

Functional Outcomes Improvement

MODULE 3



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Objectives

- Explore the best practices in care coordination.
- Review how the restorative nursing program and therapy can work together to improve resident care.
- Describe the examples of care coordination activities.



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Best Practices to Incorporate to Improve or Maintain Function in Your Organization

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Age Friendly Care Systems

- Institute for Healthcare Improvement and the John A Hartford Foundation have identified 4 M's to be Age-Friendly:
 - **What Matters**- know and align care with specific health outcome goals and care preferences
 - **Medication**- is medication necessary, if so use if it does not interfere with what matters, mentation or mobility
 - **Mentation**- prevent, ID and manage delirium
 - **Mobility**- promote safest mobility to maintain function and do what matters

• (Mate K et al, 2018)



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Mobility is Key!

- German study of nearly 15,000 residents in 262 long term care facilities
 - (Lahmann NA et al, 2015)
- Immobility was sole characteristic most strongly associated with development of
 - Urinary incontinence
 - Pressure ulcers
 - Cognitive impairment
 - Malnutrition



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Mobility and Falls- Healthcare Conundrum

- Risks of immobility are well known but many fear the risks of "allowing" mobility and potential for falls even more.
- 2007 Hospitals started receiving financial penalty for hospital acquired conditions including falls.
- Described as "never" events
- Consequently mobility in hospitals decreased
- Falls did not
- Similar pressures in nursing care facilities with quality measures and fear of lawsuits.

• (Growdon ME et al, 2017)



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Principles of Functional Mobility Care

- **Safety**
 - Individual staff safety balance with resident handling
 - Resident safety with handling
 - Anticipating non-cooperation or aggression
 - Multiple system safeguards rather than relying on error-free performance
- **Mobility Optimization**
 - Balancing the tension between mobility and safety
 - Balance resident autonomy and dignity vs staff time pressure
 - Staff approach and communication
- **Person-Centeredness**
 - Beyond cook-book interventions
 - Individualized, holistic, respectful and empowering
 - Not an "add on" to care but part of daily practice

• (Taylor JA et al, 2016)



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Mobility Perspectives (Taylor JA et al, 2014)

	Security	Purpose	Achievement
Resident	Avoid injury Comfortable during event	Able to move for desired activities Retain autonomy To be assisted as needed	Retain mobility function as much as possible Recognize successful adaptation
Care Staff	Avoid injury	Able to meet resident needs Contribute to safe handling culture	Safely assist resident retain function, mobility and independence Assist to adapt to mobility loss where appropriate
PT	Expecting best practicemobility	Able to contribute to culture of safer resident mobility optimization	Assist staff to manage resident handling safely while optimizing mobility
Manager	Minimize Risk	Able to contribute to culture of safer resident mobility optimization	Provide a culture where staff can manage resident manual handling safely Provide resources necessary for above
Family		Feel involved in resident care mobility decision	Assist the resident to retain mobility, related function and independence



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Best Practice- Avoid All or None Thinking

- Encouraging people to do as much as they are capable of doing with minimal risk to safety
- Hospital study to promote mobility using twice daily nursing walks and cognitive behavioral therapy (CBT) approach to encourage walking
 - (Brown CJ et al, 2018)
 - CBT encouraged older adults to do what they could and ask for assistance with tasks that required assistance
 - Example- person who could transfer and stand at bedside but needed assistance to walk was given a program that included standing at bedside several x's/day along with assistance to walk.



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Best Practice- Encourage Staff to Assist but Not Overtake

- Work with therapy to assess how much residents can do on their own and how/when to assist.
- Program had staff score residents ability to perform daily activities that were broken down by steps.
 - Scores range from independent, with support or not at all
 - Used video of residents doing activities to show staff capability and other videos to show how staff can take over and deny them opportunity to participate

• (den Ouden M et al, 2019)



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Best Practice- Function Focused Care

- Goal is optimizing physical activity in resident rather than simply completing nursing care tasks (EG dressing, bathing, or feeding the individual)
- Intervention- teach and motivate NH staff to effectively engage resident in activities that optimize physical activity and have resident perform functional tasks while minimizing affective and behavioral disturbances during care interactions.
- Environment adaptation may be needed

• (Galik E et al 2014)



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Best Practice- Expect the Unexpected

- Encourage staff to have a plan but be flexible in responding to the daily needs of the individual.
 - Quality interactions between staff and residents is essential
 - Staff need to be mindful of recognizing verbal and non-verbal cues from resident that may demonstrate a need for changing the plan

• (Taylor JA, 2014)



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Best Practice- Get to Know the Residents

- LifeFul program
 - (Low LF et al, 2018)
- Staff created "all about me" document that included brief psychosocial history and functional needs.
- Based on these co-created achievable goals for increased function and socialization
- Each resident became the focus of the team huddles for 1 week
 - Reviewed goals for recreation, physical function and independence
 - Promoting the resident having their "best week"
- Discussed resident at each handover that week to ensure every staff member got to know them and could contribute to implementing goals.



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Best Practice- Prompted Voiding

- Estimate that Urinary Incontinence can be corrected in 30% of nursing home residents and better managed in the remainder.
- Creating voiding record- 3 days
- Prompted voiding uses timely reminders to use the bathroom and positive reinforcement from care partners to maximize continence.
 - Asking if they need to use the bathroom at regular intervals
 - Offering toileting assistance at regular intervals
 - Praising success
- Key is individualized interval timing and sufficient trial length

• (Newman D, 2019)



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Best Practice- Exercise

- Exercise should be offered outside traditional therapy interventions
- Examples in the literature:
- Marching in Place
 - (Kato J et al, 2018)
 - 12-week program offered daily by support staff
 - Progressive program of marching in place and repeated sit to stand
 - Outcome- 11.6% improvement in Barthel Index, 33% improvement in power measures and 14.6% improvement in 10-meter walk test.



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• Elastic Band Exercise Program

• (Chen KM et al, 2015)

- 10 nursing homes in Taiwan with 114 people who used w/c for mobility
- 40-minute program, 3x/week for 6 months
- 3 phase exercise
 - Warm up
 - Aerobic motion
 - Harmonic stretching

• Improvements in flexibility, strength, and sit to stand test



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Short Stay VS Long Stay Residents- Is there a difference?

Short Stay

- Goal is to recover from an illness as much as possible to return home or lesser level of care.
- Function is a key
 - For resident-returning home
 - For facility- quality measures, person-centered care
- Staff should focus on encouraging as much mobility as possible to prepare for discharge.

Long Stay

- Goal is to sustain resident contributions to function as long as possible.
- Function is a key
 - For resident self-image
 - For facility- quality measure, person-centered care and staff workload
- Staff should focus on encouraging as much mobility as possible to promote wellbeing.

Bottom Line: practices that encourage the resident to be mobile and doing as much as possible for themselves are best practice.



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References

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Best Practices in Care Coordination

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Function & the inpatient setting

- While hospitalized, on average, older adults spend 83% of their time in bed and 12% of their time in a chair
- Roughly 40-60% of these patients experience a decline in functional ability, sometimes as early as their second day as an inpatient
- Hospitalized older adults are 61 times more likely to develop a disability compared to those who are not hospitalized
- Older adults who are less mobile and develop medical deconditioning have higher rates of infections, pressure sores, falls, and readmission to inpatient facilities vs returning to the community

(Resnick; Brown 2009; Gill TM 2009, 2004; Kortebein P 2008)

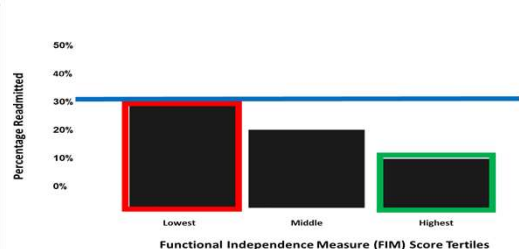


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Function & the inpatient setting

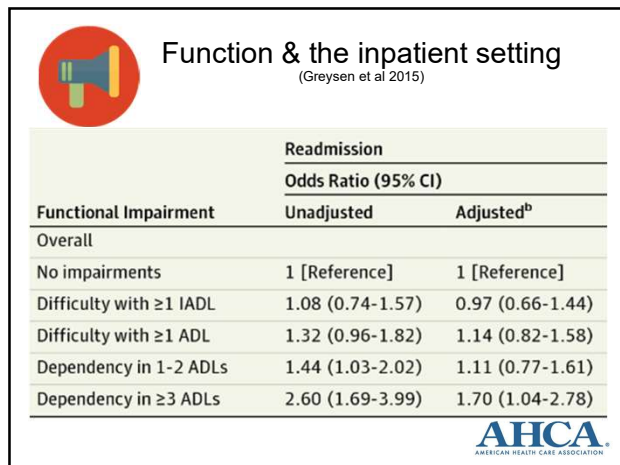
(Hoyer et al. Arch. Phys Med & Rehabil. 2013;94;1951-8)



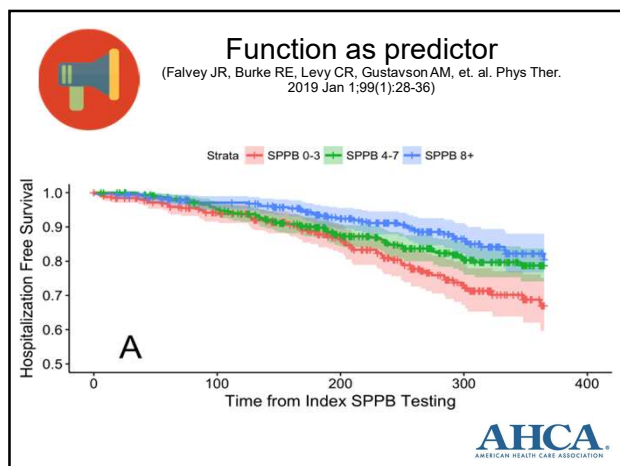
Functional Independence Measure (FIM) Score Tertiles	Percentage Readmitted
Lowest	~30%
Middle	~20%
Highest	~10%



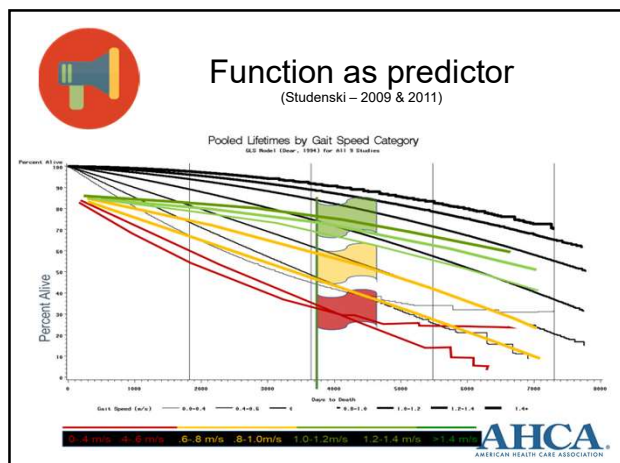
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Functional Tests & Measures

- When assessing function and fall risk, it is important to include key components like range of motion, muscle strength, and sensory integrity
- Balance & Gait
 - Berg Balance Scale
 - Timed Up and Go (TUG)
 - Tinetti
 - Dynamic Gait Index (DGI)
 - Multi-dimensional reach
 - Romberg
 - 4 square step test
- Strength
 - Arm curl test
 - 2-minute step test
 - 30-second chair stand

*(APTA Falls Pocket Guide + resources)



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Overall functional considerations

- Balance
- Mobility – ambulation/ gait speed
- Strength
- **Short Physical Performance Battery**
assessing all key categories



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Short Physical Performance Battery

Static Balance



Gait Speed



Sit-to-Stand



(Guralnik et al 1995)

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Sample Function-focused Nursing Evaluation

Ask the person to perform the following:

- a. Range of motion (ROM)
 - i. Full ROM to 180° of abduction (hands over head) ____ (1 point if yes, 0 if no.)
 - ii. Full external rotation (hands behind head) ____ (1 point if yes, 0 if no)
 - iii. Full internal rotation and adduction (hands in small of back) ____ (1 point if yes, 0 if no)
- b. Either lying or sitting, point and flex your toes, bend and straighten your knees, and/ if sitting, march.
 - i. Able to flex ankle ____ (1 point if yes, 0 if no)
 - ii. Able to point toe ____ (1 point if yes, 0 if no)
 - iii. Able to bend and straighten knees ____ (1 point if yes, 0 if no)
 - iv. Able to march ____ (1 point if yes, 0 if no)



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Function-focused Nursing Evaluation

- c. Chair rise—observe whether the person can do this independently or how much help is needed (give up to 10 min to complete the task)
 - i. How many tries does it take ____ Scoring; 1–3 = 1; >3 times = 0
 - ii. Do they use their arms ____ (0 points if yes, 1 if no)
 - iii. Can they make it to a full stand and stand independently for 1 min ____ (1 point if yes, 0 if no)



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Function-focused Nursing Evaluation

- d. Follow a one-, two-, or three-step command doing a functional task: Ask the participant to take a towel, fold it in half, and put it on the table (bedside table or bed or whatever is available).
 - i. Follows a one-step verbal command (1 = yes; 0 = no)
 - ii. Follows a two-step verbal command (1 = yes; 0 = no)
 - iii. Follows a three-step verbal command (1 = yes; 0 = no)
 - iv. Follows a one-step visual/cueing command (1 = yes; 0 = no)
 - v. Follows a two-step visual/cueing command (1 = yes; 0 = no)
 - vi. Follows a three-step visual/cueing command (1 = yes; 0 = no)

HIGHER SCORES ARE BETTER CAPABILITY

Total Score _____



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Choosing functional metrics to track

- Anthropometric measurements (eg – BMI)
- Overall activity level (eg – steps per day)
- Vitals (resting heart rate, resting blood pressure)
- Individual and combined domains of mobility, strength, balance



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Restorative Care: Overview

- A care philosophy that emphasizes the evaluation of residents' underlying functional abilities and providing associated intervention to optimize and maintain these abilities
- Restorative Program Types:
 - Dedicated/ Designated – most Medicare supported programs, featuring dedicated staff
 - Integrated – engaging all staff

• (Resnick, Galik, & Boltz, 2013)



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Restorative Program Goals

- To return an individual to or maintain an individual at their highest physical, mental, and psychological functional level and well-being
- To use the skills and expertise of each discipline to plan, implement and facilitate all pathways for the best individual outcomes
- To maintain the maximal level of independence possible, with patients returning home as indicated



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In practice: Restorative vs traditional care

- Bed mobility
 - Encourages patient to move and provides time for interaction (*vs not allowing time for patient to respond*)
 - Provides step-by-step cues when patient struggles, including how to use equipment like rails (*vs just moving the patient without asking them to assist*)
 - Provides hands-on facilitation to begin patient's movement, as needed (*vs discouraging the patient from maximal level of independence due to safety or time concerns*)



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In practice: Restorative vs traditional care

- Transfers
 - Encourages patient to transfer and waits for them to move (*vs not allowing time for patient to initiate*)
 - Gives step-by-step cues on how to transfer, including "slide to the edge of the chair" (*vs no cues/ encouragement during activity, taking over during activity*)
 - Guides patient's hands to facilitate independent movement, for example on walker (*vs fully lifting patient or discouraging patient from performing activity*)



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In practice: Restorative vs traditional care

- Mobility (ambulation or wheelchair)
 - Encourages patient to walk or independently propel wheelchair, providing time to perform (*vs no involvement or encouragement, not providing enough time*)
 - Provides step-by-step cues to support mobility efforts, for example, "move your left foot forward, now move your right foot" (*vs not providing tailored assistance or not encouraging activity if patient can only perform partly or for short distances*)
 - Assists in, asks about, or encourages use of assistive devices (*vs not addressing this supportive component of the activity, as needed*)



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Restorative Care Overall

- Moving away from nursing as “watching over” patients to protect against adverse events like falls
- Prioritizing prevention of physical and psychosocial disability, always looking to a patient's highest functional level
- Encouraging/ facilitating activities that might have been considered “risky” from a traditional perspective, but really prevent deconditioning and disability



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Restorative Care Overall

- Moving from focus on “do no harm” to a focus on “if possible, do well”
- Operating in conjunction with therapy interventions that work to maximize functional performance



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Key Components of Restorative Program Implementation



- Establishing goals
- Education of staff, families, residents
- Environmental assessment
- Motivation and mentoring



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Care Coordination in Restorative Care

- Restorative Team Members
 - Team lead: "Champion"
 - Advanced practice nurse & medical director or primary care physician
 - Physical therapist, occupational therapist
 - Recreational therapist or exercise trainer
 - Activities staff
 - Social worker
 - MDS Coordinator



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Restorative Program MDS Requirements

- The care plan & medical record must document measurable objectives and interventions
- The medical record must reflect periodic evaluation by a licensed nurse
- Nursing assistants/ aides must be trained in the techniques that promote resident involvement in the activity
- A registered nurse or licensed practical (vocational) nurse must supervise the activities in a restorative nursing program



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Keys to success: Collaboration

- Identifying and supporting the champion
- Sustaining involvement of patient, family, and all care providers
- Organizational/ administrative support
- Training/ education for all stakeholders
- Flexibility and creativity in patient activities, in accordance with goals



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Tools Associated with Effectiveness

- Process/ system supporters
 - When possible, flexible schedules/ extended hours allowing patient to receive more care
- Team communication frameworks
 - IDT communication
 - Regular in-services, screens, rounds
 - Nursing <-> therapy referral system
 - Carryover across patient, family, and providers



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Tools Associated with Effectiveness

- Data collection/ assessment
 - Use of standardized tests & measures
 - Comprehensive evaluations across disciplines
 - Assessment of functional outcomes with associated audits
- Patient tools
 - Questionnaire soliciting patient values and preferences to inform activity
 - Wellness and home exercise programs



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Culture of Improving Function

- Framework from “patient safety culture”
 - Leadership
 - Teamwork
 - Evidence-based practice
 - Communication
 - Learning
 - Just-culture
 - Patient-centered care

• (Sammer et al 2009)



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Safety Culture Tools

- Assessment examples
 - Hospital Patient Safety Survey (HSOPS)
 - Safety Attitudes Questionnaire (SAQ)
 - Manchester Patient Safety Framework
- Systematic change tools
 - CUSP toolkit from AHRQ

• (<https://www.ahrq.gov/hai/cusp/modules/index.html>)



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Case Study: 1 year without a fall



- Use of a CUSP team (Comprehensive Unit-based Safety Program) through the Armstrong Institute at Sibley Memorial Hospital - Johns Hopkins Medicine
- Development of a culture where clinical staff could come to administration with ideas
 - Front-line staff were empowered to speak up for and enact change, while management took a team member role



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Case Study: 1 year without a fall



- 17-20 projects per year, 1-2 initiatives per month
- 45-minute monthly meetings – standing and protected, even if there was low attendance one month
 - Prominent display of whiteboard tracking “days since fall”; bulletin board displaying other initiatives in progress



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1 year without a fall, continued



- Staff were asked to complete simple assessment to voice concern:
 - How do you think a future patient will be harmed?
 - What can we do to mitigate the harm?
- Conversation in monthly meeting around what data could be used to understand the problem, then tracked over time to assess intervention



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1 year without a fall, continued



- Initiatives included: parking lot flow improvement, regular checks for common environmental hazards (pool on-site with wet locker room floor), installation of new railings, ease of access to and use of gait belts
- Competency trainings for staff using new skills across disciplines (eg – gait belt use)



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1 year without a fall, continued



- TUG used as fall risk screening for all ambulatory patients – documented consistently in EMR with precaution and goals for improvement
- Near misses documented and shared
- Sharing out results of improvement initiatives at yearly conference – contributing to broader culture of discussing improvement



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Resources

- Resnick; Brown 2009; Gill TM 2009, 2004; Kortebein P 2008
- Hoyer et al. Arch. Phys Med & Rehabil. 2013;94;1951-8
- Greysen et al 2015
- Falvey JR, Burke RE, Levy CR, Gustavson AM, et. al. Phys Ther. 2019 Jan 1;99(1):28-36
- Studenski – 2009 & 2011
- APTA Falls Pocket Guide + resources
- Guralnik et al 1995
- Resnick, Galik, & Boltz, 2013; Resnick
- Qualityrestorativenursingprograms.pdf
- Sammer et al 2009
- <https://www.ahrq.gov/hai/cusp/modules/index.html>



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