashkenas R, 2015)

- 30 years ago Jack Welch (CEO of GE) recognized that innovation and technology advances were going to require better coordinated work efforts to improve efficiency and outcomes.
- Initiated Work-Out process to improve collaboration and speed up decision-making
- Getting all team members in one place
- · Working together on common issue
- · How can we do that in healthcare?



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Grand-Rounds

(Sandal S et al, 2013)

- Having team members be together <u>with the</u> resident to discuss progress and challenges that need to be addressed.
- Need representatives of each area that impacts the resident
 - o Nursing
 - o Therapies
 - o Food service
 - o Housekeeping/environmental services
 - $\circ\, Administration$
 - o Physician or NP if able





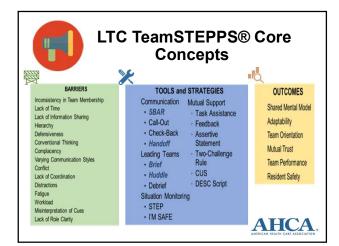
POISE-Care Model

(Abrahamson K 2017 and Nazir 2015)

- Patient-Oriented Interdisciplinary Sub-acute Care
- Promotes working interdisciplinary team, with the patient/resident as the driver of care. (Reducing hierarchy)
 - Health team includes physician or NP, PT, OT, social workers, nurses, nursing assistant, activities and food service personnel.
 - Others as desired by patient/resident including family and other care partners
- · Meet at the bedside of the resident to review the residents' top 3 goals and any concerns with care. (transparency and communication)
- Document progress to create positive outcomes



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Active Residents in Care Homes (ARCH) Implementation Findings (Smith R et al, 2019)

- To improve resident time active in care homes and increase teamwork therapists must:
 - o Develop trusting relationships with staff
 - o Empower staff
 - o Remain flexible

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Improving Care Coordination-OAPI

- "QA is a process of meeting quality standards and assuring that care reaches an acceptable level. Nursing homes typically set QA thresholds to comply with regulations. They may also create standards that go beyond regulations. QA is a reactive, retrospective effort to examine why a facility failed to meet certain standards. QA activities do improve quality, but efforts frequently end once the standard is met."
- "PI (also called Quality Improvement QI) is a pro-active and continuous study of processes with the intent to prevent or decrease the likelihood of problems by identifying areas of opportunity and testing new approaches to fix underlying causes of persistent/systemic problems. PI in nursing homes aims to improve processes involved in health care delivery and resident quality of life. PI can make good quality even better."



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QAPI Process Requires Teamwork

- Identifying where the home may not be meeting its quality standards and then having an interdisciplinary team develop a performance improvement plan.
- Organizational Change Management principles identify having "line staff" identify the solutions is more likely to create a successful change program.
- Involve not just the nurses, but CNAs, therapists, social workers, food service and residents to expand the lens and create solutions that work for everyone.
- Particularly having Nursing Assistants will empower them and help to communicate the change positively to families and visitors. (Abrahamson K et al, 2018)



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LOCK Model

- Use within the Veterans Health System
- Tenets
 - Look for the bright spots and how they differ from routine to be replicated
 - o Observe other staff/departments
 - o Collaborate in huddles intra- and inter-disciplinary
 - Keep information sharing bit-sized and trial small incremental change
 - o Facilitated by champions



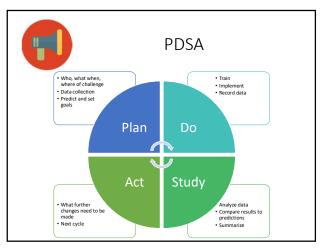


Root Cause Analysis

- · Root Cause Analysis
 - "structures team process that assists in identifying underlying factors of causes of an event..."
 (CMS.gov)
- Develop a problem statement that is clear and specific
- · Identify contributing factors
 - o For each contributing factor, identify if this was corrected- would the problem have been avoided?
 - May take 3-5 levels of "why" did this happen- to get to root cause



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Case Study: Remember the Alarm Reduction...

- In the case study discussing alarm reduction- the facility identified a problem through their quality assurance process. Despite falls committee reviewing each resident, the fall rate was not declining.
 - o Tracked overall fall rate, individual falls
 - Identified alarm use was giving reactive versus proactive data (IE- people with alarms were still falling)
 - o Team got together to discuss options including unit CNAs, therapy, administration
 - Looked for bright spots- who had alarms that were not falling and removed those first.





Case Study: Remember the Alarm Reduction...

- Following the PDSA cycle
 - o Planned- put system in place before reducing the "harder" alarms
 - Trained staff
 - Added "hall monitors"
 - o Do- reduced alarms systematically over time (first days, then evenings)
 - o Study- tracked data on falls, was plan working
 - o Act- integrate this information into policies and procedure, further refine if additional changes are



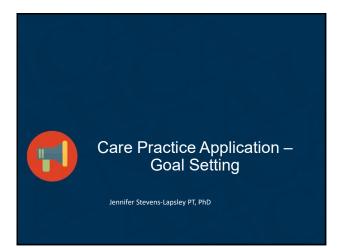
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 Publishers https://htsp.harvard.edu/product/HuZbZO-Pub-ENG-NitE-&itemi-indingMethod=Searc Accessed 12/6/19 Mills W Pimentel C, Palmer J et al. (2018) Applying a theory-driven framework to guide quality improvement efforts in nursing homes: The LOCK Model. Gerontologist 58(3):598-605.
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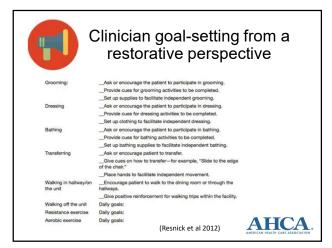
SMART format for goal setting

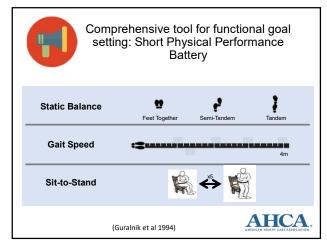
- Specific
- Measurable
- · Attainable/ achievable
- · Realistic/ relevant
- Trackable/ time-bound

• ("Develop SMART objectives")



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SPPB: Balance Tests

- Assessing ability to stand unsupported for 10 seconds with feet in three positions of increasing difficulty
- · Begin timing when resident is in position and releases support
- If balance is lost in any position, record the time that balance was maintained and do not proceed to the next, more challenging foot position
 • (Guralnik et al 1994)



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SPPB: Gait Speed

- · Assessing time it takes the resident to walk 4 meters (8ft) at usual pace (can use typical assistive device)
 - o Walk all the way past the end marker before stopping
- Perform test two times, allowing a short rest inbetween trials
 - o Start recording when the resident begins walking and stop recording at the end marker

• (Guralnik et al 1994)



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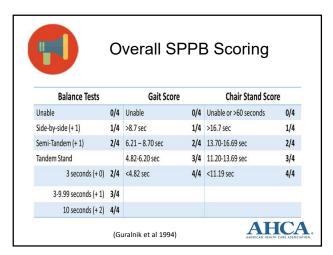


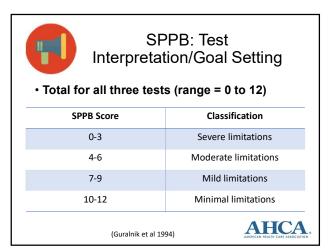
SPPB: Chair Rise

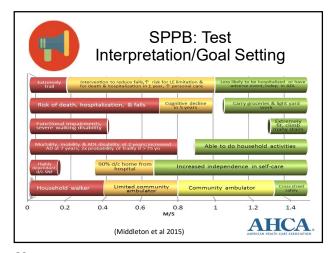
- Time required to complete a series of 5 chair rises without the use of upper extremity
- Start from sitting position, with arms folded across your chest
- Must fully sit and stand 5 times end time after 5 full stands
- Stop if unable to complete, requires the use of arms, safety issue or one minute is reached without completing 5 full stands

(Guralnik et al 1994)











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Positive impact of effective team communication

- · Improved
 - o Ability to meet patient needs
 - o Outcomes
 - o Overall quality of care
 - o Patient experience scores
- Decreased
 - o Patient length of stay
 - o Staff turnover
 - (Implement Teamwork and Communication")



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Common Barriers to Effective Communication

- · Working conditions
- Resources
- Team composition

• ("Implement Teamwork and Communication")





Elements of effective communication

- Complete
- Clear
- Brief
- Timely

• ("Implement Teamwork and Communication")



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Elements of effective team meetings

- · Participation from all parties directly involved with care
- Support from leadership, leadership consistently informed
- Clear roles
- · Clear meeting goals, agendas, and time boundaries

• ("Implement Teamwork and Communication")



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Tools for team communication: ISBAR

Briefing: a discussion between 2+ team members, using concise, pertinent information to collaborate with respect to an event

- I = Introduction (when necessary, including name and team role)
- S = Situation
- B = Background
- A = Assessment
- R = Recommendation
 - endation

 ("Implement Teamwork and Communication" THEA





Tools for team communication: STEP

- · Status of the patient
- Team members
- Environment
- Progress toward goal

• ("Implement Teamwork and Communication")



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Tools for team communication: Handoff

- During transitions in staff management, it is critical that all necessary information is transmitted to minimize risk and maximize quality of care
- Responsibility
- Accountability
- Uncertainty
- Verbal communication
 - ("Implement Teamwork and Communication")



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Tools for team communication: Check-back

 A tool for intentionality when vital information is exchanged quickly, ensuring clear transmission of the content

Example:

"BP is falling, 80/40 down from 90/60"

"Yes, the BP is falling"

"That's correct"

("Implement Teamwork and Communication")





The importance of documentation

- Patient care delivery (patient level)
- Patient care delivery (provider level)
- · Patient care management
- · Patient care support
- Billing & management

. (Shamus and Stern 2011)



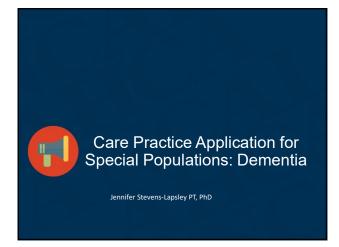
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Background

- · Over 35 million people living with dementia worldwide
- · Over 7 million new cases diagnosed each year
- A leading cause of mortality, significant healthcare system costs
- · Approximately 50% of patients across assisted living and nursing home settings present with dementia syndromes
 - (Resnick et al 2012; Durstine et al 2009; Brett et al 2016)



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Overall clinical presentation

- · Perseveration, loss of sense of time
- · Strain to recall important dates, names
- Loss of visual depth perception, fine motor skill, balance/ coordination
- · Gross postural flexion contracture
- · Vestibular dysfunction
- · Possible hallucinations
- · Issues with cognitive processes
- Loss of short-term memory (but not associations with stimuli)
 - (Durstine et al 2009)



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Overall clinical presentation

- Aggression
- Sundowning
- Yelling
- · Apathy, depression, treatment refusal
- Sleep disruption
- · Issues with filters: sexism/racism & body exposure/sexual disinhibition
 - Durstine et al 2009, Resnick et al 2012)





Functional staging (Global **Deterioration Scale**)

- 1: no symptoms
- 2: very mild impairment, compensation
- 3: mild impairment: others begin to notice deficits
- 4: moderate impairment: aware of disease, difficulties lead to social withdrawal
- 5: moderately severe impairment: <u>usually not aware of the disease due to deficits</u>, need assistance
- 6: severe impairment: personality/ emotional changes, wandering/ falls, difficulty with all ADLs
- 7: very severe impairment: blank affect, minimal verbal ability, minimal gait

(Durstine et al 2009)



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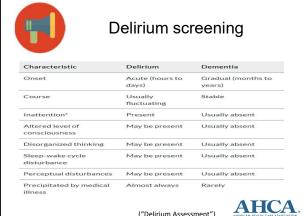
Differential with delirium & importance

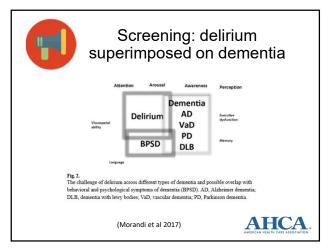
"Don't assume a diagnosis of dementia in an older adult who presents with an altered mental status and/or symptoms of confusion without assessing for delirium or delirium superimposed on dementia using a brief, sensitive, validated assessment tool."



("Choosing Wisely – Clinician Lists")







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Delirium screening

- DTS: RASS + inattention screen
- bCAM, CAM, 3D-CAM, CAM-ICU
- 4AT
- RADAR: When you gave the patient his/her medication...

 - Was the patient drowsy? Did they have trouble following your instructions?
 - o Were the patient's movements slowed down?

("Delirium Assessment")



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BPSD & The Importance of limiting restraints

"Don't use physical or chemical restraints, "Don't use physical or chemical restraints, outside of emergency situations, when caring for long-term care residents with dementia who display behavioral and psychological symptoms of distress; instead assess for unmet needs or environmental triggers and intervene using non-pharmacological approaches as the first approach to care whenever possible."



("Choosing Wisely - Clinician Lists")





Assessing BPSD

- · Nonspecific vocalization
- Verbal symptoms
- · Passive behavior
- Motor agitation

(Kales et al 2015)



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Overarching clinical pearls

- No intervention works every time be flexible and adaptable
- Keep trying being annoying is better than not providing care
- Appreciate the multifaceted nature of contributors to behavior and possible interventions



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Importance of physical activity

- Protective against further decline
- Increased mobility, decreased fall risk
- · Increased well-being/mood, cognitive activity

• (Brett et al 2016)





From the Restorative Care Mindset

Function-focused care

- maintaining physical function
- for themselves as possible

Behavior management

- * Primary focus is on improving or * Primary focus is completing the activity with no resistance/aggression
- * Motivating residents to do as much * Motivating residents to be calm and cooperative while you do ADL for
- kicked during the transfer

(Resnick et al 2012)



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Strategies for successful clinical care

- · Modifying communication techniques
- · Care and consistency
- Enhancing sensory experiences and the physical environment
- · Individualized care
 - (Resnick et al 2012)



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Strategies: communication techniques

- · Approach overall in a slow and simple manner
 - Ask questions to connect: "What is the best part of the day? Who is this is the photo?"
 - o Identify and validate feelings: "You sound angry"
- Use short commands, quick corrections; provide extra time it takes 90
- Provide choices when possible and affection (verbal and nonverbal) to reinforce positive behavior





Strategies: care and consistency

- Incorporate all members of the patient's support system
- Get to know the patient's idiosyncrasies and use this for successful care
- Be deliberate and calm with your body language – they take cues from you; communicate face-on



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Strategies: sensory experiences & environment

- · Assess environment and strike a balance
 - Too dull can be anxiety-provoking; too chaotic can cause feelings of losing control
 - Quiet, secluded space with limited distractions within 5-10 feet – but perhaps with distant view of activity for stimulation
 - o Make note of pleasing stimuli and use often



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Strategies: individualized care

- <u>Don't</u> work on reorienting this can cause agitation and the error is not harmful
- Be willing to try multiple responses to a behavior – reprimand vs distraction, etc.
- Use creative explanations as long as you're not lying; incorporate valued tasks
- When not harmful, follow their lead and engage





Special considerations: patient behavior

- · Physical aggression
- Inappropriateness (sexual disinhibition, racism, sexism)
- Yelling
- Sundowning

• (Kales et al 2015)



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Special considerations: clinician bias

- Expect challenges
- Watch pathologizing: determination, stoicism, walking
- Countertransference



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Special considerations: caregivers

- Consider caregiver burden
- Can be very helpful, but every situation is unique – may need to be involved in only select parts of session
- Engagement is key for home exercise program





Medication considerations

- Anti-Alzheimer medications improve cognitive symptoms by increasing acetylcholine and inhibiting cholinesterase in the central nervous system
- Common medication names include donepezil, galantamine, memantine and rivastigmine
- Common side effects include nausea/ vomiting, diarrhea, dry mouth, insomnia, dizziness, urinary frequency/ incontinence and rash (rarely seizures and dysrhythmias)
- Mobility is important in this population, but monitor blood pressure, mental status, GI & GU status; provide ambulation assistance as needed
 - (skidmore-Roth, ed. et al 2014)



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Exercise considerations

- Consistency and long-term participation are key, so creating a routine is best; involving regular daily activities that require exercise and preferred activities may assist toward this goal
- Emotional instability and behavioral outbursts may impact completion of program; careful supervision is key for safe participation
- Work on strength and flexibility especially in key postural muscles, include aerobic training
 (Pescatello, ed. 2014)



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Memory intervention: spaced retrieval

Technique to capitalize on procedural memory for improving patient recall of important concepts

- · Importance of clinician consistency
- Perfect repetitions, spaced further apart as patient progresses
- Keep it simple
- (Hopper et al 2005)





Memory intervention: spaced retrieval

- Step 1: Choose one or more functional targets or goals (eg. remembering facts such a name or room number, remembering to perform a certain action, remembering future activities).
- Step 2: Ask a question to elicit the target response. If the patient answers/ performs correctly the first time, choose another target for the session. If the answer is unknown or incorrect, tell or show them the right answer and have them repeat it back.
- Step 3: Ask again 15 seconds later. If they can't recall, give the answer and have them repeat it back. Try again in 15 seconds. If it's still not right, spaced retrieval may not be appropriate.

(Hopper et al 2005)



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Memory intervention: spaced retrieval

- Step 4: For those who do move past this stage, when the answer is given correctly, double the time interval (15 seconds, 30 seconds, 1 minute, 2 minutes, 4 minutes, 8 minutes, etc.) and ask the question again. Repeat this step each time the answer is correctly given.
- Step 5: If the answer is incorrect, give the right answer immediately and ask the question again at the last correct time interval.

In between asking the questions, fill the intervals with other therapy activities or conversation – it's best to choose activities or topics that have little to do with the memory target.

(Hopper et al 2005)





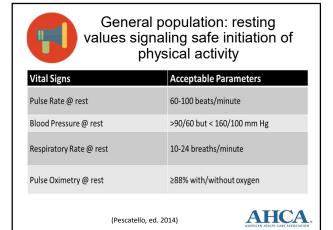


General cardiovascular & pulmonary considerations

- · "Vitals are vital"
 - o Important to assess at least twice before activity begins and upon completion, to assess response
 - As needed based on symptoms, additional assessment during activity



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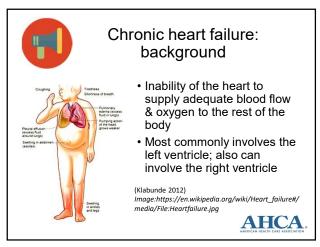


Chronic heart failure: background

- Impacting over 5 million Americans, with over 600,000 new cases every year
- There are a variety of potential causes: coronary artery disease, myocardial infarction, valvular disease, cardiomyopathies, myocarditis, chronic arrhythmia
- Most common cause of emergency room visits and hospitalizations in older adults; most expensive form of cardiovascular disease to treat
- Prognosis is still poor 5-year survival rates are roughly 25% for men and 38% for women

(Klabunde 2012, Durstine et al 2009)





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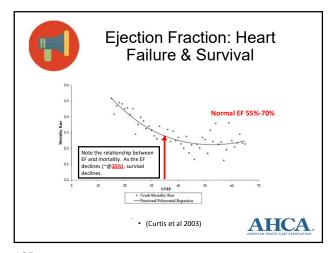
Chronic heart failure: background

Usual classifications:

- 1. Systolic HF: pump failure
- Heart Failure with Reduced Ejection Fraction (HFrEF): EF ≤40%
- 2. Diastolic HF: filling failure
- Heart Failure with Preserved Ejection Fraction (HFpEF): EF ≥50%

(Klabunde 2012)





Classification of Heart Failure ACCF/AHA Stages of HF At high risk for HF but without structural heart disease or symptoms of HF. Structural heart disease but without signs or symptoms of HF. NYHA Functional Classification No limitation of physical activity. Ordinary physical activity does not cause symptoms of HF. No limitation of physical activity. Ordinary physical activity. Ordinary physical activity. Ordinary physical activity. Elight limitation of physical activity. Comforable at rest, but ordinary physical activity. Marked limitation of physical activity. Marked limitation of physical activity. Comforable at rest, but less than ordinary activity causes symptoms of HF. Unable to carry on any physical activity without symptoms of HF, or symptoms of HF at rest. Structural heart disease with prior or current symptoms of HF. Refractory HF requiring specialized American Heart Association

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Medication considerations

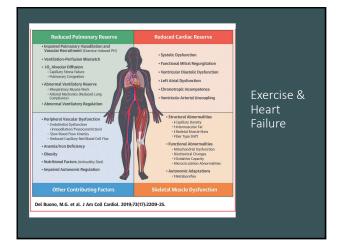
- Diuretics
- ACE inhibitors
- ARBs (angiotensin II receptor blockers)
- Digoxin
- Beta-blockers

Side effects can include electrolyte imbalance, dehydration, postural hypotension, dizziness, drowsiness

Monitor patient and manage fall risk with activity **AHCA**

(Skidmore-Roth, ed. et al 2014, Pescatello, ed. 2014)

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Goals of physical activity

- Improving cardiovascular function to enhance organ perfusion and increase activity tolerance
- · Reducing edema and dyspnea
- · Reducing mortality

(Klabunde 2012)



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American Heart Association Physical Activity Recommendations for Adults

- Get at least **150 minutes per week** of moderate-intensity aerobic activity or 75 minutes per week of vigorous aerobic activity, or a combination of both, preferably spread throughout the week.
- Add moderate- to high-intensity muscle-strengthening activity (such as resistance or weights) on at least 2 days per week.
- Spend less time sitting and encourage even light-intensity activity to offset some of the risks of being sedentary.
- Gain even more benefits by being active at least 300 minutes (5 hours) per week.
- Increase amount and intensity gradually over time. **AHCA**

("American Heart Association Recommendations for Physical Activity in Adults and Kids")

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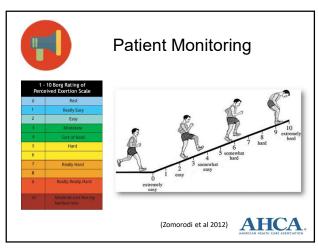


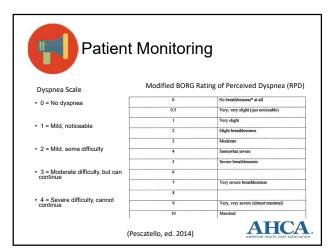
Gauging exercise intensity

- · Heart Rate Reserve Method
 - o Karvonen Formula:
 - Heart Rate Reserve (HRR):
 - Calculation based of the result of the stress test (peak heart rate).
 - Step 1: (Peak heart rate) (resting heart rate) = heart rate
 - Step 2: Define target % of the heart rate reserve (between 60-80%)
 - Step 3: Add resting heart rate to provide target heart rate
- Rating of Perceived Exertion (RPE)

(Pescatello, ed. 2014)







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Physical activity considerations

- These patients should be monitored more frequently than other patient populations for rapid onset status changes including blood pressure, dysrhythmia and severe angina or dyspnea
- Prolonged warm-up and cool-down sessions help a patient adapt to physical activity
- Some patients will tolerate short bouts of activity with interspersed breaks for physiological recovery better than typical continuous activity

(Durstine et al 2009)





Chronic Obstructive Pulmonary Disease (COPD): Background

Chronic Obstructive Pulmonary Disease (COPD) is a common, preventable and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation that is due to airway and/or alveolar abnormalities usually caused by significant exposure to noxious particles or gases



 Exacerbations, comorbidities and aging contribute to the overall severity in individual patients

© 2019 Global Initiative for Chronic Obstructive Lung Disease [www.goldcopd.org]



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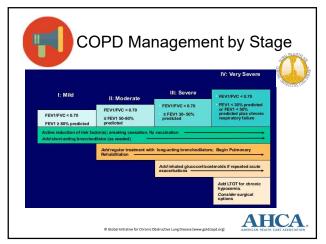
Chronic Obstructive Pulmonary Disease: Background

- COPD is the most common lung disease over 24 million Americans are impacted, and it is the 4th leading cause of death in the US
- It is most commonly caused by cigarette smoking, with small contributions from occupational, environmental, and other factors

(Durstine et al 2009)



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Patient presentation & activity considerations

- Dyspnea on exertion is a cardinal characteristic - associated activity limitations can cause a cycle of deconditioning and progressively worsening activity tolerance
- · Comorbid anxiety is often present due to persistent shortness of breath; depression often results from chronic activity limitations

(Durstine et al 2009, Pescatello, ed. 2014)



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COPD Exercise Intervention: Pulmonary Rehabilitation

- Aerobic Training
 - AHA guidelines: 150 minutes of moderate intensity aerobic exercise per week
- Strength Training
 - o 2x/week strengthening of all major muscle groups
- Breathing Training
 Pursed lipped breathing, Coordinated breathing
- · Education: smoking cessation, nutrition, energy conservation, etc.

AHCA

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Goals of physical activity

- · Reducing breathlessness, increasing exercise tolerance, improving quality of life
- · Prevent and treat acute exacerbations of symptoms, slow disease progression, decrease mortality

(Durstine et al 2009)





Functional assessment and prognosis

	Point on BODE index*				
	0	1	2	3	
FEV ₁ (% of predicted)	≥65	50-64	36-49	≤35	
Distance walked in 6 minutes (m)	≥350	250-349	150-249	≤149	
Dyspnea scale score	0-1	2	3	4	
Body mass index measure	>21	≤21	_	_	

(O'Sullivan et al 2014, Celli et al 2004)



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Medication considerations

- Sympathomimetic agonists
- Methylxanthines
- Thiazide diuretics
- Glucocorticoids
- Antidepressants
- Side effects can include tachycardia, palpitations, dysrhythmias, and muscle weakness
- Monitor patient's cardiac response to activity and tailor strength interventions to patient abilities; supplemental oxygen will likely be needed to prevent exercise-induced hypoxemia

(Durstine et al 2009, Pescatello, ed. 2014, Skidmore-Roth, ed. et al 2014)



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COPD Prognosis

- COPD Worsening when.....
 - o multi-drug resistant organisms
 - o Increased frequency of exacerbations/ admissions
 - o Increased CO2 retention
 - Decreased ability to maintain O2 saturations, even with supplemental O2
 - o Secondary Pulmonary HTN
- •Track PFT & 6-minute walk trends
 - $_{\odot}$ < 1000' in 6-min is sign of advanced disease

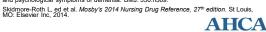
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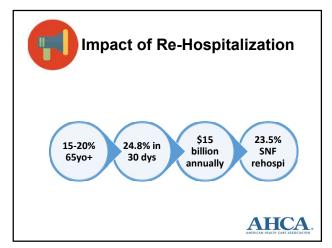
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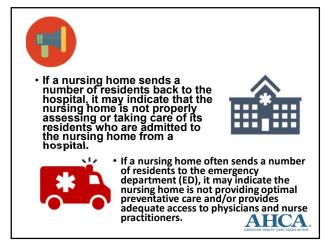
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OIG: SNFs Often Fail to Meet Care Planning and Discharge **Planning Requirements**

- Report OEI-02-09-00201; February 2013
- This study was part of a larger body of work about SNF payments and quality of care.
- SNFs did not:
 - o 1) Develop care plans that met requirements and/or did not provide care in accordance with care plans in 37% of stays
 - o 2) Did not meet discharge planning requirements in 31% of stays
- \$5.1 billion was paid by Medicare for these stays



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OIG's 2019 Top 10 Management & Performance **Challenges Facing HHS**

- Management Challenge 7: Ensuring Quality of Care in Nursing Facilities and Home- and Community-Based Settings
- The Department of HHS has:

 - Initiated a review of the requirements for nursing homes to participate in the Medicare and Medicaid programs
 Committed \$300 million towards a Community-Based Care Transition Program through its Partnership for Patients Initiative

 - Launched the National Nursing Home Quality Care collaborative
 Increased involvement of Quality Improvement Organizations
 (QIOs)
- Updated LTC Requirements of Participation (RoPs) in 2013
- OIG + CMS +DOJ: Federal Elder Justice Interagency Working Group
- State Medicaid Fraud Control Units (MCFUs) receive funding from OIG



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Number of Current Measures Related to Hospitalizations

NHC

- % SS residents after NH admit
- # hospitalizations per 1,000 LS days
- # SS residents with OP ED visit
- % SS residents successfully DC to community

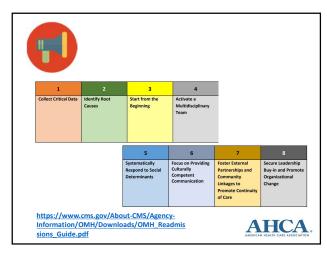
QRP

- DC to Community Potentially
- Preventable 30-Day Post-DC Readmissions

VBP

 SNF All-Cause Readmission (NQF #2510)

AHCA











Customer Satisfaction Assessment Tools

- Consumer Assessment of Healthcare Providers and Systems (CAHPS) patient experience surveys
 - o Long-stay nursing home resident
 - o Discharged resident
 - o Family member

• ("About CAHPS", CAHPS Nursing Home Surveys)



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Putting it all together: Working toward improved customer satisfaction

- · Select assessment tool
- Collect data, identify areas for improvement
- Utilize team communication tools for collaboration to reach shared goal
- Remember, day-to-day approach has a tremendous impact on patient experience





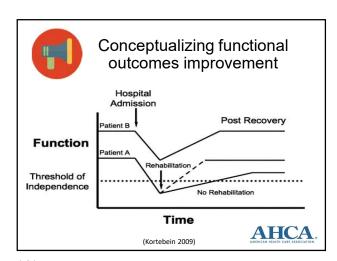
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Putting it all together: Working toward improved functional outcomes

- Ideally: select assessment tool, collect data, identify areas for improvement
- Otherwise: identify useful process and treatment items that are not currently in place and make a plan to implement
- Utilize team communication tools for collaboration to reach shared goal
- Remember, day-to-day approach has a tremendous impact on patient experience



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What are Antipsychotic Medications

- · Anti-psychotics are a class of medications approved to treat schizophrenia, Tourette's Syndrome or Huntington's Disease
 - Miriam-Webster Dictionary defines that as "Powerful tranquilizers"
- Medications are considered psychotropic
 - o These impact mood behavior, thoughts or perceptions
- Started being used "off label" to treat "behaviors of dementia"
- Black box warning to avoid use in Older Adults



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Benefits to Reducing Inappropriate Antipsychotic Medication

- Staff nurses identify
 - o Improvement in quality of life
 - o Improvement in family satisfaction
 - o Reduction in falls
 - o Improvement in the facility Quality Indictor Score

. (Simmons SF et al. 2018)



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OIG Report 2011

- In 2011 the Office of the Inspector General released: Medicare Atypical Antipsychotic Drug Claims For Elderly Nursing Home Residents . Based on 2007 data:
- 14% of elderly nursing home residents had Medicare claims for atypical antipsychotic drugs
- 83% of Medicare claims for atypical antipsychotic drugs for nursing home residents were associated with off-label conditions
- 88% were associated with condition specified in FDA boxed warning
- 51% of drug claims for this group were erroneous, not supported by medical dx or documentation
- 22% were not administered within CMS standards





Why is/was use so high?

- Nursing Home Prescribing Culture (Tjia J et al, 2012)
- Influenced by
 - o External factors- regulations and reimbursement system
 - o Internal Nursing Home Stakeholders-
 - nursing staff, leadership, medication authority and patient/family,
 - structural influences like facility size, staffing, staff turnover, specialty units, ownership
 - o Organizational Culture- shared values, beliefs and
 - Observable patterns of medical care
 - Qualities and beliefs that are stated by organization as important and desirable
 - important and desirable
 Implicit understanding of accepted behaviors and attitudes.



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CMS Created National Partnership To Improve Dementia Care in Nursing Homes

- Since initiating this in 2012- antipsychotic use by nursing home long term residents has decreased from 23.9% to 14.6% at the end of 2018.
- Check your state and region here:
- https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/National-Partnership-to-Improve-Dementia-Care-in-Nursing-
- · Starting in 2019- Late Adopters are being cited for noncompliance with federal regulation related to unnecessary medications. **AHCA**

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CMS Resources

- "Hand in Hand: A training series for nursing homes"
 - o Developed and distributed in 2012

 - https://surveyortraining.cms.hhs.gov/pubs/ClassInformation.aspx?cid=0CMSHIH_ONL
 - o Training principles include
 - Consistent staffing
 - Empowering nurse aides
 - Promoting team involvement
 - Building relationships





Person-Centered Care

- Research has shown that using person-centered care practices can reduce behavioral expressions and thus the "need" for antipsychotic medications.
- Tawiah P, et al 2016 showed a reduction from 18% to 5% by culture change that included
 - o Natural awakening
 - Changing medication administration to promote uninterrupted sleep
 - o Increasing activities
 - Reducing medical practices (BP reduced from 3-4x/daily to 1x/week)
 - o Consistent assignments



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OASIS Training

- Developed by Susan Wehry, MD- a geriatric psychiatrist
- Offers 5 module training online evidence- based on developing:
 - o Compassion
 - o Language
 - o Person-directed care
- In one study it was used in 93 facilities to train staff Saw a greater reduction in antipsychotic use than control facilities
 - \circ No increase in behavioral disturbances were observed
 - (Tjia J, et al 2017)



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Bottom Line

- Reducing inappropriate antipsychotic medication use requires individualized assessment and teamwork as has previously been discussed in these modules.
- Reducing medication that causes fatigue should allow for greater functional participation in ADLs, walking and continence.





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