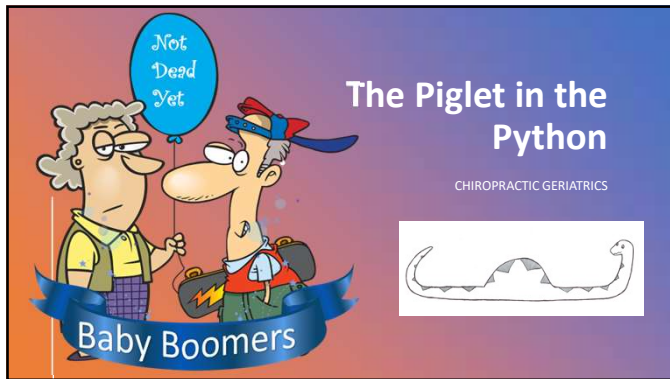




1

Karen Konarski-Hart DC FACO DAAPM MSDPEM FICC

karen@konarskiclinic.com

(put "Piglet in Python" in "subject")

501-258-7757 cell/text

422 N Cedar Little Rock AR 72205

2

So who am I?

I am a Chiropractic Physician in private practice in Little Rock AR for over 40 years. And yes, I am one, (that is a person older than 65) as are most of my family, friends and many of my patients.

I am on the UAMS Longevity Clinic Advisory Committee and I also serve on the ACA's Committee on Equity Diversity and Inclusion as advocate for the aging and disabled populations.

I am not a coding expert, a researcher, a professor or a medical specialist. But I do see the handwriting on the wall....

Throughout this presentation I will use examples from real experiences and the opinions are only mine & the sources I cite.

3



The "pig" started its journey through the python in 1946...

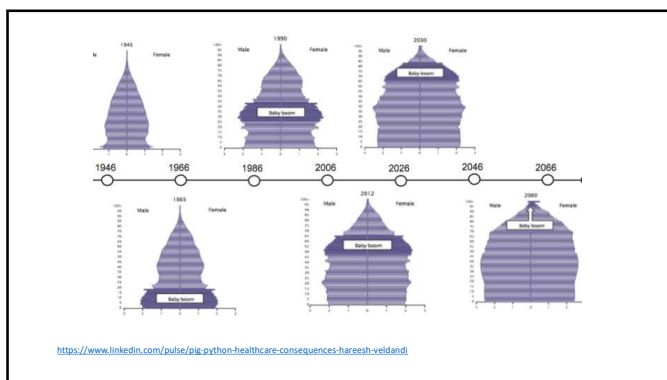
There were 76 million births during the "Baby Boom" era 1946-1964

Adjusting for death, immigration and the inclusion of pre-baby boomers, **by 2030, nearly 1 in 5 US residents (20%) is expected to be 65 years or older. (71,880,000)**

14% of chiropractic patients are 65 or older

<https://www.prb.org/resources/just-how-many-baby-boomers-are-there/>

4



5

DCs are now fighting for payment for full scope under Medicare.

BUT What if we acquired that tomorrow?

It's not just about getting our PART exam & Xrays paid.

Would we be able to properly evaluate and treat the non-spinal conditions with which many patients on Medicare would present ?
i.e. persons with disabilities and/or patients of advancing age

We have become accustomed to seeing these patients for analysis and treatment of dysfunctions of spinal articulations with a contributing spinal condition. How many of us presently do a full systems exam on these patients or address co-morbidities that exacerbate or result from visceral, life style or cognitive issues?

Do we realize the complexity of treatment of the whole person of advanced age or disability?

House, Senate Reintroduce Chiropractic Medicare Coverage Modernization Act: H.R. 1610 & S. 799

excludes any Medicare



6

Are we ready for interprofessional discourse with the team of specialists also treating these individuals as well as the polypharmacy which is likely to be part of the picture?

Are we ready for disability exams, advanced care questionnaires and directives, POLST and DNR forms?

Do we have the training, technology and resources to increase accessibility in our offices?

Are we willing to schedule the time for the consultation on whole person health?

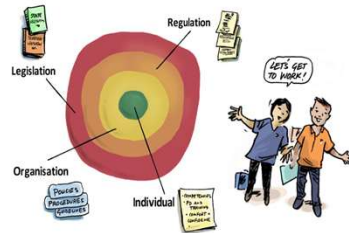
Are we able to offer quality of life education such as "falls prevention"?

Are we aware of resources for referral that can support the recommended treatment plan?

7

Internally

Are we prepared for legislative, insurance and scope of practice issues that will arise and the potential need for changes?



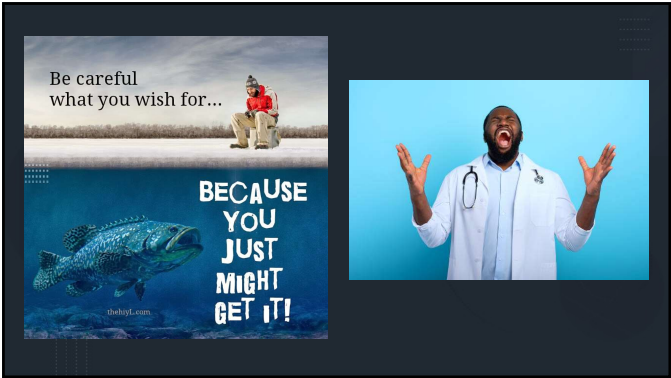
8

The Most Important Question...

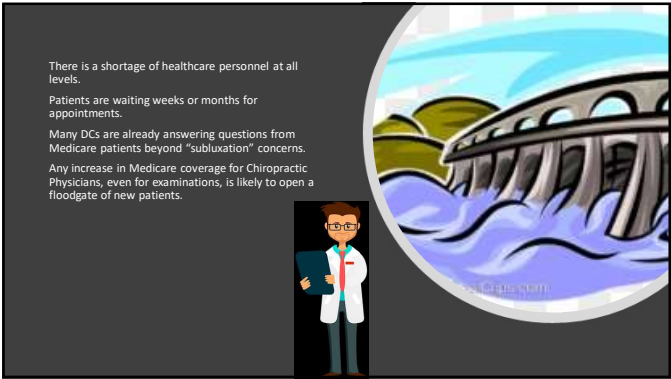
Are we aware of our own misconceptions or assumptions?



9



10



11



12



This course is to...

- Point out some of the potential weaknesses in our present education, scope and personal practice focus relative to elder patients
- Recommend how we as Chiropractic Physicians might become more pro-active in anticipation of expanded Medicare coverage
- Provide some resources for increasing involvement with an aging population

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Recognizing every practice is unique, hopefully this course will encourage you to explore what expanded Medicare coverage, and the patient population it brings, might offer you.

Perhaps you will consider continuing education, review of your forms and exams, training for staff, remodeling to increase accessibility or purchasing new equipment.

By starting to incorporate aspects of the recommended history & exam of geriatric patients, as well as exercise, nutrition and prevention counseling, your transition to full coverage may be smoother.

At the least, this may be a good opportunity for forming referral networks and updating past interprofessional relationships

14



- Each section of this course could be expanded into its own full class
- Throughout, I have provided references, links & resources
- Hopefully, those will allow you to “bone up”, as it were, on the topic (sorry)

15



Our “Flight” of Topics

- Our present education/skills
- Community involvement (building your base)
- “Medicare” health assessments
 - (What’s important, our place in the mix)
- “Medicare” screening tools
- Falls Prevention (immediate implementation)
- Assistive devices
- Barriers to older patients seeking care
 - (Including loneliness, grief)
- Communication with older patients
 - (In general, sensitive topics including “end of life”)
- Getting paid (example)
- Common Geriatric Comorbidities
- Common Geriatric Labs
- Masquerading Diseases
 - (Including pharmaceutical myotoxicity)

16



- This course will be packed with info
- You will have access to all the slides & references
- Review at your pace & include appropriate staff

SO...
Hang on for the ride!

17

Other professions have already recognized the need for increased knowledge in geriatric healthcare

<https://aace.org/article.aspx?articleid=209448>
Medical Education | April 2023

Developing Osteopathic Competencies in Geriatrics for Medical Students
Donald R. Noll, DO, MEd; King Charnett, DO; Pamela M. Baschew, EdD, MPH; Sherry C. Pomerantz, PhD; Janice Casalski, MS; Patrick Avakhandia Esqba, Jr, OMS; Anita Chopra, MD

Also:
<https://www.aace.org/article.aspx?articleid=209448>
<https://www.aace.org/article.aspx?articleid=209448>

18

Health Care Planning and Promotion: Recognize the effect of positive physical contact on the mind, body and spirit connection of the acute and chronically ill elderly patient and chronically ill elderly patient.

20

https://chiro.org/Medicare/ABSTRACTS/Best_Practices_Recommendations_for_Older_Adults.shtml#:~:text=95B29%5D%20Assessments%20of%20chiropractic%20coursework,experience%20with%20older%20adult%20patients.

21

<https://pubmed.ncbi.nlm.nih.gov/20732584/>



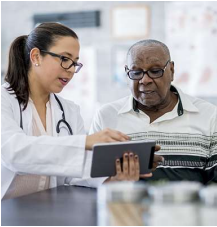
Best Practices Recommendations for Chiropractic Care for Older Adults: Results of a Consensus Process, updated by the 2017 article:
Best Practices for Chiropractic Care for Older Adults: A Systematic Review and Consensus Update
J Manipulative Physiol Ther. Jul-Aug 2020;20(5):454-73. doi: 10.1016/j.jmpt.2020.06.006.
 Cheryl Hawk, Michael Schneider, Paul Dougherty, Brian J Gieberzon, Lisa Z Killinger

As we stated

...By 2030, nearly 1 in 5 US residents is expected to be 65 years or older. [4] Chiropractors commonly provide care to older adults in the United States, with **approximately 14% of chiropractic patients being 65 years or older...**

...Although a substantial body of research related to chiropractic has accumulated since 2002, **most of it addresses conditions of the general adult population, not those of older adults specifically...**

<https://pubmed.ncbi.nlm.nih.gov/20732584/>



22

This presents a great opportunity for Chiropractic educational programs and research centers to focus on geriatric specific research to support our therapeutic approaches.

Reimbursement and even liability may be dependent on evidence-based/informed treatment plans for older adults.

23

Changing the Care of Chronic Conditions

Part 1 High Blood Pressure

Kenny J Cole, MD, MHCDS

PRESENT: DOWNSTREAM approach:
 inc. # aging pts. + dec. # PCPs = dec. time for Hx & Px => PCP "triages" => specialist to treat

NEED: UPSTREAM prevention:
 (parable)




=>




<https://www.healthcarejournal.com/sites/default/files/journal/1b/1UAR-2023-Jul-Aug/26/index.html>

24

Treating the Whole Patient (Patient Weight & Cardiovascular Care)

Jason Pelton, MD CHI St Vincent Heart Institute

"Roughly 71% of Arkansans are overweight or obese"
< 50% people in US have BP controlled

"...treatment for an emerging ...condition in a patient who is overweight must include an associated plan for weight loss."

=> Decreased -stress on ht m, bp, vascular dis,
-blood sugar (diabetes, 1/9 Arkansans), amputation
-cholesterol, stroke



<https://www.healthcarejournal.com/sites/default/files/journal/fb/HIAR-2023-jul->

25

Chiropractic Physicians are already educated in history taking, measuring vital signs, consultation, goal setting/pt expectations & recommending home instructions (diet, exercise, weight loss)

PLUS

They often see patients on frequent visits.

= track, determine progress or reason for noncompliance, reinforce

BUILD TRUST



26

With Medicare inclusion, Regardless of your personal practice focus & choice of therapies, be especially diligent in having evidence-based/informed research to support your recommendations for care.

This is especially important if you are using conservative approaches (nutrition, manipulation, etc) as a replacement for or delaying medical or pharmaceutical intervention.

Never remove a patient from prescribed medication without consulting the prescribing physician. Advise patients the same.

Remember that geriatric patients may have a very volatile physiology relative to their medications, even minor alterations in dose may precipitate major reactions.

27



28

Just for a minute consider the following services commonly used in a chiropractic office & how you might alter the use based on an elderly patient’s anatomy and physiology...

Consider contraindications regarding bone structure, flexibility, skin, circulation, neurologic compromise, respiration, past medical history...

29

Physiotherapy/Modalities

- Massage
- Electrotherapies
- Ultrasound
- Heat and Cold
- Laser
- Acupuncture/Acupressure
- Infrared
- Exercise

30

Chiropractic Techniques

- Diversified
- Gonstead
- Activator, Impulse
- Thompson Drop Table
- Flexion/Distracton
- Spinal Mobilization
- Spinal Decompression

31

Other

- Orthopedic supports/braces
- Orthotics
- Ergonomic training/supports
- Counterirritants
- Supplements

32

...The most commonly used nonmanipulative procedure is patient education, used by 95% of chiropractors...

It is well established that strength training and balance exercises are beneficial for improving physical function and reducing impairment in older adults in both the home and clinic settings. Chiropractors often use these and other types of therapeutic exercise as an integral component of their treatment of older adults.

Like other health care providers, chiropractors provide health promotion counseling. There is strong evidence supporting counseling by providers for physical activity and exercise for older adults, for general health, and also for fall prevention.

There is also strong evidence that older adults should be screened for fall risk factors (such as medication use—particularly polypharmacy—blood pressure, balance and gait, heart health, and home safety).

<https://pubmed.ncbi.nlm.nih.gov/2973584/>



33



Falls Prevention Awareness Day

September 22



FALLS PREVENTION AWARENESS WEEK

September is PAIN Awareness MONTH

Getting Involved Now!

One way we can move toward increased involvement with older patients is participation in local or national public health events and educational opportunities in our communities.

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Getting Involved... WHY?

- Falls Prevention Day Sept 22 NCOA.org
- September is both Pain Awareness Month and Falls Prevention Week (coinciding with the first day of Fall, Sept 22). These are nationally celebrated public health events of which we, as chiropractic physicians, should be part.
- This is especially true since the Medicare expansion bill is our primary legislative focus and these health issues significantly affect Medicare patients. Pain awareness blends with our opioid awareness efforts.
- Participation, even in a simple way, is a win/win for all involved. Chiropractic physicians gain exposure in their communities as experts and team players. Patients gain valuable information about the cause and treatment options for their pain and tips to prevent injury.

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Getting Involved... How?

- Participation can be as much or as little as you wish to do. Just putting up a poster, posting info on your social media or having brochures available in your office is simple.
- For more involvement, contact your local AARP, assisted living or elder communities, church committees or any other civic group that would be interested in a short presentation. Most of those entities have lunch meetings and are usually very interested in new speakers.
- If you don't have knowledge of any of these groups, ask your patients. THEY will know places looking for speakers. Or call your county health unit. Now is the time to make contact and offer your presentation, in person or virtually.



36

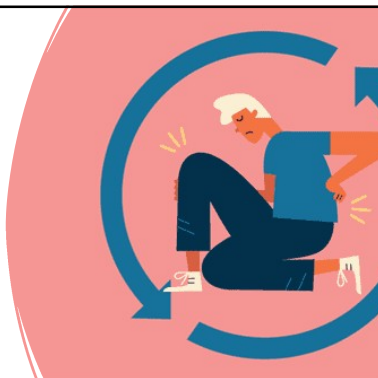
Years ago, I put together a 15 minute pain presentation and a similar one for falls prevention, basic, interactive and easy to understand. Supplemented with some handouts from the sources below, they are always well received.

37

Pain

Here are a few links for the topic of **National (Chronic) Pain Awareness Month**. The first is the mother of the event. Most of these have links to other info including factoids, patient info, etc.

<https://www.theacps.org/pain-awareness/september-is-pain-awareness-month/>
<https://www.nih.gov/News-Events/Directors-Messages/All-Directors-Messages/Pain-Awareness-Month-3d27a809f3-Header-Through-Research>
<https://www.nih.gov/News-Events/Directors-Messages/All-Directors-Messages/Pain-Awareness-Month-2020>
<https://painmed.org/pain-awareness-initiative/>
<https://spainfoundation.org/news/pain-awareness-month-2020-week-preview/>
<https://www.burn.com/national-pain-awareness-month>



38

Falls Prevention

Here are links for Falls Prevention Day (week) which is the first day of fall (Sept 22). I have always had a positive interaction with the National Council On Aging (who sponsors the issue).

<https://www.ncoa.org/professionals/health-center-for-healthy-aging/national-falls-prevention-resource-center/falls-prevention-awareness-week/>
<https://agesofamerica.com/falls-prevention-awareness-day/>
<http://stopfalls.org/news-events/fall-prevention-awareness-week/>
<http://stopfalls.org/news-events/fall-prevention-awareness-week/> (this is the Occupational Therapists approach with some good ideas)



39

Even if You Never Leave Your Own Office...

40

With Medicare Inclusion for DCs...

- Besides reimbursement for our usual intake exams, there are a significant number of evaluation, counseling and management opportunities that may arise with older patients.
- Depending on our individual practice situations, some of these may arise naturally, others may provide a chance for DCs to explore new working arrangements with other providers.

41

With Medicare Inclusion for DCs...

- We will be expected to know how to
- perform the basic assessments required
 - coordinate responsibility for them
 - interpret them.

42

With Medicare Inclusion for DCs...

The following are existing reimbursable services often performed by PCPs, PAs or APNs. Many are questionnaire-based with issues of concern noted for further evaluation or referral.

43

Welcome to Medicare Preventive Visit (IPPE)

<https://www.medicareinteractive.org/get-answers/medicare-covered-services/preventive-services/welcome-to-medicare-preventive-visit>

The **Initial Preventive Physical Examination (IPPE)** is also known as the "Welcome to Medicare Preventive Visit." (G0402)

The Welcome to Medicare preventive visit is a one-time appointment patients can choose to receive when new to Medicare. The aim of the visit is to promote general health and help prevent diseases. It is a **review of medical and social health history and preventive services education**. An Initial Health Risk Assessment (HRA) is part of this visit.

Eligibility

- Medicare Part B covers a **one-time Welcome to Medicare preventive visit**. Note that patients must receive this visit **within the first 12 months of their Part B enrollment**.

Covered services

- During the course of the Welcome to Medicare preventive visit, a provider should:
- Check height, weight, blood pressure, body mass index (BMI), and vision
- Review medical and social history
- Review potential for depression and other mental health conditions
- Review ability to function safely in the home and community
- Provide education, counseling, and referrals related to patient risk factors and other health needs
- Provide a checklist and/or written plan with information about other recommended preventive services

The Welcome to Medicare preventive visit is **not a head-to-toe physical**. This visit is also separate from the Annual Wellness Visit (AWV), which a patient can choose to receive once each year.

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Annual Wellness Visit

<https://www.medicareinteractive.org/get-answers/medicare-covered-services/preventive-services/annual-wellness-visit>

The Annual Wellness Visit (AWV) (G0438) is a **yearly appointment** with the primary care provider (PCP) to create or update a personalized prevention plan (PPP) and complete a Health Risk Assessment (HRA). This plan may help prevent illness based on current health and risk factors. Keep in mind that the AWV is not a head-to-toe physical. Also, this service is similar to but separate from the one-time Welcome to Medicare preventive visit.

Eligibility

- Medicare Part B covers the Annual Wellness Visit if:
- The patient has had Part B for over 12 months
- And, the patient has not received an AWV in the past 12 months

Additionally, the patient cannot receive an AWV within the same year as the Welcome to Medicare preventive visit.



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Who can do an AWW?

An Annual Wellness Visit is covered when performed by a:

- **Physician** (a doctor of medicine or osteopathy)
- **Qualified non-physician practitioner** (a physician assistant, nurse practitioner, or certified clinical nurse specialist)
- **Medical professional** (including a health educator, registered dietitian, nutrition professional, or other licensed practitioner), or
- **A team of medical professionals who are directly supervised by a physician** (doctor of medicine or osteopathy)



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Annual Routine Physical Exam

The Annual Routine Physical Exam allows members to seek a **separate visit with their physician to discuss general health questions/issues without presenting a specific chief complaint**. The exam includes a **comprehensive review of systems and physical examination**.

- The Annual Routine Physical Exam can be documented using codes 99385-99387 for new patients and codes 99395-99397 for established patients.
- Annual Routine Physical Exam: 99387 or 99397- Elements of an Annual Routine Physical Exam:
- Comprehensive history and physical exam
- Status review of chronic diseases/conditions
- Documenting the management of minor problems that do not require additional work
- Ordering appropriate immunizations, laboratory/radiology services and screening tests
- Counseling/anticipatory guidance/risk factor reduction interventions



BILLING AND CODING When an Annual Wellness Visit and Annual Routine Physical Exam occur at the same date of service, no modifier is necessary. No specific diagnosis is required for the Annual Wellness Visit, but Z00.00 or Z00.01 is appropriate for the Annual Routine Physical Exam.

47

Coding



- A full physical exam, 99397, is different than an Annual Wellness Visit, G0438/G0439, or "Welcome to Medicare Exam", G0402. A full physical 99397 or 99387 is NOT covered by Medicare and patients are responsible for the cost and can be billed.
- A Depression Screening (G0444) is a required component within the Initial Annual Wellness Visit (G0438) and should not be billed separately. If a depression screening is completed at the time of a subsequent Annual Wellness Exam (G0439), then billing both codes would be appropriate, G0439 and G0444.
- 99385-99387 Annual Routine Physical Exam-New Patient
- 99395-99397 Annual Routine Physical Exam-Established Patient
- G0438 Annual Wellness Visit, Initial (AWV) includes a personalized prevention plan of service (PPS)
- G0439 Annual Wellness Visit, Subsequent (AWV) includes a personalized plan of service (PPS)
- G0444 Annual Depression Screening, 15 minutes or just "Depression screen annual" for short, used in medical care.

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Screening Tools

There is **no particular screening instrument** recognized by CMS for use in the initial (IPPE) and annual wellness visits (AWV), so the provider may choose to use any screening tool as long as it is a **nationally recognized instrument**.

We'll discuss the components of these assessments then look at some samples and resources for accepted questionnaires/exams so you can research and become familiar with them.

- Note that these "wellness screenings" are **NOT exams for a treatable diagnosis** which would be related to a specific disease and billed as such.
- They are also **not "routine physicals"**. Routine physicals are NOT reimbursable by Medicare, although some components of the IPPE & AWV may be included in them.

49

Health Risk Assessment (HRA)

Get patient self-reported information

- Intake patient history forms. *****

Consider the **best way to communicate** with underserved populations, people with limited English proficiency, health literacy needs, and people with disabilities

At a minimum, collect this information:

- **Demographic data**
- **Health status self-assessment**
- **Psychosocial risks** including, but not limited to, depression, life satisfaction, stress, anger, loneliness or social isolation, pain, and fatigue
- **Behavioral risks** including, but not limited to, tobacco use, physical activity, nutrition and oral health, alcohol consumption, sexual health, motor vehicle safety (for example, seat belt use), and home safety
- **Activities of daily living (ADLs)**, including dressing, feeding, toileting, grooming; **physical ambulation**, including balance or fall risks and bathing; and **instrumental ADLs (IADLs)**, including using the phone, housekeeping, laundry, mode of transportation, shopping, managing medications, and handling finances

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Health Risk Assessment (HRA)

1. Establish patient's medical and family history

- At a minimum, document:
 - Medical events of the patient's parents, siblings, and children, including hereditary conditions that place them at increased risk
 - Past medical and surgical history (illness experiences, hospital stays, operations, allergies, injuries, and treatments)
 - Use of, or exposure to, medications and supplements, herbs and vitamins

2. Establish current providers and suppliers list

- Include current patient providers and suppliers that regularly provide medical care, including behavioral health care.

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Health Risk Assessment (HRA)

3. Measure

- Height, weight, body mass index (BMI) (or waist circumference, if appropriate), blood pressure, pulse and rhythm
- Other routine measurements deemed appropriate based on medical and family history

4. Detect any cognitive impairment patients may have

- Assess cognitive function by direct observation, considering information from the patient, family, friends, caregivers, and others. Consider using a brief cognitive test, health disparities, chronic conditions, and other factors that contribute to increased cognitive impairment risk. Alzheimer's and Related Dementia Resources for Professionals webpage has more information.

5. Review patient's potential depression risk factors, including current or past experiences with depression or other mood disorders

- Select from various standardized screening tools designed for this purpose and recognized by national professional medical organizations. Depression Assessment Instruments webpage has more information.

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Health Risk Assessment (HRA)

6. Review patient's functional ability and level of safety

Use direct patient observation, or appropriate screening questions or standardized questionnaires recognized by national professional medical organizations to review, at a minimum, these areas:

- Ability to perform ADLs
- Fall risk
- Hearing impairment
- Home safety

7. Establish an appropriate patient written screening schedule, like a checklist for the next 5–10 years

Base written screening schedule on the:

- United States Preventive Services Task Force and Advisory Committee on Immunization Practices (ACIP) recommendations
- Patient's HRA, health status and screening history, and age-appropriate preventive services

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Health Risk Assessment (HRA)

8. Establish patient's list of risk factors and conditions where you recommend primary, secondary, or tertiary interventions or report whether they're underway

Include:

- Mental health conditions, including depression, substance use disorder(s), and cognitive impairment
- IPPE risk factors or identified conditions
- Treatment options and associated risks and benefits

9. Provide personalized patient health advice and appropriate referrals to health education or preventive counseling services or programs

Include referrals to educational and counseling services or programs aimed at: Lifestyle interventions to reduce health risks and promote self-management and wellness, including:

- Fall prevention
- Nutrition
- Physical activity
- Tobacco-use cessation
- Weight loss
- Cognition

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Health Risk Assessment (HRA)

10. Provide Advance Care Planning (ACP) services at patient's discretion

ACP is a discussion between you and the patient about:

- Their advance directive preparation in case an injury or illness prevents them from making health care decisions
- Future care decisions they might need to make
- How they can let others know about care preferences
- Caregiver identification
- Advance directives explanation, which may involve completing standard forms
- Advance directive is a general term referring to various documents like a living will, instruction directive, health care proxy, psychiatric advance directive, or health care power of attorney. It's a document that appoints an agent or records a person's wishes about their medical treatment at a future time when the individual can't communicate for themselves. Advance Care Planning fact sheet has more information.

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Health Risk Assessment (HRA)

11. Review current opioid prescriptions

For a patient with a current opioid prescription:

Review any potential opioid use disorder (OUD) risk factors

Evaluate their pain severity and current treatment plan

Provide non-opioid treatment options information

Refer to a specialist, as appropriate

HHS Pain Management Best Practices Inter-Agency Task Force Report has more information.

12. Screen for potential substance use disorders (SUDs)

Review the patient's potential SUD risk factors and, as appropriate, refer them to treatment. You can use a screening tool, but it's not required. National Institute on Drug Abuse Screening and Assessment Tools Chart has screening and assessment tools.

56

Preparing Patients for Annual Wellness Visit (AWV)

Preparing Eligible Patients for the Annual Wellness Visit

Providers can help eligible patients prepare for their AWV by encouraging them to bring this information to their appointment:

- Medical records, including immunization records
- Detailed family health history
- Full list of medications (Rx & OTC) and supplements, and frequency & dose of each they take
- Full list of current providers and suppliers involved in their care, including community-based providers (for example, personal care, adult day care, and home-delivered meals), and behavioral health specialists
- Falls questionnaire

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<https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/preventive-services/medicare-wellness-visits.html>

58

Cautionary note...

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If in their history, your patient indicates that they have a disease or condition that could result in a medical emergency...

You might want to:

- Highlight that info on the outside of their chart
- Ascertain if they carry an emergency remedy with them
- Have an updated emergency contact number
- Determine if you should have equipment/training
- Affirm actions they can take to prevent emergency

60

Basic Guidelines for Emergency Response

- Remain calm
- Scene safety (you, staff, patients)
- 911 if appropriate
- First aid to level of your ability (Good Samaritan)
- Enlist others if needed and they are able
- Maintain privacy, confidentiality & dignity
- Refer if appropriate

61

An Ounce of Prevention...

The **U.S. Preventive Services Task Force (USPSTF)** is an independent, volunteer panel of national experts in prevention and evidence-based medicine. The Task Force works to improve the health of people nationwide by making **evidence-based recommendations** about clinical preventive services such as screenings, counseling services, and preventive medications.

The following slides list their **recommendations for preventive actions for older adults** with the caveat that each patient is an individual who should receive these services after consultation with their physician and mutual determination that the service is appropriate for that individual.

<https://www.uspreventiveservicestaskforce.org/uspstf/about-uspstf>

<https://betterhealthwhileaging.net/preventive-health-services-for-older-adults-healthy-aging-checklist-part-5/>

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- <https://www.uspreventiveservicestaskforce.org/apps/>
- Can be accessed on web or mobile app
- ID recommended screening, counseling & preventive services based on age, sex and behavioral risks

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IMPORTANT NOTES

Note the terminology: “recommendations for preventative action”

- Although these are what the USPSTF recommends, it also states that each patient is an individual. Thus, determinations for these screenings should be done with the best action for that person in mind.
- If you vary from the recommendations, make sure you have adequate justification.
- Just as many DCs disagree with “Choosing Wisely”’s imaging protocol, there also has been pushback regarding some of these recommendations by medical specialty groups.
- Most insurance coverage follows these recommendations, but they are subject to change based on the most current research, so consult the USPSTF website for the most recent list.

<https://www.uspreventiveservicestaskforce.org/uspstf/about-uspstf>

64

Understanding Preventive Health Services

<https://betterhealthwhiliving.net/preventive-health-services-for-older-adults-healthy-aging-checklist-part-5/>

Preventive health services essentially fall into three categories:

- Screening for health problems that are not yet causing symptoms noticeable to the patient. This includes some forms of cancer screening, as well as screening for conditions like high blood pressure or high blood sugar, which generally don’t cause symptoms.
- Checking for common problems that do cause symptoms but are easily overlooked in routine clinical care. This includes asking patients about things like depressive symptoms, falls, or even checking for signs of alcohol misuse.
- Administration of vaccines or medications to reduce the risk of a future illness.

In 2011, Medicare began offering a variety of preventive health services for free, because the 2010 Affordable Care Act mandated preventive care with no cost-sharing. (Whereas in traditional fee-for-service Medicare, beneficiaries may need to pay 20% of costs.) However, for services to be free, they may need to be ordered during the Annual Wellness Visit.

65

What To Know About Preventive Health Services in Older Adults

Here are 3 key things to know:

1. For a preventive service to be recommended, there should be proof that providing this service results in improved health outcomes for most people.
2. You should know that for screening or early-detection services to improve health outcomes, clinicians must be routinely able to follow-up with a treatment that works, or somehow improves the health and wellbeing of the patient.
3. Furthermore, there needs to be proof that the screening or early-detection works better than waiting for the problem to become more symptomatic.

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Explanation

Many frequently offered screening services are not currently endorsed by the USPSTF, because research has not proven that detecting certain problems leads to better outcomes.

- => For instance, screening for prostate cancer by checking prostate-specific antigen (PSA) levels in older men is no longer recommended, because research found that overall screening didn't save many lives, but did cause men to undergo many painful biopsies or treatment of small prostate cancers that probably would never have troubled them.
- In other words, not all testing is useful. Especially when it comes to people with no symptoms, testing can often be harmful, or, at least, wasteful.
- However, quite a lot of doctors will offer all kinds of screening and preventive tests, either because they have not kept up with the latest recommendations or because they make money when they do the tests. So it's essential for you to be informed and learn more about a screening test before proceeding.

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Explanation

Many preventive health services become optional — or sometimes even recommended against — when people reach a certain age or state of poor health.

- That's because many preventive services have only been shown to be effective in people likely to live another 5-15 years.
- This makes sense when you think about it: prevention services for a relatively healthy person aged 70 will not be the same as what might be recommended for a person who is 82 and has moderate-stage Alzheimer's disease.
- For more on estimating life-expectancy in older adults, you can visit ePrognosis.org, a site from the UCSF Division of Geriatrics to help older adults and families make cancer screening decisions.

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Summary of Preventive Services For Older Adults to Consider

- Many preventive services for older adults can be checked on as part of the Medicare Annual Wellness Visit.
- Remember, some types of prevention are unlikely to help older adults who are very old, very frail, or in poor health due to chronic illnesses. This is especially true with cancer screening.
- So before proceeding with any of these services, be sure to learn more about whether the service is recommended for your specific patient.

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Recommended Preventive Services For Older Adults

- The following preventive services are recommended for some or all older adults.
(we'll review most in detail in the next section)
- o Mental health, cognitive health, and substance use
- o Checking for depression
- o Checking for tobacco use
- o Checking for alcohol misuse
- o Checking for signs of cognitive impairment
- o Safety and functional ability
- o Asking about falls
- o Checking for signs of functional impairment and assessing home safety
- o Checking for signs of elder mistreatment

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Recommended Preventive Services For Older Adults

Physical health

- o Screening for high blood pressure
- o Screening for high cholesterol
- o Screening for obesity
- o Screening for abnormal blood glucose and type 2 diabetes
- o Screening for abdominal aortic aneurysm
- o Screening for osteoporosis
- o Screening for hepatitis C
- o Screening for HIV
- o Screening for other sexually transmitted infections

• Cancer screening: colorectal, cervical, lung, breast,

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Preventive Services For Older Adults

Be aware that “shot-gun” labs or imaging are no longer approved

Reasons/diagnoses are required for each component

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Example...**Osteoporosis to Prevent Fractures: Screening**

January 14, 2025

Population	Recommendation	Grade
Women 65 years or older	The USPSTF recommends screening for osteoporosis to prevent osteoporotic fractures in women 65 years or older. See the "Practice Considerations" section for more information on screening tests.	B
Postmenopausal women younger than 65 years with 1 or more risk factors for osteoporosis	The USPSTF recommends screening for osteoporosis to prevent osteoporotic fractures in postmenopausal women younger than 65 years who are at increased risk for an osteoporotic fracture as estimated by clinical risk assessment. See the "Practice Considerations" section for more information on risk assessment and screening tests.	B
Men	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of screening for osteoporosis to prevent osteoporotic fractures in men. See the "Practice Considerations" section for suggestions for practice regarding the I statement.	I

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Cont. Example...**Screening Tests and Screening Strategies**

(Osteoporosis)

- The most commonly used bone measurement test to screen for osteoporosis is dual-energy x-ray absorptiometry (DXA) at a central site (eg, total hip, femoral neck, or lumbar spine). Centrally measured DXA correlates with bone strength and clinical fracture outcomes and uses low doses of radiation.³² Fracture risk at a specific site is best predicted if bone density is measured at that site.³³
- Some evidence suggests that BMD alone may not be the most useful predictor of fracture risk, especially in younger populations.³² Several risk assessment tools that incorporate age and sex, with or without other risk factors, have been developed to either identify probability of osteoporosis or predict fracture risk. It is important to note that some of the risk assessment tools were developed on small cohorts of homogeneous populations or have limited published evidence.
- Risk assessment tools designed to estimate future fracture risk that can be used with or without BMD as a risk factor input include FRAX,³⁴ the Fracture Risk Calculator (FRC),³⁵ and the Garvan Fracture Risk Calculator.^{32,33} Of note, the predictive accuracy of these tools often improves when BMD is included in the risk assessment calculation.³⁴ Risk assessment tools designed to identify osteoporosis (eg, the Osteoporosis Risk Assessment Instrument [ORAI] and the Osteoporosis Self-assessment Tool [OST]) generally require fewer risk inputs than tools designed to predict fracture risk.³⁴

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"Geriatric Syndrome"

- Term often used to refer to common health conditions in older adults that do not fit into distinct organ-based disease categories and often have multifactorial causes.
- The list includes conditions such as cognitive impairment, delirium, incontinence, malnutrition, falls, gait disorders, pressure ulcers, sleep disorders, sensory deficits, fatigue, and dizziness.
- These conditions are common in older adults, and they may have a major impact on quality of life and disability.
- Geriatric syndromes can best be identified by a geriatric assessment.

<https://www.uptodate.com/contents/comprehensive-geriatric-assessment>

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ICD- 10 R54-

Age-related physical debility R54-
Applicable To:
Frailty
Old age
Senescence
Senile asthenia
Senile debility
Excludes:
age-related cognitive decline (R41.81)
sarcopenia (M62.84)
senile psychosis (F03)
senility NOS (R41.81)

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Geriatric Assessment

- Although the geriatric assessment is a diagnostic process, the term is often used to include both evaluation and management.
- Geriatric assessment is sometimes used to refer to evaluation by the individual clinician (usually a primary care clinician or a geriatrician) and at other times is used to refer to a more intensive multidisciplinary program, also known as a Comprehensive Geriatric Assessment (CGA).

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CGA

- Comprehensive geriatric assessment (CGA) is defined as a multidisciplinary diagnostic and treatment process that identifies medical, psychosocial, and functional limitations of a frail older person in order to develop a coordinated plan to maximize overall health with aging
- It requires evaluation of multiple issues, including physical, cognitive, affective, social, financial, environmental, and spiritual components that influence an older adult's health.
- CGA is based on the premise that a systematic evaluation of frail, older persons by a team of health professionals may identify a variety of treatable health problems and lead to better health outcomes.

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CGA

CGAs are usually initiated through a referral by the primary care clinician or by a clinician caring for a patient in the hospital setting.

• Specific criteria used by CGA programs to identify patients include:

- • Age
- • Medical comorbidities such as heart failure or cancer
- • Psychosocial disorders such as depression or isolation
- • Specific geriatric conditions such as dementia, falls, or functional disability
- • Previous or predicted high health care utilization
- • Consideration of change in living situation (eg, from independent living to assisted living, nursing home, or in-home caregivers)

One outpatient approach would be to refer patients for CGA who are found to have problems in multiple areas during geriatric assessment screens. Major illnesses (eg, those requiring increased home resources to manage medical and functional needs) should also prompt referral for CGA, particularly for functional status, fall risk, cognitive problems, and mood disorders.

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- In many settings, the CGA process relies on a core team consisting of a clinician, nurse, and social worker and, when appropriate, draws upon an extended team of physical and occupational therapists, dietitians, pharmacists, psychiatrists, psychologists, dentists, audiologists, podiatrists, and opticians. (chiropractic physicians?)

- The core team may conduct only brief initial assessments or screens for some dimensions. These may be subsequently augmented with more in-depth evaluations by additional professionals

- Increasingly, CGA programs are moving towards a "virtual team" concept in which members are included as needed, assessments are conducted at different locations on different days, and team communication is completed via telephone or electronically, often through the electronic health record.



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Goals of Treatment in any Assessment Summary

- A patient's goals should be positive (eg, attending a future family event).
- Frequently, patients prioritize social (e.g. maintaining social activities) and functional (e.g. completing ADLs without help) goals over health-related goals (e.g. longer life expectancy)
- Both short-term and longer-range goals should be considered and progress towards meeting these goals should be monitored, including reassessment if goals are not met within a specified time

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DCs in the Mix?

- Chiropractic Physicians may be ideally suited for inclusion in geriatric assessment as part of an assessment team.
- Because DCs typically see, speak to and touch a patient for multiple visits in a given time frame, they may detect or monitor physical or psychological issues potentially missed on annual medical evaluations
- DCs often assist patients in goal setting since it is presently a requirement for Medicare documentation

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83

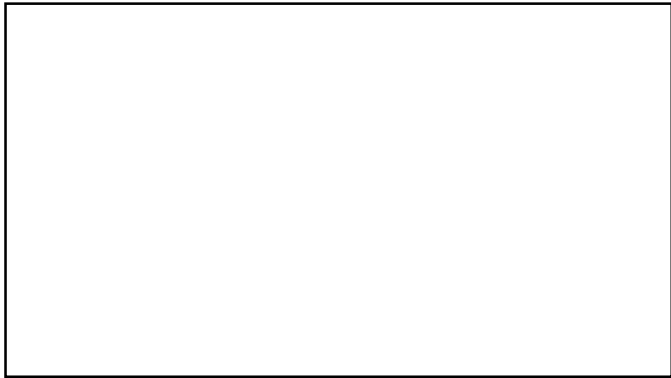


Just an example...

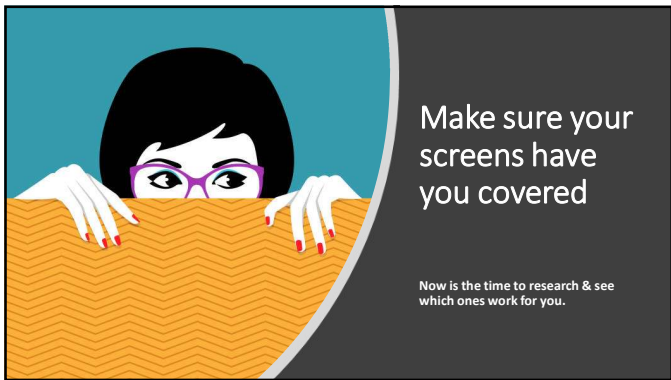
The IPPE (code G0402) pays ~ \$170

First AWV (G0438) and
Subsequent AWVs (G0439) > \$110

84



85



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Screening Tools for the AWV

As stated:

There is no particular screening instrument recognized by CMS for use in the AWV, so the provider may choose to use any screening tool as long as it is a nationally recognized instrument.

Some components begin with 1-2 questions or actions which can be expanded upon if indicated. Failure of the initial screen often is an indication for referral for the expanded testing.

- https://www.uns.edu/sites/default/files/medicare_awv_screening_tools_2015.pdf
- <https://www.uwmedicine.org/sites/steve/files/2019-12/UH13436%20Medicare%20Wellness%20Visit%20Questionnaire.pdf>

87

An excellent resource:

www.geriatrictoolkit.Missouri.edu

Geriatric Examination Tool Kit

Goodman, C.G. Snyder, T.E. (2013). *Differential Diagnosis for Physical Therapists: Screening for Referral*. (5th ed.). St. Louis, MO: Saunders Elsevier. -- [Appendices](#)

Probst, L. Wills BW. (2023). Geriatric Examination Tool Kit. University of Missouri, College of Health Sciences, Department of Physical Therapy

88

MOST IMPORTANT

If implementing any of these screenings (questions or exam)...

Know what you will do with a person who tests positive!



89

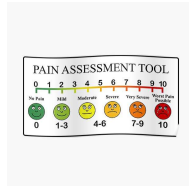
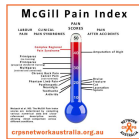
Specific Screening Tools (examples)

<u>Depression Screening:</u>	<u>Pain</u>
• PHQ – 2	VAS
• PHQ – 9	NRS
	VRS
<u>Functional Ability:</u>	McGill
• Timed Up and Go (TUG)	Oswestry
• IADLs	
<u>Cognition:</u>	
• MiniCog	

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Pain

The Visual Analogue Scale (VAS), Numerical Rating Scale (NRS), Verbal Rating Scale (VRS), and the Faces Pain Scale-Revised (FPS-R) are among the most commonly used measures of pain intensity in clinical and research settings. There also are the Oswestry and McGill Pain Questionnaires.



<https://pubmed.ncbi.nlm.nih.gov/21856077>

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McGILL PAIN QUESTIONNAIRE
ROMANUS HEDZACK

Patient's Name: _____ Date: _____ Time: _____

PRE: 0-100 A: 0-100 E: 0-100 M: 0-100 PPI: 0-100

Rank	Descriptor	Rank	Descriptor	Rank	Descriptor
1	aching	11	throbbing	21	stinging
2	burning	12	stabbing	22	itching
3	cramping	13	sharp	23	tingling
4	prickling	14	burning	24	numbing
5	stinging	15	aching	25	throbbing
6	burning	16	stabbing	26	stinging
7	cramping	17	throbbing	27	burning
8	prickling	18	cramping	28	prickling
9	stinging	19	prickling	29	stinging
10	burning	20	burning	30	burning

Comments: _____

McGill (one example)

The descriptors fall into four major groups:

sensory (S), 1-10;

affective (A), 11-15;

evaluative (E), 16;

miscellaneous (M), 17-20.

The rank value for each descriptor is based on its position in the word set. The sum of the rank values is the pain rating index (PRI). The present pain intensity (PPI) is based on a scale of 0-5.

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Depression Screening:
Patient Health Questionnaire-2
PHQ-2

Over the past two weeks, how often have you been bothered by any of the following problems?

1. Little interest or pleasure in doing things.

- 0 = Not at all
- 1 = Several days
- 2 = More than half the days
- 3 = Nearly every day

2. Feeling down, depressed, or hopeless.

- 0 = Not at all
- 1 = Several days
- 2 = More than half the days
- 3 = Nearly every day

Total point score: _____

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Depression Screening The Patient Health Questionnaire-9: PHQ-9

Overview

- Administered to patients with a positive stage-one screen (PHQ-2)
- An excellent questionnaire for confirming the diagnosis of major depressive episode
- Two-stage screening with the point-scored PHQ-2 as the initial screening instrument and the PHQ-9 for confirmation of a major depressive episode yields accurate overall results (95.1%)
- Can also be used to monitor the severity of depressive symptoms and assess response to treatment

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PHQ – 9 if a positive PHQ-2 screen

Over the last 2 weeks how often have you been bothered by

(0: not at all, 1: several days, 2: more than half the days, 3: nearly every day)

- Little interest or pleasure in doing things
- Feeling down, depressed or hopeless
- Trouble staying or falling asleep, or sleeping too much
- Feeling tired or having little energy
- Poor appetite or overeating
- Feeling bad about yourself, that you are a failure or have let your family down
- Trouble concentrating on things, reading newspaper or watching TV
- Moving or speaking so slowly that others could notice or being so fidgety or restless that you have been moving around more than usual
- Thoughts that you would be better off dead or wanting to hurt yourself in some way

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Interpretation of Total Score PHQ-9

Total Score Depression Severity

- 1-4 Minimal depression
- 5-9 Mild depression
- 10-14 Moderate depression
- 15-19 Moderately severe depression
- 20-27 Severe depression

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5 major action categories to be considered in ADL:

• Personal hygiene

• Dressing

• Eating

• Continence

• Mobility











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ADLs

Personal Hygiene: bathing, grooming, nail care

Dressing: selecting, putting on & taking off clothes

Eating: selecting, preparing, consuming appropriate nutritious food

Continence: recognizing need, using toilet, cleaning self

Mobility: balance, arising from or sitting down on bed or chair, walking, use of stairs

98

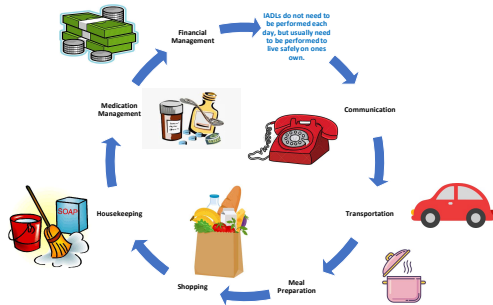
ADL

Activity	Description	Score
Hygiene	Autonomous	0
	Partial assistance for one part of the body	1
	Assistance for several parts of the body or toileting impossible	2
Dressing	Autonomous	0
	Dresses but needs assistance with shoes	1
	Needs assistance in choosing clothing, getting dressed, and remains partially or completely undressed	2
Toileting	Autonomous	0
	Needs to be accompanied; needs assistance	1
	Does not go to the toilet; does not use the toilet or urinal	2
Locomotion	Autonomous	0
	Needs assistance	1
	Bedridden	2
Continence	Continent	0
	Occasional incontinence	1
	Permanent incontinence	2
Meals	Autonomous	0
	Needs assistance to cut meat or peel fruit	1
	Total assistance or artificial feeding	2
Total		

https://www.researchgate.net/figure/Scale-of-Basic-Activities-of-Daily-Living-ADL_S109209

99

Instrumental Activities of Daily Living (IADLs)



100

Instrumental Activities of Daily Living: IADLs = INDEPENDENCE

Lawton, M.P., & Brody, E.M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. The Gerontologist, 9(3), 179-186.

- **Ability to use telephone by yourself :** 
(lookup and dial numbers or dial well known numbers or answer but not dial =1)
(not use phone at all = 0)
- **Shopping:** 
(can do all shopping independently = 1)
(can only shop for small purchases, need to be accompanied or can't shop at all = 0)
- **Food preparation:** 
(able to plan, prepare and serve adequate meals = 1)
(prepare meals with supplied ingredients, heat & serve prepared meals, prepare meals but not adequate diet, or can't prepare or serve self = 0)

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- **Housekeeping:**
(can maintain home alone or with assistance for heavier jobs or perform light daily tasks, or perform light daily tasks but can't maintain cleanliness alone, or needs help with all home maintenance = 1)
(does not participate in any home maintenance = 0)
- **Laundry:** 
(can do independently or launder small items = 1)
(laundry is done by others = 0)
- **Transportation:** 
(can travel independently on public transport, in own vehicle or arrange for paid individual transport or travel on public transport with another person = 1)
(travel by paid individual transport or private vehicle = 0)

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• **Self responsibility for medication:**

(prepare & take own medicine, proper dose, proper time = 1)

(take own medicine if prepared or can't take without assistance = 0)



• **Handling finances:**

(able to pay bills, manage checks, budget or manage day to day but require help with major financial transactions = 1)

(unable to handle money or finances independently = 0)



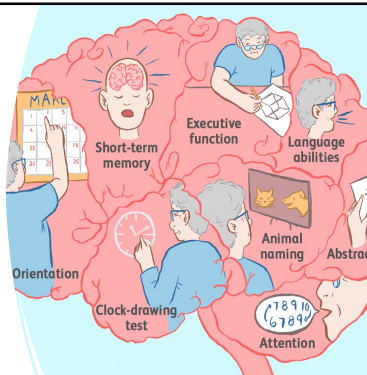
SCORE /8

103

Annual Wellness Cognitive Screen

The AWV requires detection of cognitive impairment by:

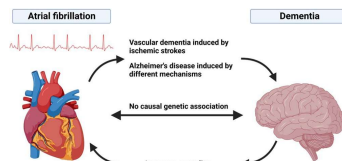
"....assessment of an individual's cognitive function by direct observation, with due consideration of information obtained by way of patient report and concerns raised by family members, friends, caretakers, or others."



104

Note (remember):

- If person has A-fib check for dementia
- If person has dementia check for A-fib
- Microemboli



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Mini-Cog

- Cognitive impairment screening test for primary care settings
- Is easily administered by medical staff members who are not physicians.
- Can be administered in three minutes
- Does not require any special equipment
- Sensitivity reported from 76-99% with specificity from 89-93%
- Effectively used in multilingual populations with diverse socioeconomic status and education level

Borson S, et al. Int J of Geriatr Psychiat. 2000; 15:1021-1027. Borson S et al. J Am Geriatr Soc 2003; 51:1451-1454. Borson S et al. J Am Geriatr Soc 2005; 53:871-4. Scanlan JM, Borson S. Int J of Geriatr Psychiat. 2001; 16:216-222.



106



Mini-Cog

- 1) Registration
- 2) Clock draw test CDT
- 3) Three word recall

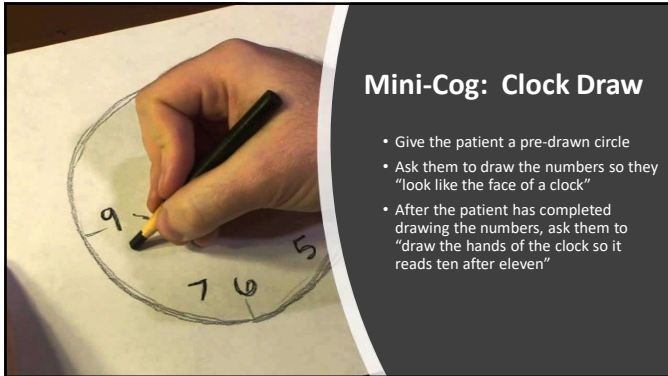
107

Mini-Cog: Registration

- Ask the patient to remember 3 words: APPLE, WATCH, PENNY
- Say each word with a one second pause between them
- If they can't repeat all 3 – say them all again
- Repeat them up to 5 times
- The patient should not be given any help or cues to remember
- Then instruct the patient: "Remember these three words - I will ask you to repeat them later"



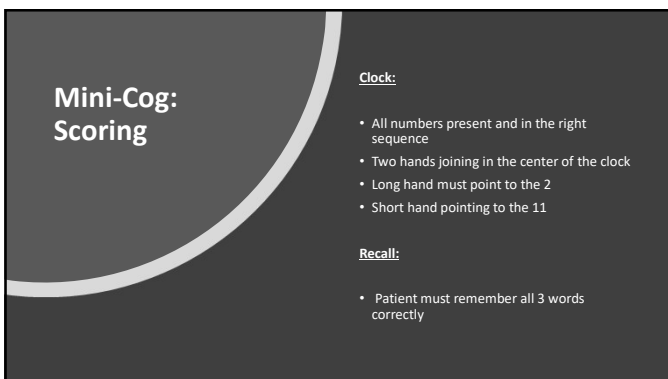
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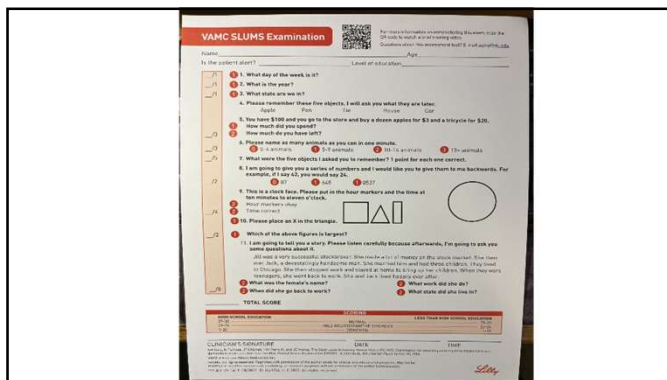


111

Mini-Cog Interpretation for Cognitive Impairment

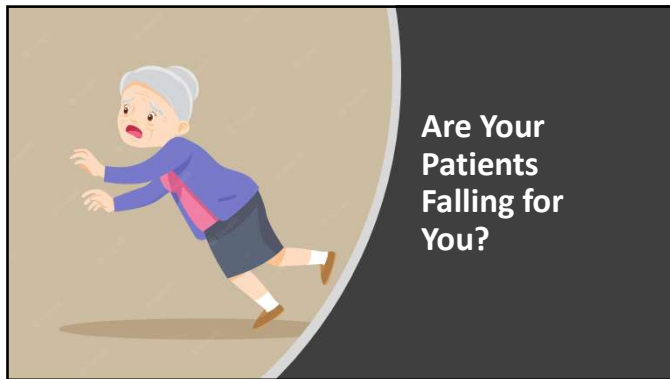
3 recalled words	neg
1-2 recalled words plus normal CDT	neg
1-2 recalled words plus abnormal CDT	pos
0 recalled words	pos

112

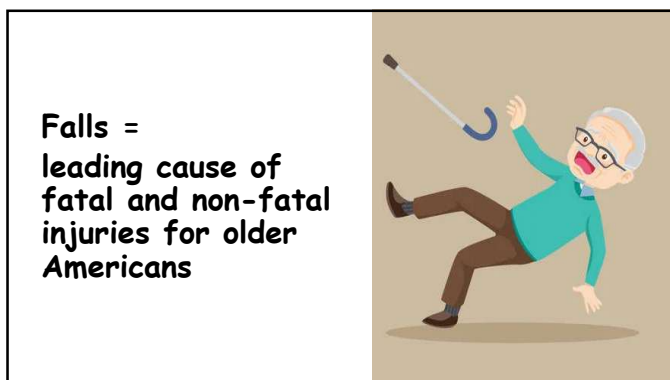
[illegible]

113

[illegible]



115

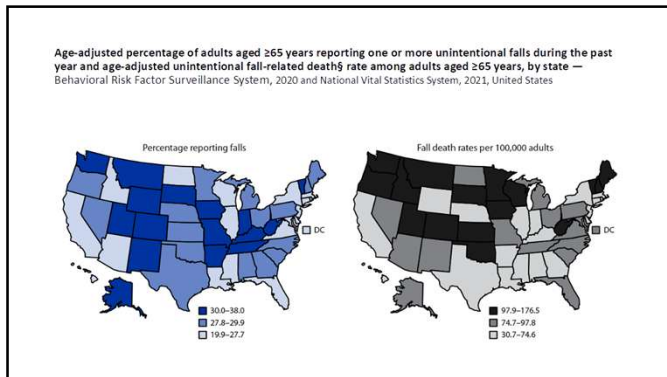


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- In 2020, **14 million older adults** in the US reported falling,
- In 2021, a total of **38,742 died** from falls.
- **Women suffered more non-fatal falls** than men,
- Fall-related **death rates were higher among men** than among women.
- In 2022, about **one in three** older adults reported at least one fall.
- In 2021, **100 older adults died every day** because of falls, more than the previous 20 years (increasing annually for at least 2 decades)

<https://www.cdc.gov/mmwr/volumes/72/wr/mm7235a1.html#>

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Stopping Elderly Accidents, Deaths and Injuries (STEADI) initiative

Nearly 1 in 4 older adults (ages 65+) reported falling in 2020

Almost 39,000 older adults died due to a fall in 2021

Falls are preventable¹

Clinicians can:

- Screen for fall risk** (Icon: clipboard with checkmark)
- Assess for fall risk factors** (Icon: magnifying glass over a person)
- Intervene using effective strategies, such as:**
 - Physical therapy
 - Home modifications
 - Medication management

Source: CDC STEADI National Program Model, SEPTEMBER 1, 2020

<https://www.cdc.gov/steadi/about.html>
<https://www.cdc.gov/mmwr/volumes/72/wr/mm7235a1.html#>

CDC MMWR

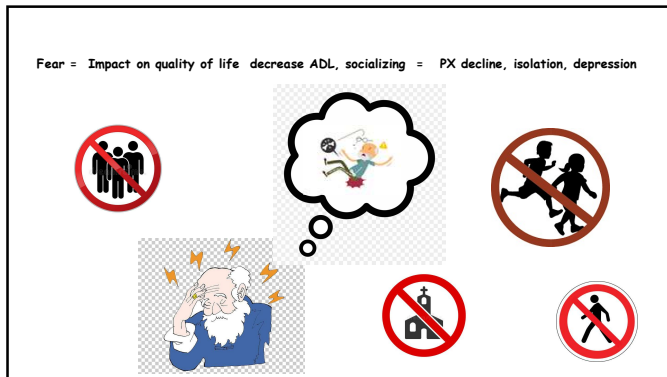
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STEADI Stopping Elderly Accidents, Deaths & Injuries

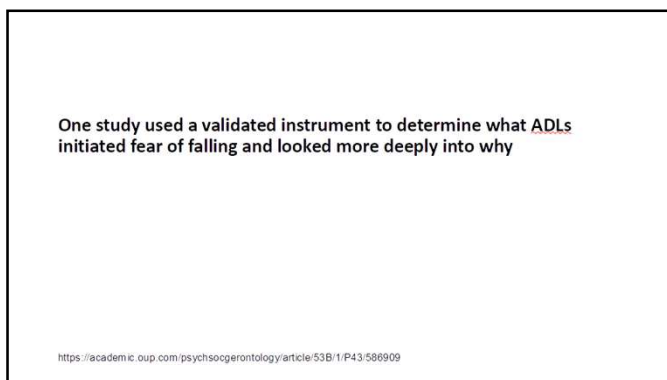
<https://www.cdc.gov/steadi/index.html> **Excellent resource**

- Clinical Resources
- Inpatient & Outpatient & Pharmaceutical Care
- Provider Training & Education
- Patient & Caregiver Resources
- STAND STEADI Videos

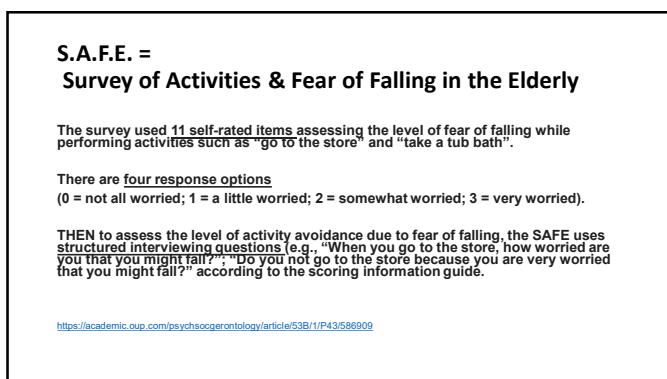
120



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122



123

So for each activity several questions were asked:

- Do you currently do it (yes or no);
- If you do the activity, when you do it how worried are you that you might fall (0 = not at all worried, 1 = a little worried, 2 = somewhat worried, and 3 = very worried);
- If you do not do the activity, do you not do it because you are worried (0 = not at all worried; 3 = very worried) that you might fall;
- If you do not do the activity because of worry, are there also other reasons that you do not do it (if yes, specify);
- For those not worried, what are the reasons that you do not do it (specify);
- Compared to 5 years ago would you say that you do it... (1 = more than you used to, 2= about the same or 3 = less than you used to).



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Items	Mean	SD
1. Go to store	0.84	0.93
2. Prepare simple meals	0.65	0.90
3. Take a tub bath	1.30	1.06
4. Get out of bed	0.36	0.72
5. Take a walk for exercise	0.60	0.85
6. Go out when slippery	1.44	0.95
7. Visit a friend or relative	0.73	0.90
8. Reach over head	0.98	0.94
9. Go to place with crowds	1.35	0.99
10. Walk several blocks outside	0.79	1.01
11. Bend down	0.71	0.95
Total score	9.75	7.21

<https://doi.org/10.1371/journal.pone.0214796.t002>



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- The 3 least fear-inducing daily activities—getting out of bed, taking a walk for exercise and preparing simple meals—are all necessary for wholesome independent living. The low level of activity restriction associated with those three items may indicate only minimal impact of fear of falling on self-care and on maintaining healthy habits.
- On the other hand, the 3 most fearful daily activities—going out when it's slippery, going to places with crowds and taking a tub bath—are indeed common fall settings with alternatives which allow them to be avoided.
- Recognizing the fall risks in these circumstances could be interpreted as **wise wariness**. It does not necessarily entail activity curtailment. After all, walking several blocks outside and go to the store induced minimal fear of falling. Thus, it is reasonable to infer that the study participants knew they had alternatives. If so, the findings could be interpreted as confirming that the avoidance measured is neither restrictive nor excessive, but rather protective instead.
- <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214796#:~:text=A>

126

Recommended

- Include **questions** regarding fear of falling in intake histories of older patients
- Whether the screening questions are written or verbal, **qualify** the responses verbally to determine reasoning and extent of fear
- Are **options** available to mitigate the fear or the risk without eliminating the activity?



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Screen for Falls and/or Fall Risk

Key Falls Questions:

1. Did you fall within the last year?
If "YES", ask: How many times? Were you injured?
2. Do you feel unsteady when standing or walking?
3. Do you worry about falling?

If the patient answers YES to any key question evaluate gait, strength, and balance

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Activities generating fear of falling

"I'm afraid of falling when I'm..."

- 1. Walking
- 2. Lifting and carrying objects (e.g., cup, child)
- 3. Going up and downstairs
- 4. Walking on different surfaces (e.g., grass, uneven ground)
- 5. Walking in crowded places
- 6. Walking in dimly lit, unfamiliar places
- 7. Leaving home
- 8. Getting in and out of a chair
- 9. Showering and/or bathing
- 10. Exercise
- 11. Preparing meals (e.g., planning, cooking, serving)
- 12. Doing housework (e.g., cleaning, washing clothes)
- 13. Work and/or volunteer work
- 14. Recreational and leisure activities (e.g., play, sports, arts and culture, crafts, hobbies, socializing, travelling, family interaction)

Completely disagree Disagree Unsure Agree Completely agree (1-5)

https://cdn-links.bww.com/journals/pdf/a/gpt_41_1_2016_11_29_landers_jpg-d-16-00015r2_sdc2.pdf

129

Fear of Falling Questionnaire- Revised FFQ-R

- The FFQ-R is a 15-item self-report questionnaire for measuring fear of falling.
- Each item is rated on a Likert-type scale from 1 (strongly disagree) to 4 (strongly agree).
- The total possible score ranges from 15–60, with higher scores indicating greater fear of falling.
- Focuses on patient's belief in their own control

<https://pubmed.ncbi.nlm.nih.gov/25079081/>

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Patient Beliefs re: Falling (FFQ-R)

- | | no | 1 | 2 | 3 | 4 | 5 | yes |
|---|----|---|---|---|---|---|-----|
| 1. It is likely I will fall in the next month. | | | | | | | |
| 2. If I fall chances are I will be hurt in some way. | | | | | | | |
| 3. I cannot prevent a fall. | | | | | | | |
| 4. I am afraid of falling again. | | | | | | | |
| 5. If I fall, my life would change greatly. | | | | | | | |
| 6. The thought of falling really frightens me. | | | | | | | |
| 7. I will probably fall if I get dizzy or trip. | | | | | | | |
| 8. I can probably prevent myself from falling. | | | | | | | |
| 9. I could make some changes in my life to prevent a fall. | | | | | | | |
| 10. I frequently limit my activities to prevent a fall. | | | | | | | |
| 11. I seldom think about the possibility of falling. | | | | | | | |
| 12. One of my worst fears is that I will fall. | | | | | | | |
| 13. It is very likely that I could fall without being injured. | | | | | | | |
| 14. I know many people in situations similar to mine who have fallen. | | | | | | | |
| 15. The older people get the more likely they are to fall. | | | | | | | |

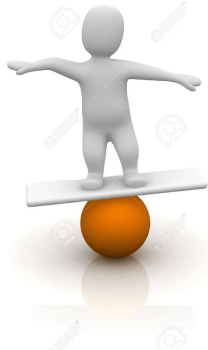
<https://pubmed.ncbi.nlm.nih.gov/25079081/>

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Other questions

- Exercises: type, frequency
(esp. core, foot dorsiflexion, proprioception/balance)
- Any other activities that may lead to fall
(hobbies, family, home)
- Any changes in medications, ADL, sleep

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A Question of Balance

- 50-75% older adults tested at health fairs had balance issues;
- Balance assessment is part of Medicare Initial Preventive Physical Exam IPPE & Annual Wellness Visit (AWV)
- Not commonly tested by physicians (physical exam) unless reported problem
(usually just question re ADLs)
- Contrib. Factors: vision, inner ear, sensation (neuropathy), nutrition, circulation, neuro, musculoskeletal

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Definition: BALANCE

- n. an even distribution of weight enabling something to remain upright & steady
- v. put or keep something in steady position so it does not fall

Romberg's test



Ask patient to stand with the heels together, first with the eyes open, then with the eyes closed.

Note any excessive postural swaying or loss of balance

- Present when eyes open or closed = cerebellar deficit (cerebellar ataxia)
- Present only when eyes are closed ('positive' Romberg's) = proprioceptive deficit (sensory ataxia)

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Exam: Balance/Falling Risk

Assess

- Limitation, hesitation, compensation, sensory changes with spinal ROM
- Balance (Romberg, etc.)
- Blood pressure recumbent & standing
- Extremity ROM & strength (esp. ankle dorsiflexors)
- Gait (esp. toe lift)
- Appropriate use of assistive devices
- Vision & Hearing****



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*** Hearing Loss & Balance

- > 1 in 3 Americans over age 65 will fall each year
(National Institute on Aging.)
- Approximately 1 in 3 individuals age 65 -74 has hearing loss.
- Mild degrees of hearing loss => 3X increased risk of falling.
- As the degree of hearing loss increases, the chances of falling also increase.

<https://www.utsouthwestern.edu/newsroom/articles/year-2022/july-hearing-loss-and-falls.html>

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Why Hearing Loss => Falls ?

- Due to their shared location within the bony labyrinth of the inner ear -> Possible concomitant dysfunction of both the cochlear and vestibular sense organs
- Decreased hearing sensitivity may limit access to auditory cues that are needed for environmental (spatial) awareness. (eg triangulation)
- Decrements in attentional resources and increased cognitive load imposed by hearing loss may impair the maintenance of postural balance

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3518403/>

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Further Balance Testing

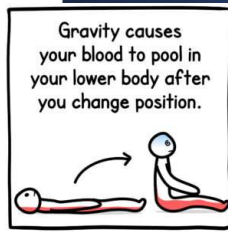
Practical: 10 sec each
(stop at level patient is unable to complete)

- Stand up holding door frame, eyes open, lift one leg then the other (repeat eyes closed)
 - Stand flat foot eyes open/closed
 - Semi Tandem eyes open/closed
 - Tandem eyes open/closed
 - Walk/Turn around
- Make sure someone or something can catch them

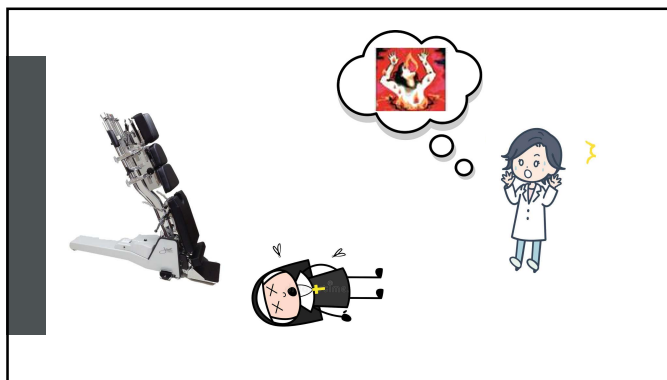
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Measuring Orthostatic Blood Pressure

- Have the patient lie down for 5 minutes.
- Measure blood pressure and pulse rate.
- Have the patient stand. (be ready to catch them)
- Reassess blood pressure and pulse rate after standing 1 & 3 minutes.
- A drop in systolic BP of ≥ 20 mm Hg, or in diastolic BP of ≥ 10 mm Hg, or experiencing lightheadedness or dizziness after arising is considered abnormal.



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Functional Reach Test



- The functional reach test is another reliable, valid, and quick diagnostic test that evaluates balance and postural stability.
- The patient should stand with his or her feet shoulder width apart and raise one arm 90 degrees to the front of his or her body.
- Then, without moving his or her feet, the patient should reach as far forward as possible while still maintaining stability.
- The maximum distance the patient can reach forward beyond arm's length should be measured using a ruler fixed at shoulder height.
- Generally, the inability to reach at least 7" is highly predictive of falls in older persons.

<https://www.aafp.org/pubs/afp/issues/2010/0701/p61.html>

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Functional Reach Test – protocol

The test explained:

- The Functional Reach Test is performed with the participant in standing. It is the measure of the difference, in inches (cm), between arm's length with arms at 90° flexion and maximal forward reach, using a fixed base of support. The test uses a ruler against a wall at shoulder height. It is reported that a reach of < 7 inches or 15 cm may predict a fall.

Setting: Physiotherapy cubicle

Equipment required:

- Wall, ruler, Velcro or tape to fix ruler to wall at shoulder height (or white board that can be marked)
- Chair, non permanent marker or tape (line marked on floor)

Method:

1. Mark a line on the floor.
2. Explain to the participant "I am interested in how far you can reach forward whilst you are standing. It is important that your feet stay in the same place and that you do not fall. I will ask you to stand sideways next the wall and place a ruler horizontally on the wall at your shoulder height. Then you will raise your straight arms out in front of you and make a fist. This is the starting position. I will mark this point on the ruler. Then I will ask you to reach forward without moving your feet whilst keeping your hands in a fist shape. I will then mark this new position and ask you to return to the starting position"
 "If at any point you need to rest please say and you can sit down".
 "You will have one practice session. We will do this a further two times. You can sit and have a rest between each measure".
3. Demonstrate to participant.

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4. The patient is instructed to stand next to, but not touching the wall and to position the arm that is closer to the wall at 90° of shoulder flexion with a closed fist.

5. Place the ruler horizontally on the wall and secure appropriately

6. Record the starting position at the 3rd metacarpal head on the ruler.

7. Ask the patient to "Reach forward as far as you can without taking a step and keeping your hands in a fist shape."

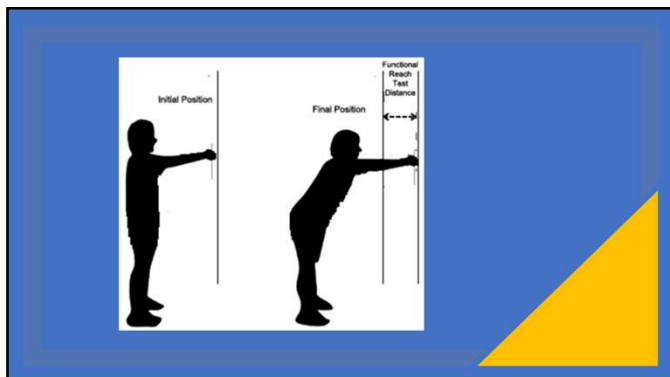
8. The location of the 3rd metacarpal is marked and recorded. Stand next to the patient to ensure support if a loss of balance occurs.

9. Repeat test again.

https://research.ndorms.ox.ac.uk/prove/documents/assessors/outcomeMeasures/Functional_Reach_Test_Protocol.pdf

<https://www.youtube.com/watch?v=aJqJzt-U2s> Great video!

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Timed Up and Go (TUG)

Purpose: To assess mobility

Equipment: A stopwatch

Directions:

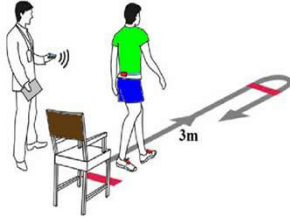
- Patients wear their regular footwear and can use a walking aid if needed.
- Begin by having the patient sit back in a standard arm chair and identify a line 3 meters or 10 feet away on the floor.

Instructions to the patient:

- When I say "Go," I want you to...
- Stand up from the chair
- Walk to the line on the floor at your normal pace
- Turn
- Walk back to the chair at your normal pace
- Sit down again

On the word "Go" begin timing. Stop timing after patient has sat back down and record.

- Time in seconds _____



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TUG: Interpretation



An older adult who takes ≥ 12 seconds to complete the TUG is at high risk for falling.

Observe the patient's postural stability, gait, stride length, and sway.

Circle all that apply:

Slow tentative pace / Loss of balance / Short strides / Little or no arm swing / Steadying self on walls / Shuffling / En bloc turning* / Not using assistive device properly

* En bloc turning = turning head, body and legs as a unit, rather than top-down

www.cdc.gov/injury/STEADI
STEADI: Stopping Elderly Accidents, Deaths & Injuries

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To Patients

Need: BE PRO-ACTIVE!!! Esp important if recent LE injury or surgery

- Remove clutter, rugs, avoid slippery floors or slick shoes or socks
- Well lit
- Wear solid low shoes, glasses, avoid loose clothing/articles that could catch
- Wear alert button, use cane/walker/assistant/hand rails
- Consider custom orthotics
- Exercise, massage, chiro
- RETRAIN PROPRIOCEPTION



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To Patients:

- Beware of sudden changes of position or extreme head positions
- Report medical issues: dizzy, nausea or light headed w/ position change, loss of sensation
- Report falls, loss of grip, weakness, slurred speech, momentary "absences"
- Be alert in hot weather, dehydrated, lack of sleep, stress, poor diet (esp B vit)
- Be esp. alert after changes of medication or illness

Physicians:

- Question patient about the above issues
- Assess patient physically
- Treat or Refer as indicated



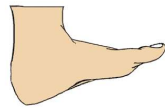
151

Exercises to individual patient ability

- Weight shifting
- One-legged balancing (in door frame)
feet apart, feet together, one foot, eyes closed
- Heel-toe walk
- Leg raises
- Foot taps
- Head rotations
- Standing marches
- Sit-to-stands
- Walking
- Standing body twist (2 legs, 1 leg)
- Heel & Toe raises
- Wall pushups & wall slides
- Step ups



Dorsiflexion



Normal Range: 20 degrees

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Older adults need aerobic, strength & balance exercise

Further Exercises: hold on to support if needed

- 1) stand on 1 leg/ then other leg (hold chair or door frame if necessary)
- 2) eyes follow thumb lateral/vertical near/far
- 3) body circle each direction (walk in circle around small chair or stool)
- 4) step forward over items, step sideways each direction over items, figure 8 walk
- 5) step over crossed canes (box step)
- 6) Towel pick up with toes while seated
- Walking on sand
- Tai Chi, Yoga, Qi Gong, Wii, Dance, Walking
- (do Tai Chi & Qi Gong barefoot if possible for best balance sense)
- Inflatable seat pillow (wobble cushion) (SIT, do not stand on it without assistance)

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About Tai Chi

- Research shows that practicing tai chi can **improve balance, stability, and flexibility** in older people, including those with Parkinson's disease. Practiced regularly, it can also help reduce pain, especially from knee osteoarthritis, back problems, and fibromyalgia.
- **Increases body awareness.** Known as slow-motion exercise, tai chi encourages slow and deliberate body movements accompanied by deep breathing (which also improves respiration). This combination helps seniors focus on the way their body moves and allows them to pay attention and address any discomfort they may be feeling.
- **Improves cognition.** A 2018 study showed a connection between the practice of tai chi and improvements in cognition for seniors with mild cognitive impairment. This is promising news for older adults looking to improve their memory and executive functioning skills.
- **Reduces risk and fear of falling.** Maintaining good balance, flexibility, and coordination become more important the older you get. While most physical activities, especially weight-bearing exercise, can help seniors maintain and even improve their mobility, activities such as tai chi also reduce the risk and fear of falling in older adults by improving balance and motor function.
- **Eases arthritis pain.** Seniors with chronic pain from conditions like arthritis may experience a reduction in symptoms by following a regular practice of tai chi.
- <https://www.healthline.com/health/senior-health/tai-chi>

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- 5 different styles of tai chi, and each can be modified to suit your goals and personal fitness level. All styles incorporate continuous movement from one pose to the next. Some can even be done while seated.
- **Yang style** tai chi focuses on slow, graceful movements and relaxation. Yang style is a good starting point for beginners.
- **Wu style** tai chi places an emphasis on micro-movements. This style of tai chi is practiced very slowly.



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It starts at the
base

- A study published in the **British Medical Journal** found that a multi-faceted foot care program can **reduce the number of falls by 36%**.
- It stated that **foot and ankle exercises, foot orthoses and wearing appropriate footwear** are all key in preventing falls.
- Foot conditions such as bunions, claw toes, ingrown toe nails and general foot pain can all cause problems with gait and balance.
- <https://www.healthy-footwear-guide.com/blog/wearing-healthy-footwear-can-help-prevent-falls>

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It starts at the base

Why orthotics for Baby Boomers



- Years of foot abuse esp. bizarre shoes & hard surfaces
=> bunions, hammer/claw toes, collapsed arches, metatarsalgia, neuromas, plantar fasciitis, heel spurs, corns, calluses
- Injury or surgery to LE (the "walk of life")
=> altered leg length, shift in weight bearing, accentuation of pronation or supination

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It starts at the base

- Low-heeled shoes provide greater stability.
- Sole Material/Design:** A sole that is too smooth is slippery and a sole with too much tread grabs at the ground, which often makes the wearer stumble. Ideally, the soles need to be made of slip-resistant material and tread.

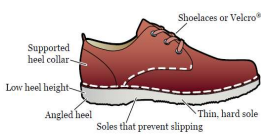
Care for older patients should include assessment of patients' present footwear as well as floors most used by them

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Safe shoes are shoes that fit you well, are comfortable, and are in good condition. They also have the following features that help keep you from falling (see Figure 1).

Safe shoes have.

- Heels that are 1 inch (2.5 centimeters) or lower
- A way to close the shoe so that it stays on your foot (such as shoelaces or Velcro®)
- Thin, hard soles
- Soles that prevent slipping
- A supported heel collar, which grips your heel firmly
- An angled heel to prevent slipping

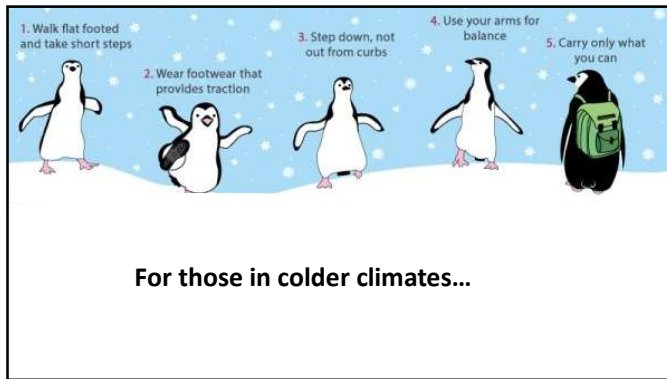


Unsafe shoes

- Unsafe shoes don't fit well, are uncomfortable, or are in poor condition. Unsafe shoes have:
- Heels that are greater than 1 inch (2.5 centimeters)
- No way of securing your foot in the shoe (such as slip-on shoes, slippers, clogs, or flip flops)
- Soft or thick soles (loss of proprioceptive sense)
- Soles that are slippery or worn out

<https://pubmed.ncbi.nlm.nih.gov/19235118/>

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Winter Footwear

There are many factors to consider when choosing winter footwear. Warmth and protection against the elements are important but for many, the prevention of falls is the number one consideration. Here are a few things to look for in your footwear:

Soles—

- **Pure rubber soles** (bottom of your footwear) provide the best traction in winter. The softer the rubber, the better it will usually grip the ice. Softer rubber can however wear out more quickly, particularly if you are walking on dry cement so it's best to wear your winter boots only in the colder temperatures on snow and ice (similar to not using your winter tires in springtime). Manufacturers often use a mixture of manmade rubber and natural rubber to provide a grippy sole that does not break down too quickly. You can tell the sole has good rubber content by trying to move the "lugs" with your fingers. Cheaper boots will have soles that feel more like hard plastic that will end up freezing in the cold and becoming very slippery.
- New technology – Some manufacturers offer new features designed to prevent slips and falls. Look for:
- Footwear that has **metal shavings** infused into the rubber. These shavings act like thousands of small teeth that bite into the ice and provide an elevated level of slip prevention that regular rubber cannot equal.
- **Retractable metal cleats** that provide the ultimate grip in winter.
- **Lugs** – Lugs are the grippy nubs on the bottom of boots that provide traction. An sole that has **multi-directional lugs** grips from side to side as well as front to back, giving you better traction. **Sharper and deeper lugs** help bite into packed snow and ice providing more grip on uneven surfaces.

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- **Wide soles** – Boots that have wider soles have a broader base of support and give more stability on slippery surfaces
- **Flat soles** – Some boots, particularly winter hiking boots, have a more clearly defined heel that can act like a brake on snow and ice when walking down hills or on uneven ground. Flatter soles with no defined heel offer the most stability on slippery flat surfaces like sidewalks as you have more contact with the ground. People who are less steady on their feet should look for boots with flatter soles. Choose your boots according to the surfaces you walk on and your type of activity.
- **Ankle support** – Having firm ankle support helps prevent foot and ankle fatigue when walking longer distances and provides an extra sense of security while walking in winter. In the case of a fall, the ankle support can help prevent injury to the ankle
- **Closure** – Loose footwear can be a fall hazard. **Lace-up boots** offer more support and stability than boots that slip-on or have a zipper for closure. The more secure your feet are inside the boot, the less likely you are to stumble and fall. If you are unable to do up laces, hook and loop closure such as **VELCRO®** is the next best option.
- **Proper Fit** – Be sure that your boots are the right size. A **properly fitted** boot is more stable than one that is too loose. Boots should not be too tight across your foot and must allow enough room to be able to wiggle your toes. A poorly fitting boot will not support your foot properly and can lead to a fall and ankle injury.
- Do you wonder how your boots measure up on snow and ice? Check out what researchers had to say when they tested them on ice: <https://kille-suhm.com/rms/en>
- **Ice grippers**

You can buy grippers that go on over your footwear to provide traction. These products may have names such as ice cleats, crampons, or ice grippers. They have spikes, coils or cleats on the bottom that help prevent slipping on snow and ice. It is best to sit down to put these on, and they must be removed when entering a building, as they become slippery on hard surfaces like tile.

<https://preventfalls.ca/older-adults/footwear/>

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kite UHN



The **Maximum Achievable Angle Test**, or MAA for short, works in 4 basic steps:

1. The person starts at level ground on a surface made entirely of ice.
2. The person walks back and forth across the ice as we increase the slope of the floor bit by bit.
3. We keep increasing the angle until they slip (don't worry, they wear a full safety harness so they don't actually fall on ice!)
4. The angle before they begin to slip is then called the Maximum Achievable Angle (hence the name for our test).

<https://kite-uhn.com/rmt/en/how-we-test>

kite UHN

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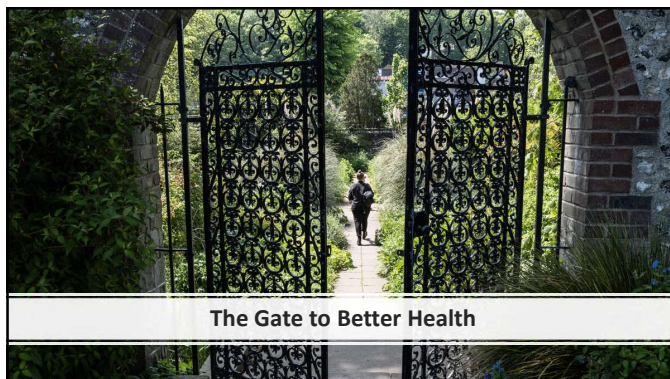
The rating system is very simple –

- if footwear passes **an angle of 7 degrees it will have a score of 7 and passes the MAA test**. It rates **one snowflake**! 7 is the minimum to meet the accessibility guidelines in Ontario to walk up a curb ramp.
- **A score of 11 = 2 snowflakes, 15 or above = 3 snowflakes!**
- To simulate different environments, participants walk both uphill and downhill and on both Cold and Wet Ice.
- To ensure **maximum slip protection**, the overall score for each footwear is based on the lowest MAA from the four testing conditions.

• <https://kite-uhn.com/rmt/en/how-we-test>



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The Gate to Better Health

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- https://www.physio-pedia.com/Gait_Deviations
- <https://www.merckmanuals.com/professional/geriatrics/gait-disorders-in-older-adults/gait-disorders-in-older-adults#>
- <https://stanfordmedicine25.stanford.edu/the25/gait.html> (excellent resource for PK exams)

Videos:

- Trendelenburg gait exercise https://www.youtube.com/watch?v=ka1XAT6g_nA
- <https://www.youtube.com/watch?v=6LkfwXm5UwM>
- <https://www.youtube.com/watch?v=HE0IkSMVFeg&list=TLpQMjEwOTIwMjPiVHYAGOKj2Q&index=5>
- <https://www.youtube.com/watch?v=Jn4mpfatnY>
-
- Gait assessment
- <https://www.youtube.com/watch?v=PZBlv0uSXVg>
- <https://www.youtube.com/watch?v=9Pc-24l7dVI>

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- **Gait velocity** (speed of walking) remains stable until about age 70;
 - It then declines about 15%/decade for usual gait and 20%/decade for fast walking.
- 
- **Gait velocity is a powerful predictor of mortality**—as powerful as an older person's number of chronic medical conditions and hospitalizations. **After age 75, slow walkers die ≥ 6 years earlier than normal velocity walkers and ≥ 10 years earlier than fast velocity walkers**. **< 4 m/sec => increased mortality**
 - Gait velocity slows because older people take shorter steps at the same rate (**cadence**).
 - The most likely reason for shortened step length (the distance from one heel strike to the next) is **weakness of the calf muscles**, which propel the body forward; calf muscle strength is substantially decreased in older adults. However, older people seem to compensate for decreased lower calf power by using their hip flexor and extensor muscles more than young adults.

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- **Cadence** (reported as steps/minute) does not usually change with aging alone. Each person has a preferred cadence, which is related to leg length and usually represents **the most energy-efficient rhythm**. Tall people take longer steps at a slower cadence; short people take shorter steps at a faster cadence.
- **Double stance time** (ie, time with both feet on the ground during ambulation) **increases with age**. This increases even more when they walk on uneven or slippery surfaces, when they have impaired balance, or when they are afraid of falling

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- Gait deviations occur as an individual ages
- Neurological and non-neurological causes
- 85% of 60-years-old have a normal gait,
- By the age of 85, only 20% maintain normal gait.

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For Perfect Gait, You Need...

- Locomotor function, balance, postural reflexes, sensory function and sensorimotor integration, motor control, the musculoskeletal system and cardiopulmonary functions.
- Afferent nerves from the visual, vestibular and proprioceptive systems provide essential information on the position of the body and its parts.
- Efferent system comprises descending pathways including the pyramidal tract, peripheral nerves, neuromuscular end plate and muscles.

<https://www.sciencedirect.com/science/article/abs/pii/S037973816300652>

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Exam

- To be done, most of the patient's loose fitting clothes should be removed to detect any orthopedic abnormalities such as asymmetries or postural abnormalities.
- Gait should be observed from all sides, while the patient walks a distance of at least several meters without obstacles and preferably without shoes.
- Normal walking appears to be rhythmical, flowing, and effortless, with freely swinging legs and with an upright body posture.
- Normal walking is accompanied by movements of the head, the trunk and the arms.

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Examine...

- Step length, stride length, step width, rhythm, speed, posture, swinging of arms and legs and the duration and type of contact with the floor.
- A general neurological examination should follow evaluation of gait.

Rule out:

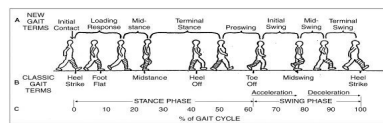
Neurologic: Parkinson, dementia, delirium, stroke, cerebellar dysfunction, multiple sclerosis, ALS

Metabolic: Diabetes mellitus, encephalopathy, obesity, vitamin B12 deficiency, uremia

Psychiatric: Substance abuse, depression, anxiety, malingering

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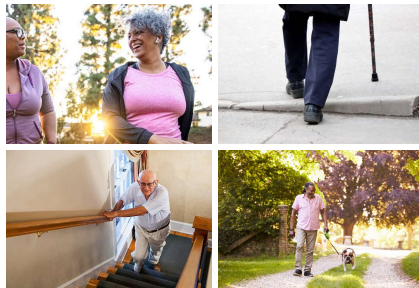
GAIT CYCLE



- The **gait cycle is divided into a stance and swing phase.**
- The **stance phase = 60 %** of the gait cycle and is subdivided into initial contact, loading response, mid-stance, terminal stance and pre-swing.
- The **swing phase = 40%** and is subdivided into initial swing (toe-off), mid-swing (tibia vertical) and terminal swing, terminated by the heel striking the ground.
- Both feet are on the ground at the beginning and end of the stance phase, these two double support periods = 10–12 % of the gait cycle.

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GAIT RELATED TO ADLs



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Functional Gait Assessment

A Test to Evaluate Risk of Falling _____ about 15 min

What's the purpose?

To evaluate stability and balance as person walks to help determine the risk of falling.

Must maintain balance while walking and performing different tasks.

Use with patient who currently ambulates well but either has noticed some changes or who wishes to increase or change activities involving walking.

What is the procedure?

- Walk 20 feet at your normal pace
- Walk at your normal pace for 5 feet, then walk as fast as you can for 5 feet, then walk slowly for 5 feet
- Walk 20 feet at your normal pace while turning your head to the right and to the left
- Walk 20 feet at your normal pace while looking up and down
- Walk at your normal pace, then turn around to face the opposite direction and stop
- Walk at your normal pace, step over a shoebox and continue walking
- Walk 12 feet "heel to toe" with your arms folded across your chest
- Walk 20 feet at your normal pace with your eyes closed
- Walk 20 feet backwards
- Walk up a set of stairs. At the top of the stairs, turn and walk down

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Functional Gait Assessment

- Each item is scored on an ordinal scale from 0 to 3, with
 - 0 = severe impairment
 - 1 = moderate impairment
 - 2 = mild impairment
 - 3 = normal ambulation
- The assessment may be performed with or without an assistive device.
- Individuals should walk without physical assistance of another person.
- When administering walking items, do not walk in front of or directly beside the patient, as this "paces" the patient and can influence the speed they walk. Instead, walk at least a half step behind the patient.

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Functional Gait Assessment

- What does the score mean?
- Each task is scored between 0 and 3 with possible score of 30.
- Lower scores indicate poorer stability and balance and higher risk of falling.

0 _____ 30
Higher risk of falling Lower risk of falling

www.sralab.org/rehabilitation-measures

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Functional Gait Assessment Equipment

- Stopwatch
- Measuring device to mark off area
- Marked walking area: Length = 20' (6 meters); width 12" (30.48 cm)
- Obstacle of 9" height (22.86 cm) using at least 2 stacked shoe boxes
- Set of steps that are 7.75 – 9" high with bilateral rails

https://www.youtube.com/watch?app=desktop&v=kqQ_nigCikQ

Functional Gait Assessment (FGA)

Setup & Instruction



178

- <https://www.sralab.org/rehabilitation-measures/functional-gait-assessment>
- <https://www.vgm.com/communities/us-rehab/services/fma/>
- <https://www.sralab.org/rehabilitation-measures/short-musculoskeletal-function-assessment>
- <https://www.aafp.org/pubs/afp/issues/2010/0701/p61.html>

179

Table 1. Medical Conditions and Risk Factors Associated with Gait and Balance Disorders		
Affective disorders and psychiatric conditions Depression Fear of falling Sleep disorders Substance abuse	Infectious and metabolic diseases (continued) Obesity Tertiary syphilis Uremia Vitamin B ₁₂ deficiency	Neurologic disorders (continued) Myelopathy Normal-pressure hydrocephalus Parkinson disease Stroke Vertebrobasilar insufficiency Vestibular disorders
Cardiovascular diseases Arrhythmias Congestive heart failure Coronary artery disease Orthostatic hypotension Peripheral arterial disease Thromboembolic disease	Musculoskeletal disorders Gout Cervical spondylosis Lumbar spinal stenosis Muscle weakness or atrophy Osteoarthritis Osteoporosis Podiatric conditions	Sensory abnormalities Hearing impairment Peripheral neuropathy Visual impairment
Infectious and metabolic diseases Diabetes mellitus Hepatic encephalopathy Human immunodeficiency virus-associated neuropathy Hyper- and hypothyroidism	Neurologic disorders Cerebellar dysfunction or degeneration Delirium Dementia Multiple sclerosis	Other Other acute medical illnesses Recent hospitalization Recent surgery Use of certain medications (i.e., antiarrhythmics, diuretics, digoxin, narcotics, anticonvulsants, psychotropics, and antidepressants), especially four or more
Information from references 6, 10, 11, 22, and 23.		

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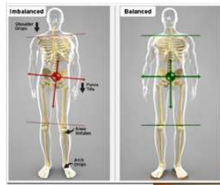
182

183

- ## ANTALGIC GAIT-PAINFUL GAIT:
- ▶ Due to pain anywhere from foot to hip, the patient avoids bearing weight on the affected limb.
 - ▶ Reduced stance phase, shortened step length, shortened stride length, shortened reciprocal arm swing, increased velocity of steps.
- 

Abnormal Gait: Musculoskeletal Cause

- **Leg Length Discrepancies** can either be structural or functional.
- This can cause pelvic drop, decreased hip, knee, and ankle plantarflexion.
- To compensate, the patient may use **vaulting or toe-walking**.



VAULTING

Seen in limb length discrepancy, hamstring weakness or extension contractures of the knee. The knee is hyper-extended and locked at end of stance phase and entire swing phase. So to clear the leg the patient goes up on the toes of the other leg to clear the affected limb.

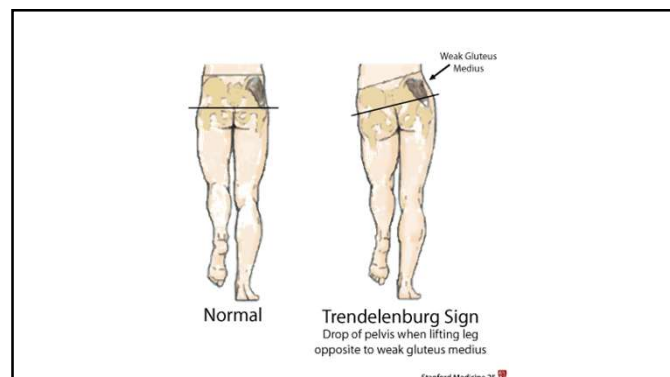


184

Abnormal Gait: Musculoskeletal Cause

- **Trendelenburg Gait** occurs when the **gluteus medius is weak**.
- Gluteus medius weakness can be the result of dysfunctions or diagnoses related to back pain or lumbopelvic pain, chronic hip dysfunctions, or lumbopelvic surgery.
- **The weakness of the involved side causes a contralateral pelvic hip drop during swing phase.**
- This contralateral hip drop might cause the quadratus lumborum, on the stance leg, to bring the pelvis back in neutral.
- The trunk may also lean to the weak side for balance.

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Abnormal Gait: Musculoskeletal Cause

- **Posterior Lurch Gait**, when the trunk leans posteriorly with a hyperextended hip, especially during the loading response due to a **weak gluteus maximus**.

Also known as **gluteus maximus gait**.

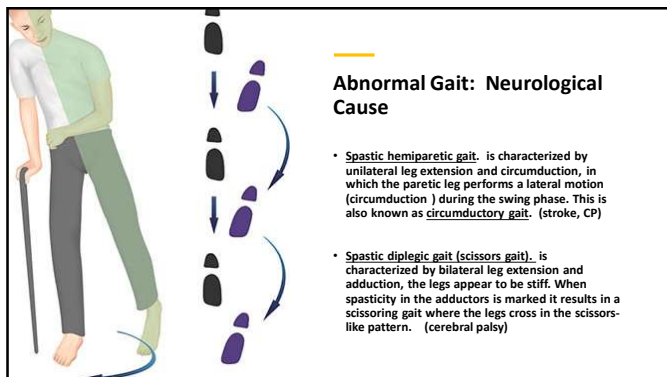


187

Abnormal Gait: Musculoskeletal Cause

- **Circumduction of the Hip**, during swing phase occurs for several reasons including weak hip flexors, contralateral hip dysfunction, or leg length discrepancy.
- This is a combination of hip hiking, forward rotation of the pelvis, and abduction of the hip.
- Hip flexor weakness is caused by L2-L3 nerve compression or possibly upper motor neuron lesion.

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Abnormal Gait: Neurological Cause

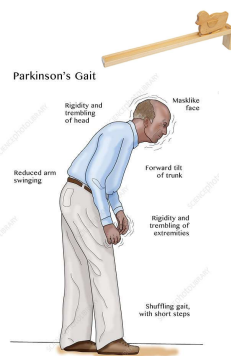
- **Waddling gait (myopathic gait).** weakness in the gluteus medius muscles leads the hip on the swinging side to drop during gait, in an attempt to counteract, the patient bends the trunk towards the other side, resulting in the gait to appear waddling. (muscular dystrophy)



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Abnormal Gait: Neurological Cause

- **Parkinsonism gait.** slow with a short step length and a narrow base. The feet are lifted less high than normal resulting in shuffling.
- Patients with parkinsonism can develop a **Freezing Gait** in which there is blockage of movement during turning or when approaching obstacles or narrow passages such as doors.
- Usually difficulty with initiation of gait
- This gait is also known as **Festinating Gait**.



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Abnormal Gait: Neurological Cause

- **Cerebellar ataxic gait.** broad based, insecure and lacks coordination. Leg movements and step length are irregular and variable. (appear drunk)
- **Sensory Ataxic gait.** the patient's proprioception is disturbed resulting the gait to appear broad-based and insecure. The patient uses visual control to compensate for the disturbed proprioception.
- **Hyperkinetic gait.** seen in basal ganglia deviations including chorea, dystonia and Wilson's disease

192

Abnormal Gait: Neurological Cause

NOTE: older adults with early cognitive impairment are more likely to have reductions in smoothness of gait

walk slower with shorter steps, steps are more variable and asymmetric, and spend longer time with both feet on the ground, esp. if trying to work on a cognitive problem while walking.

Slower walking is associated with increased amyloid protein in the brain which is associated with Alzheimers



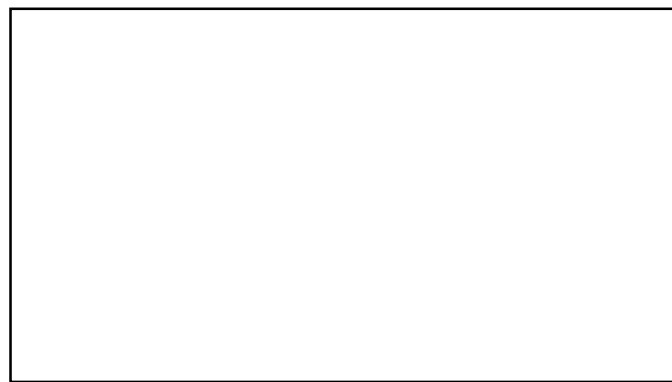
or



Recommended that older patients try to continue to walk as briskly as is safe for them.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6201510/walkingwithdementia/8~text>

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194



Other Fall Stuff...
...to D or not to D



195

It's Only Natural

- Maintains healthy bones
- Lowers the risk of influenza
- Reduces the risk of diabetes
- Improves your cardiovascular health
- Helps to prevent cancer
- Improves mood (inc. serotonin)
- Improves sleep quality
 - inc. alertness in day
 - inc. melatonin at night



<https://www.terrabelaseniorliving.com/senior-living-blog/the-importance-of-vitamin-d-from-the-sun-in-your-senior-years/>

196

BENEFITS of VITAMIN D

BETTER SLEEP
improves sleep quality & duration, & may help regulate tryptophan which supports the production of serotonin

HELPS FIGHT DISEASE
fights inflammation & helps our body to recover faster from illness

FEEL BETTER
enhances mood, reduces depression & feelings of anxiety. Plus, it just feels good to be outside

WEIGHT
can help reduce weight by preventing fatigue, making physical activity easier

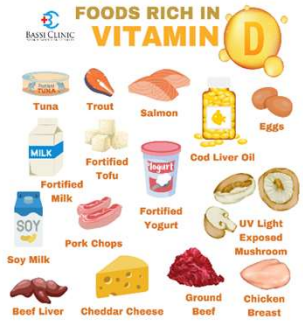
ENERGY
improves muscle function, growth & recovery + boosts energy levels

IMMUNE SUPPORT
supports heart health, protects against asthma, eczema, & minimises cancer risk

CALCIUM & PHOSPHOROUS
helps strengthen bones through better absorption & balance in the body

THE 'SUNSHINE' VITAMIN

FOODS RICH IN VITAMIN D



197

Other Fall Stuff to D or not to D

- Falls in the elderly, as well as fall-related adverse outcomes such as low trauma bone fractures, are events that could be prevented.
- Epidemiological studies conducted over the past 15 years provide an increasing number of arguments in favor of an action of vitamin D on muscles and CNS. **Vitamin D improves postural balance, propulsion and also executive functions and navigation abilities among older adults.** Vitamin D supplementation thus not only determines **gait performance, but also prevents the occurrence of falls and their complications among older adults.**
- The prescription of **at least 800 IU of vitamin D daily in insufficient elderly subjects is a simple intervention that should be incorporated into new strategies for postural rehabilitation, primary and secondary fall prevention, strength training, integration of body schema, automation of gait and adaptation to the environment.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3959005/>

198

Other Fall Stuff to D or not to D

- In this meta-analysis of RCTs (random controlled trials), **doses of 700 IU to 2000 IU of supplemental vitamin D per day were associated with a lower risk of falling** among ambulatory and institutionalized older adults.

<https://www.frontiersin.org/articles/10.3389/fendo.2022.919839/full>

199

Other Fall Stuff to D or not to D

- Recent studies have found links between vitamin D and Covid-19, with researchers in India reporting that **vitamin D level was “markedly low in severe Covid-19 patients...”**[we] recommend mass **administration of vitamin D supplements to population at risk for Covid-19,**” although the authors stopped short of offering an effective vitamin D dose.

<https://www.physiciansweekly.com/does-high-dose-vitamin-d-actually-heighten-fall-risk/>

200

Other Fall Stuff to D or not to D

- **BUT...vitamin D supplementation doses ≥ 1000 IU/day might have differential effects on fall risk based on fall location and fracture risk, with the most robust finding that vitamin D doses between 1000 and 4000 IU/day might increase the risk of first time falls with fractures**

<https://agjournals.onlinelibrary.wiley.com/doi/full/10.1111/jgs.17290f>

201

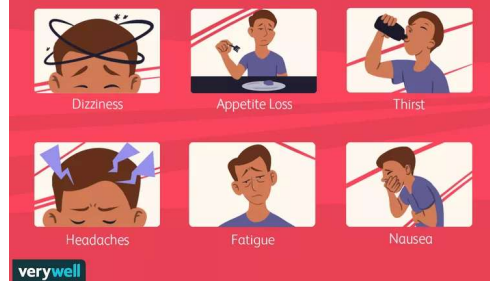
Other Fall Stuff to D or not to D

- Seniors with elevated fall risk and low serum 25-(OH)D levels saw no benefits from high-dose vitamin D3 supplementation versus a low dose, and higher doses may even do more harm than good, according to results from the STURDY trial.
- In a comparison of the effects of four doses of vitamin D3 supplements on falls, the primary outcome rates — **time to first fall or death over 2 years — were higher for the 2,000- and 4,000-IU/d doses than for the 1,000-IU/d dose.**

<https://www.physiciansweekly.com/does-high-dose-vitamin-d-actually-heighten-fall-risk/>

202

Symptoms of Too Much Vitamin D



203

Other Fall Stuff to D or not to D

Safe and defensible dosing
of Vit D in the elderly
800-2000 IU

<https://www.nia.nih.gov/health/dietary-supplements-older-adults>



204

Dietary Supple-ments

- People over age 50 may need more of some vitamins and minerals than younger adults do.
- **Calcium:** Calcium works with vitamin D to keep bones strong at all ages. Bone loss can lead to fractures in both older women and men. Calcium is found in milk and milk products (fat-free or low-fat is best), canned fish with soft bones, dark-green leafy vegetables like kale, and foods with calcium added, such as breakfast cereals.
- **Vitamin D:** Most people in the United States consume less than recommended amounts of vitamin D. Consider adding vitamin D-fortified milk and milk products, vitamin D-fortified cereals, and fatty fish to the diet, or using a vitamin D supplement.
- **Vitamin B6:** This vitamin is needed to form red blood cells. It is found in potatoes, bananas, chicken breasts, and fortified cereals.
- **Vitamin B12:** This helps keep red blood cells and nerves healthy. While older adults need just as much vitamin B12 as other adults, some have trouble absorbing the vitamin naturally found in food. Strict vegetarians and vegans are at greater risk of developing vitamin B12 deficiency because natural food sources of vitamin B12 are limited to animal foods.



<https://www.nia.nih.gov/health/dietary-supplements-older-adults>

205

Vitamin and mineral recommendations for people over 50

- The [Dietary Guidelines for Americans, 2020-2025](#) (PDF, 30.9M) recommends how much of each vitamin and mineral men and women of different ages need.
- **Vitamin B12:** 2.4 mcg (micrograms) each day. If you are taking medicine for acid reflux, you might need a different form, which your health care provider can give you information about.
- **Calcium:** Women over age 50 need 1,200 mg (milligrams) each day. Men need 1,000 mg between age 51 and 70 and 1,200 mg after 70, but not more than 2,000 mg a day.
- **Vitamin D:** 600 IU (International Units) for people age 51 to 70 and 800 IU for those over 70, but not more than 4,000 IU each day.
- **Vitamin B6:** 1.7 mg for men and 1.5 mg for women each day.
- Sometimes, too much of a vitamin or mineral can be harmful. Most if not all of your daily vitamins and minerals should come from food. When thinking about whether you need more of a vitamin or mineral, think about how much of each nutrient you get from food and drinks, as well as from any supplements you take.
- For a comprehensive list of vitamin and mineral intake levels for older adults, visit [NIA's article on vitamins and minerals](#) or the [Dietary Guidelines for Americans, 2020-2025](#) (PDF, 30.9M).
- <https://www.nia.nih.gov/health/dietary-supplements-older-adults>

206

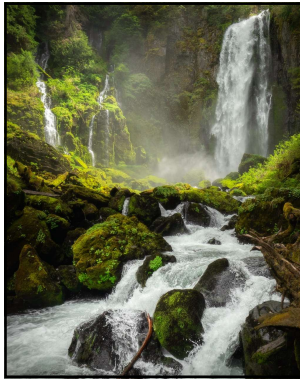
Help Patients “Meat” Their Needs

- The elderly protein intake often is from grain, fish, poultry, dairy
- Little red meat, difficult chewing, expense
- Often inadequate
- Correct supplementation of EAA shows
 - inc. lean body mass
 - inc muscle strength
- Pts 8 wks post hip surgery w EAA supplements had inc. leg strength compared to control group
- EAA dec negative effects of bed rest on functional tests
- Current studies are underway



207

[illegible]



There's Something in the Water!

- Most essential nutrient
- Up to 30% of pts >65 are dehydrated on hospitalization
- 75% of Americans may be chronically dehydrated
- Dehydration effects: skin, KI, GI, Rx, diabetes, pancreatitis, sepsis, COPD
- Contributors: disability, dec thirst, incontinence, diuretics, laxatives, opioids, weather change, poverty, no A/C, comorbidities, no caregiver

211

- Water = 70% brain mass
- 2% dehydration => dec basic & high order cognition
- Dehydration => inc cogulation => clot => 2X inc stroke mortality
- A fib w dehydration => 60% inc risk of ischemic stroke
- Dehydration => inc vasoconstriction => KI stones
=> metabolic syndrome
- Intracellular water is directly proportional to ADL score, handgrip, gait speed



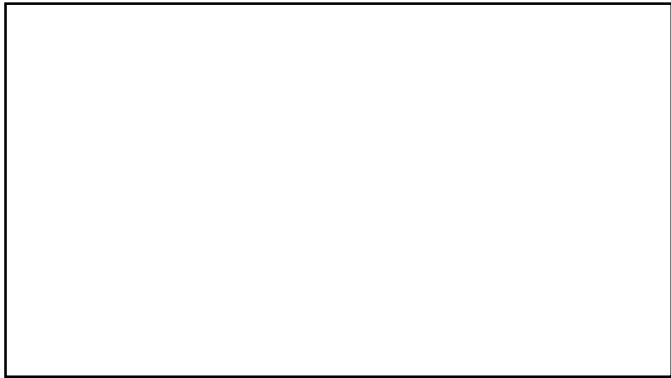
212



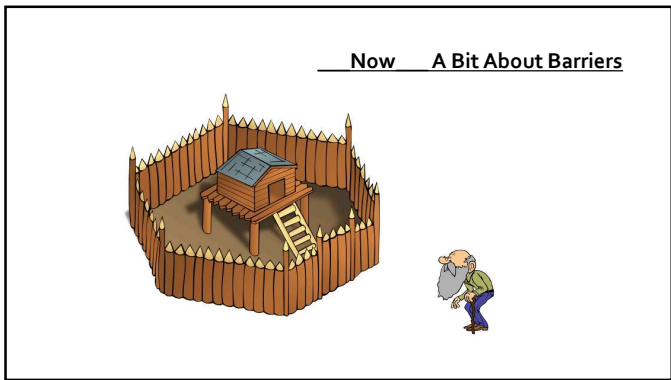
Review with Patient

- All supplements, herbs and medications:
Rx, doctor recommended, OTC (on their own)
- Review diet, food & fluid intake (journal)
- Avoid duplications, interactions, overdosing, deficiencies

213



214



215



216

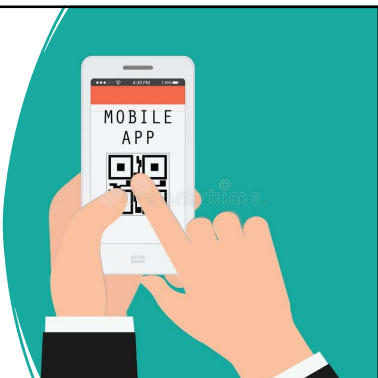
Barriers

- Health care provider misinformation, assumptions, stereotypes
- Lack of provider disability training; limited facility accessibility and lack of examination equipment for people with diverse disabilities;
i.e. lack of disability accommodation
- Gaps in insurance coverage for medication, durable medical equipment, specialist care or rehabilitative services
- Inadequate transportation
- Caregiver/family interference or limited independent decision ability
- Fear of possible assessment or treatment protocols or diagnosis

217

Imagine...

Someone who has limited vision, loss of dexterity and hearing impairment and who is not tech savvy, trying to call a roboservice for an appointment, for a prescription or with a question or concern



218

Information you can provide

Captioned phones

Rx readers or dispensers +

Reminders for Part D insurance renewal

Upright walkers/canes/grab bars + tools for disability

Online or local balance or exercise classes

Senior & mental health websites

Fall Alert Buttons

219

Annual Medicare Part D Application

<https://www.medicare.gov/plan-compare>

220

Spoken RX CVS

What's Spoken Rx?

- It's a smart tagged prescription label that works with our app to read your prescription information aloud — in English or Spanish.
- Created for blind or low-vision patients, Spoken Rx shares your prescription information without having to read the label.

<https://www.cvs.com/cvs/spoken-rx>



221

SCRIPTABILITY, SCRIP TALK

<https://www.scriptability.com/scriptalk-talking-labels>

Walmarts

<https://www.envisionamerica.com/participating-pharmacies>



222

Clear Captions

- Have hearing loss?
Can't hear your phone calls?
- See on-screen captions of what your caller is saying with a ClearCaptions phone. **This service is available at no cost to qualified users** – call now to see if you qualify.

- Give us a call now
- 1-866-219-3373

www.Clearcaptions.com

223

CANES

LOOK FORWARD INSTEAD OF DOWN

REGULAR CANE CAMPBELL POSTURE CANE

Wrist joint
Street shoes

Fitting Your Cane

30°
Hip Joint

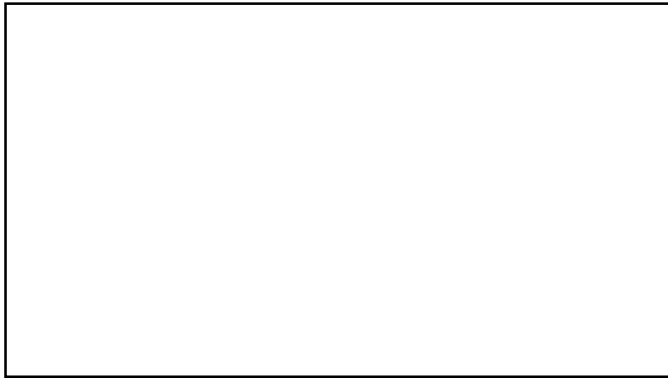
1. Wear your regular walking shoes when fitting this cane.
2. Height of the cane should be even with your wrist or hip joint when you are standing upright. Your elbow should be bent at a comfortable angle.
3. You should not feel heavy or uncomfortable when this cane is in your hand.

224

Upright Walkers

NOT

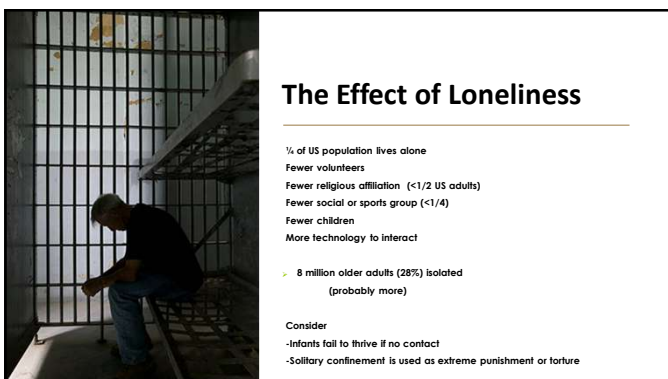
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227



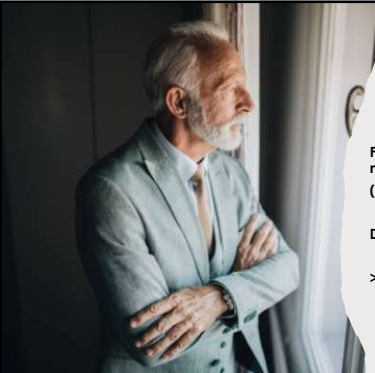
228



Reactive Loneliness

During or after life transitions
(retire, death, divorce, move, illness)

229



Chronic Loneliness

Freq when without resources to fill social needs
(lack emotional, mental skills, transport, \$)

Do not have social circle

> 42 million older adults

230



Perceived isolation =

- o Depression
- o Poor sleep
- o Poor decision making
- o Cognitive decline
- o Poor CV fxn
- o Impaired immunity
- o Dec Px activity
- o Dec Rx compliance

(elderly during COVID)

231




Lacking social connection is health risk greater than...

- Smoking 15 cigarettes/day
- Obesity
- Px inactivity
- Air pollution





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People suffering from social isolation are 14 per cent more likely to suffer an early death compared to people who are not lonely.

30% ↑ stroke or CV disease
(poor health habits)

40% ↑ dementia



• Often delay or dismissal of importance of addressing health concerns

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LONELY LEUKOCYTES

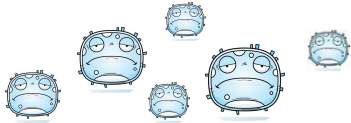
The WBCs of lonely people don't fight infection as well



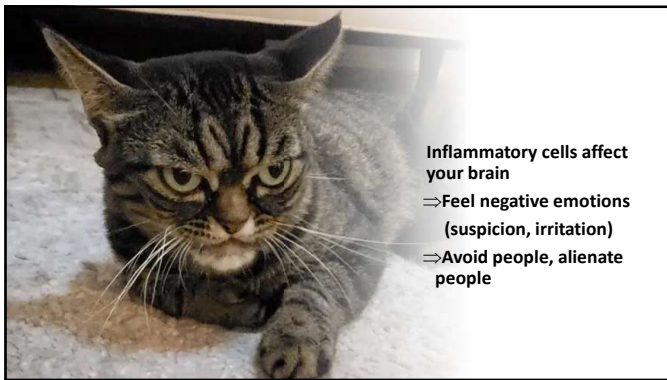
234

Studies showed that monkeys that were isolated had more viruses and less anti-virus WBCs in their blood

They also had an increase in inflammatory cells



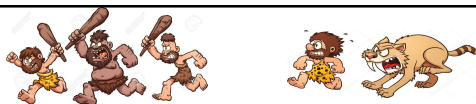
235



Inflammatory cells affect your brain

- ⇒ Feel negative emotions (suspicion, irritation)
- ⇒ Avoid people, alienate people

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The physiological effects of loneliness may have evolved to stimulate primitive man to seek the safety of a group/tribe which decreases threat.

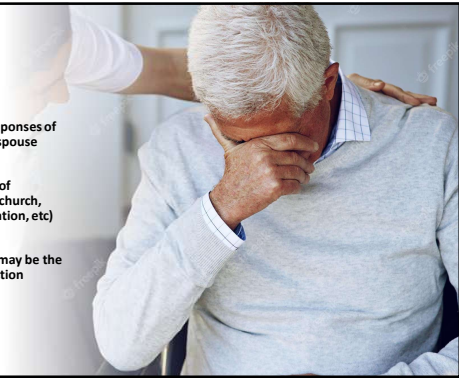
This evolved as an inflammatory response which now impairs the immune system & increases a wide range of disease. => "Lonely Leukocytes"

This => vicious cycle

Lonely => WBC inflam response => Brain => neg. emotion => avoid people => Lonely

237

- Be alert to comments or responses of patients esp after death of spouse
- Ask about possible sources of interaction (family, friends, church, community activities, education, etc)
- Be aware that doctor visits may be the only source of social interaction



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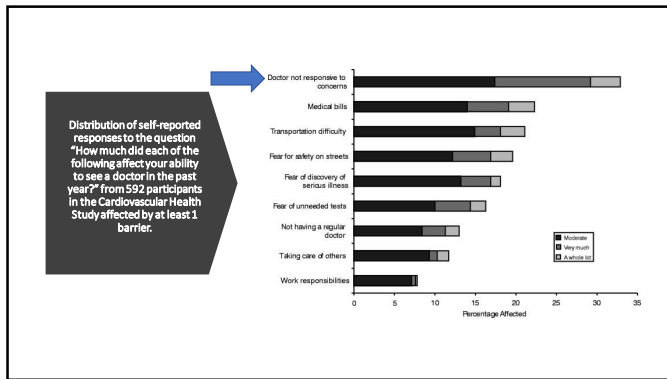


239

Research shows

What is the greatest barrier to an older patient seeking care?

240



241

It is intriguing that in this study **an elderly person's perception of the physician's lack of responsiveness was a greater disincentive to seeking care than more tangible barriers.**

Barriers to care such as cost, transportation, lack of information, and caring for others also prevent individuals from obtaining health care.

A qualitative study of angina patients showed they felt physicians were busy and that the patients did not like to bother them with their own conditions.

Lack of satisfaction has also been found to be **associated with more symptoms and lower medication compliance in patients**, whereas greater satisfaction has been associated with better outcomes. Interpretation of our data suggests that the psychological impact of **perceptions of care may later translate into barriers for seeking future health care.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448535/>
 Am J Public Health. 2004; October; 94(10): 1788-1794.
 Barriers to Health Care Access Among the Elderly and Who Perceives Them
 Annette L. Fitzpatrick, PhD, MA, Neil R. Powe, MD, MPH, MBA, Lawton S. Cooper, MD, MPH, Diane G. Ives, MPH, and John A. Robbins, MD

242

Effective doctor-patient communication has research-proven benefits: Patients are more likely to adhere to treatment and have better outcomes, they express greater satisfaction with their treatment, and they are less likely to file malpractice suits.

Effective communication has practical benefits. It can:

- Help prevent medical errors
- Lead to improved health outcomes
- Strengthen the patient-provider relationship **TRUST**
- Make the most of limited interaction time

243

Sorry to bother you, Doctors, but might you have time to see any patients today

Practice Potluck

Waste Galore

Unfortunately, the increase in documentation demanded by insurance, esp. Medicare, has doctors filling out required forms rather than engaging the patient. Or an assistant or the patient fills out the forms and the doctor never reads them.

244

And the doctor never “sees” the patient

So how many blocks do you walk in a day?

245

The **pervasiveness of age stereotypes** in contemporary American society is shaping the way in which individuals think, feel, and behave as they enter their later years.

With the unprecedented number of Baby Boomers reaching old age, ensuring that the aging population has access to the resources they need to maintain high levels of physical, psychological, and social functioning has become a top priority.

Besides the effect of older adults' attitudes on health care use, it is also important to consider how **clinicians' views** on aging and ageism within the health care system may interact with older adults' self-views to influence the delivery of high-quality health care.

To **help older adults view aging in a more positive light** and more effectively manage their own health, policymakers and practitioners must take a multifaceted approach and address the issue of age stereotypes and health care delay from individual, institutional, and societal levels.

Would the patient have been concerned about their symptom 30 years ago?

Self-Perceptions of Aging and Perceived Barriers to Care: Reasons for Health Care Delay
Winter 2009, Vol. 34, No. 4, pp. 524-534
The Gerontologist, Volume 49, Issue 3, 2009, pp. 524-534
<https://academic.oup.com/gerontologist/article/49/3/524/524>

246



Recognize

Medicare immediately segregates patients...check your attitude
DON'T ASSUME
We are NOT a "UNIT" after age 65
Not just palliative care
Annual workup, rehab (limited to 2 weeks w/o progress)
Goals & Lifestyle (pickaxe, mt climbing, driving, independence)
Decreased dexterity, vision, hearing, memory, tech ability ➦ decreased intelligence
Avoid facing away from patient while asking questions or not speaking to the patient.
May be stages of grief for acquired disability
Chasing insurance coverage ("The diagnosis or test of the year" : doing tests or procedures because that's what insurance is presently covering. The same tests or procedures are rarely done or diagnosis given when insurance doesn't pay for it.)

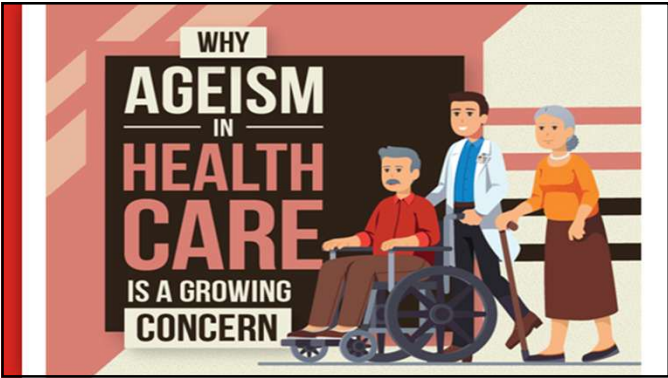


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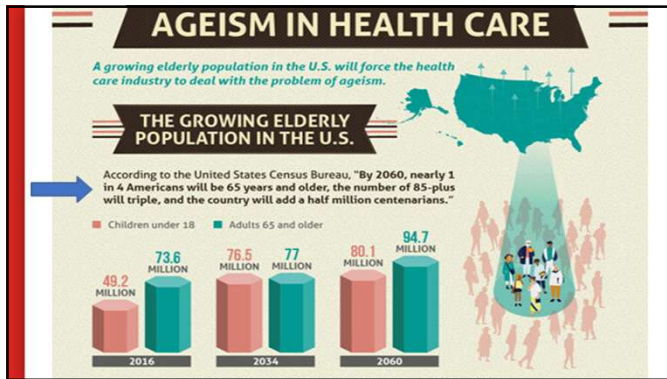
"NON-COMPLIANCE"

- If a patient resists care or following through with recommendations, ask **WHY** and be empathetic. Address **THEIR** concerns.
- Is it won't OR can't?
- Is it fear or a past experience or misinformation?
- Try to meet them where **THEY** are.

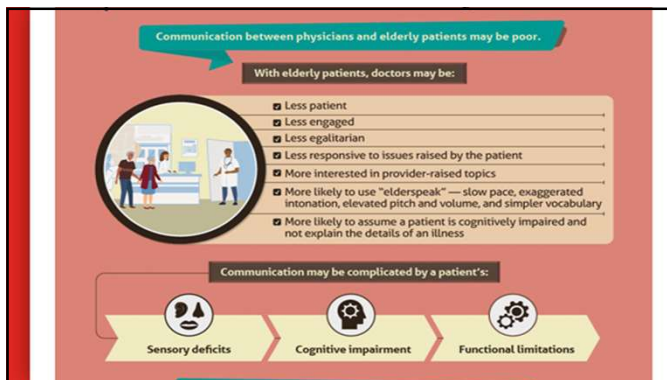
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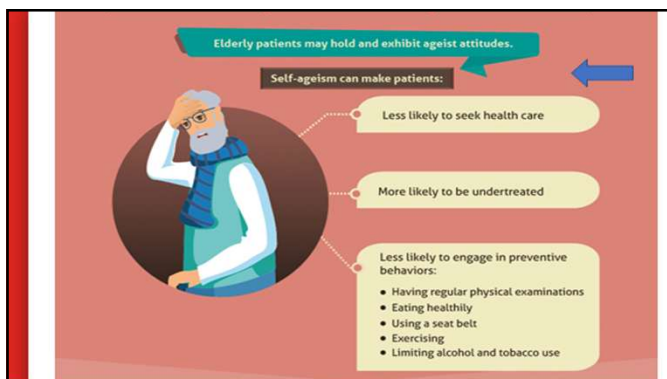
249



250



251



252

Because ageism in health care exists across all levels, combating ageism will require implementing a strategy that involves training health care practitioners, revising institutional policies and procedures, and addressing ageist attitudes in elderly patients.

CHALLENGES IN COMBATING AGEISM

It can be difficult to distinguish ageism from carefully reasoned clinical decisions.



Ageism can be deeply embedded in daily procedures, and health care practitioners make decisions across multiple areas that impact clinical practice:

Screening >> Diagnostic tests >> Treatment

Health care practitioners follow routine, familiarity, and evidence. Categorizing and stereotyping patients by risk or potential outcome may be necessary to make decisions.

Following established practices makes it difficult for health care practitioners to embrace change.

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TIPS FOR ADVANCED PRACTICE NURSES IN COMBATING AGEISM

- Focus on supporting the well-being of the whole person — not just treating the disease.
- Educate elderly patients on the importance of adopting preventive habits, such as routine exercise.
- Ask elderly patients about their health and wellness goals and work with them to create a plan.
- Help elderly patients consider and establish their priorities.
- Encourage elderly patients to adopt a positive and supportive perspective of themselves in older age.



CONCLUSION

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Today you are going to learn a new language.



Elderspeak

- Elderspeak is an inappropriate simplified speech register that sounds like baby talk and is commonly used with older adults, especially in health care settings.
- Use of diminutive familiar terms (sweetie, hon)
- Condescending tone, words or actions
- n. adjustments to speech patterns, such as exaggerated speaking (more slowly or more loudly, shortening sentences, or using limited or less complex vocabulary), that are sometimes made by younger people when communicating with older adults. These simplified speech patterns are implicitly based on the assumption that older adults are cognitively impaired or incapable of understanding normal speech.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7743962/>

<https://elctecourse.org/elderspeak/>

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Elderspeak

- Individual
 - Cultural (regional, ethnic)
 - Age difference
 - Degree of familiarity
 - "Elder-assist" "Elder-touch"
- (allow patient to choose amount of assistance or physical contact)
- Discuss with staff



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Interviewing

- Use proper form of address: especially those who are older and might be used to more formal terms of address.
- Make older patients comfortable: comfortable seating, help with filling out forms, escort to and from rooms, indicate restrooms, check on frequently if waiting, update on delays
- Establish rapport: without elderspeak speak clearly, slowly, enunciate, avoid masks, greet patient & everyone with them & determine relationship, apologize for delays, social questions
- Pace questions: talk to patient even if another is answering, listen, reflect back understanding or ask for clarification, allow time for answer, explain or reword
- Oral & Written Directions
- Request journal & written questions

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Interviewing

- One study found that doctors, on average, interrupt patients within the first 18 seconds of the initial interview. Once interrupted, a patient is less likely to reveal all of his or her concerns.
- Face the patient, maintain eye contact, and when he or she is talking, nod or use frequent, brief acknowledging responses, such as "okay," "I see," and "uh-huh." Active listening keeps the discussion focused and lets patients know you understand their concerns.
- Studies show that clinical empathy can be learned and practiced and that it adds less than a minute to the patient interview. It also has rewards in terms of patient satisfaction, understanding, and adherence to treatment. Watch for opportunities to respond to patients' emotions

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Interviewing

- Don't assume that patients know medical terminology or a lot about their disease. Introduce necessary information by first asking patients what they know about their condition and building on that.
- Be ready for well educated but also for misinformed response
- Explain why tests are ordered & return results ASAP
- Avoid jargon
- Explain your Dx & DDs, reaffirm prior Dxs or why yours differs
- Written and oral reasoning for your directives

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Interviewing

- Some words may have different meanings to older patients than to you or your peers. Words may also have different connotations based on cultural, ethnic or personal background ("cancer, dementia, hospice, palliative care")
- Avoid Elderspeak but use simple, common language, and ask if clarification is needed. Offer to repeat or reword the information. Have written resources or anatomic models for visual reference.
- Be aware of hearing impairment, illiteracy or reactions based on past history or fears
- Provide alternate or supportive means of communication (models, pictures, interpreter, videos, active demonstration)
- Write directions for home & followup care clearly, specifically & succinctly ("drink 10 oz of water with every meal"...not "increase fluids")
- KISS don't overload (1 or 2 exercises, 1 dietary change/supplement, 1 lifestyle change)

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Open ended ?s ...Listen, don't assume

Eg. Frequent falls is it difficulty with balance or hazards?
If difficulty with balance is it

inner ear
cerebellar disorder
altered LE sensation, neuropathy
medication or alcohol
muscle imbalance/immobilization
positional hypotension



Is this a recent onset or long standing? Has the pt been given a reason for it? What treatments including proprioceptive training have been tried? Could there be multiple contributing factors?

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Before the Patient Leaves

Make sure the patient understands:

- What is the main health issue
- What he or she needs to do
- Why it is important to act
- "teach-back method"
- Any potential issues (transport, finances, home assistance, equipment)
- Whom the patient can contact with questions



Make sure the doctor allows patients the chance to voice THEIR main concern & ask their own questions. Avoid any sign to the patient that they are a burden.

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A survey of patients in eastern Arkansas revealed that their greatest concern was having someone to ask questions of after the doctor's visit.

Many times it was to clarify the directions or to help make decisions about what items or medications were most critical.

In the poorer communities, it is often related to financial limitations (i.e. which medication was most important if they couldn't afford all of them).

Or it related to accessibility (to healthy food, exercise facilities, computer, etc.).

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