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Geriatric Syndromes
The Dirty Dozen

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Sowing Seeds for More Rewarding Lives

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Geriatric Syndromes: What we will cover today

- Urinary Incontinence
- Insomnia
- Falls/Gait Changes
- Dizziness
- Hearing Problems
- Vision Problems
- Delirium
- Dementia
- Depression
- Malnutrition
- Pressure Sores
- Chronic or persistent pain

Learning Objectives

- Explore the effects of aging on the body
- Discuss assessment and treatment options for older adults with urinary incontinence
- Identify causes of insomnia in the older adult
- Explore the common causes of falls in the older adult
- Explore the best practices for fall prevention in the older adult
- Identify the most common causes of confusion in the older adult

Learning Objectives

- Discuss assessment of late life depression and treatment options
- Explore interventions for malnutrition
- Identify common causes of dizziness in older adults
- Discuss best practices for pressure sore prevention and management
- Identify strategies for chronic pain management in the older adult

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Urinary Incontinence

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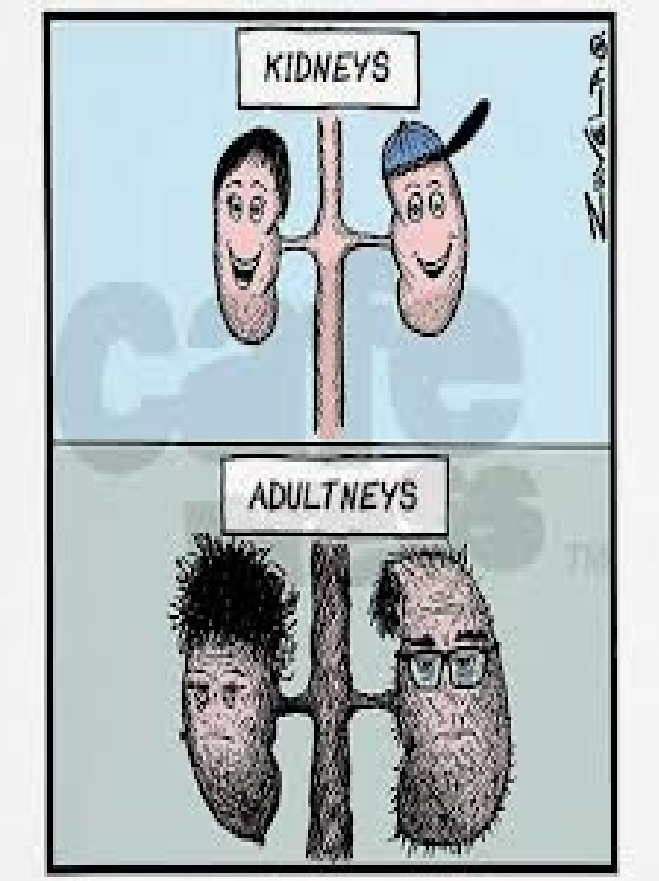
What is infrequent bladder syndrome?
Who is afflicted with it?
What are the complications?
What is the treatment?

The Aging Genitourinary System



What is urinary incontinence?

- Losing urine when you don’t want to
- Never a normal consequence of aging

Changes to Expect as We Age

- Decrease in glomerular filtration rate (GFR)
  - GFR can be determine by the Cockcroft-Gault formula
    - http://www.mdcalc.com/creatinine-clearance-cockcroft-gault-equation/
  - Difficulty maintaining fluid and electrolyte balance
- Decreased efficiency in removing medications from the bloodstream
- Decreases in bladder elasticity and contractility
- Decrease in bladder sensation and desire to void
- Increase in nocturnal urine formation
- Reduction in bladder capacity

Translation

- More frequent trips to the bathroom
- If incontinent, more episodes at night
- Urgent need to use the bathroom

Background -Bladder Control System

Brain:

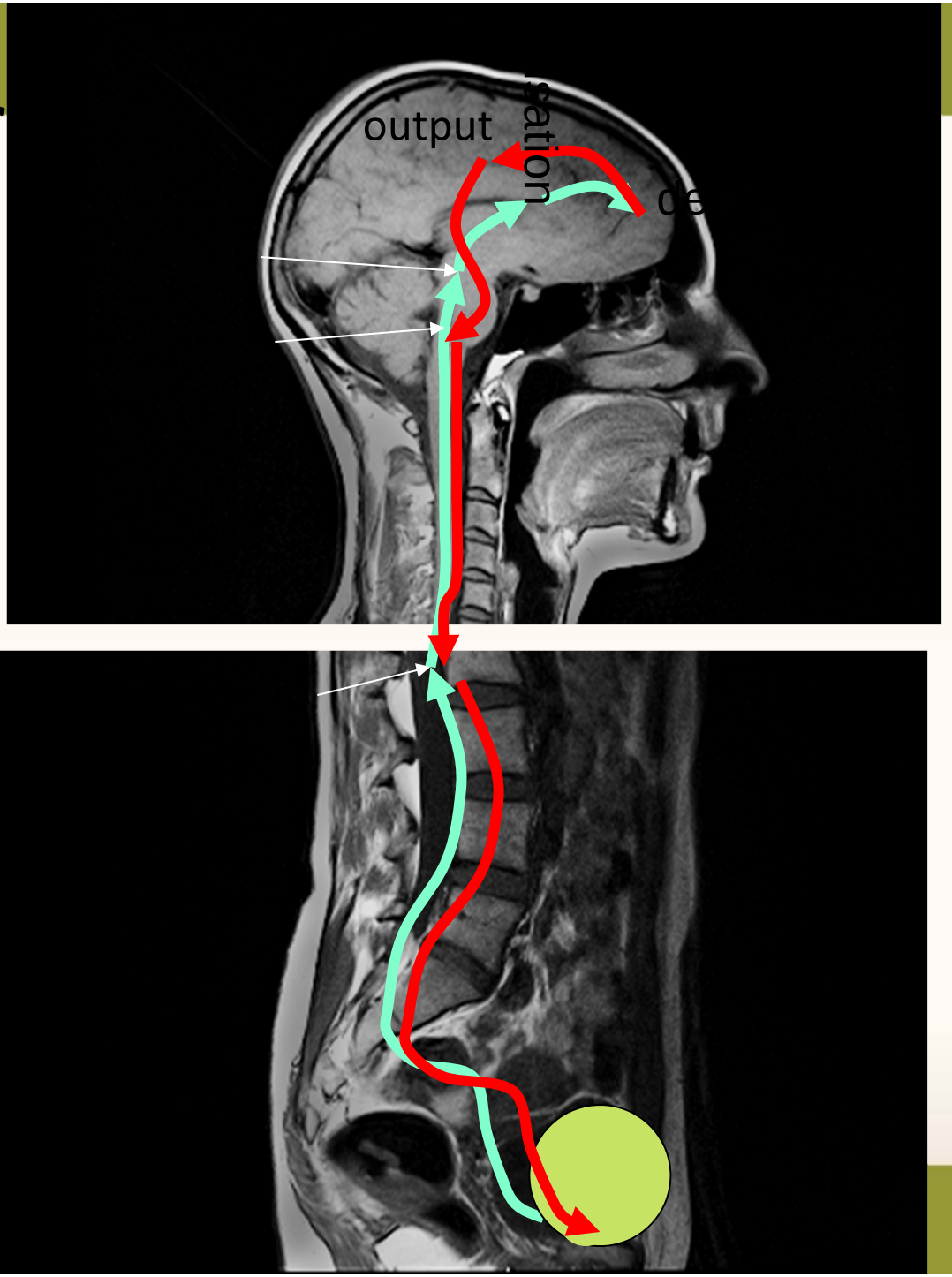
- *Brain stem*
- *Detrusor motor area*

Spinal cord:

- *Thoracolumbar*
- *Sacral*

Lower urinary tract:

- *Bladder*
- *Urethra*



Urinary Incontinence

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Stats on Incontinence

- Affects
  - 38% of women over 60
  - 17% of men
  - 50% of nursing home residents

Lack of Reporting of Incontinence

- By older adult
  - Embarrassed
  - Think it is normal aging
- By healthcare staff
  - Short length of time in hospital
  - Think it is normal aging
  - Think it has been addressed

Urinary Incontinence Categories

- Transient
  - Acronym: **DIAPPERS**
    - **D**elirium
    - **I**nfection
    - **A**trophic vaginitis
    - **P**harmacological impact
    - **P**sychological
    - **R**estricted mobility
    - **S**tool impaction
- Chronic or persistent

Transient Incontinence

- Treat the underlying cause
- Do not assume
  - Older adult = Incontinence

Five types of Chronic Urinary Incontinence

- Stress
- Urge
- Overflow
- Functional
- Mixed

Types of Incontinence: Stress

- Stress
  - More common in women
  - Increase in intra-abdominal pressure
    - Coughing
    - Sneezing
    - Exercising
    - Running
    - Lifting something heavy

Types of Incontinence: Urge

- Urge
  - Strong desire to void, unable to hold the urge to urinate
  - Detrusor hyperactivity with impair bladder contractility (DHIC)
  - Most common 50-75%
  - Many causes – bladder irritants, bowel problems, stroke, injury to the nervous system

Types of Incontinence: Functional

- Functional
  - Due to a problem affecting mobility or manipulation of clothing
  - Also due to cognitive issues such as dementia

Types of Incontinence: Overflow

- Overflow
  - Inability to effectively empty the bladder effectively
  - Constant dribbling
  - Sensation of incomplete emptying
  - Causes include nerve damage by diabetes, MS, enlarged prostate as well as blocked urethra or damage to the bladder

Types of Incontinence: Mixed

- Combination of more than one type
- Usually stress and urge

Drugs that Contribute to UI

- Diuretics- frequency, urgency
  - furosemide, hydrochlorothiazide
- Anticholinergics – retention, impaction, sedation
  - oxybutynin, tolterodine
- Narcotic analgesics- retention, impaction, sedation
  - oxycontin, oxycodone
- ACE inhibitors- cough
  - captopril, enalapril, benzepril
- Calcium blockers – can relax bladder contraction
  - nifedipine, diltiazem, verapamil

Assessment

- Medical history
- History of problem: onset, frequency of episodes, duration, and severity
- Transient or established/chronic
- Physical exam
  - Appearance, clothing stained
  - Ask to cough while standing
- Medications
- Testing

Assessment

- Lower abdominal tenderness
- Distended, PVR
- Skin rashes, excoriation
- S/S UTI, hematuria
- Constipation, fecal impaction

Questions to Ask About Incontinence

- How often
  - Day/night
- How much
  - Weak stream?
  - Straining to void?
  - Emptying?
- Sleep pattern
- Description

Your Daily Bladder Diary

This diary will help you and your health care team figure out the causes of your bladder control trouble. The "sample" line shows you how to use the diary.

Your name: _____

Date: _____

Time	Drinks		Trips to the Bathroom		Accidental Leaks	Did you feel a strong urge to go?	What were you doing at the time?
	What kind?	*How much?*	*How many times?*	*How much urine? (circle one)*	*How much? (circle one)*	*Circle one*	*Sneezing, exercising having sex, lifting, etc.*
Sample	Coffee	2 cups	✓✓	(sm) med lg	(sm) med lg	Yes (No)	Running
6–7 a.m.				sm med lg	sm med lg	Yes No	
7–8 a.m.				sm med lg	sm med lg	Yes No	
8–9 a.m.				sm med lg	sm med lg	Yes No	
9–10 a.m.				sm med lg	sm med lg	Yes No	
10–11 a.m.				sm med lg	sm med lg	Yes No	
11–12 noon				sm med lg	sm med lg	Yes No	
12–1 p.m.				sm med lg	sm med lg	Yes No	
1–2 p.m.				sm med lg	sm med lg	Yes No	
2–3 p.m.				sm med lg	sm med lg	Yes No	
3–4 p.m.				sm med lg	sm med lg	Yes No	
4–5 p.m				sm med lg	sm med lg	Yes No	
5–6 p.m.				sm med lg	sm med lg	Yes No	
6–7 p.m.				sm med lg	sm med lg	Yes No	

Use this sheet as a master for making copies that you can use as a bladder diary for as many days as you need.

Time	Drinks		Trips to the Bathroom		Accidental Leaks	Did you feel a strong urge to go?	What were you doing at the time?
	What kind?	*How much?*	*How many times?*	*How much urine? (circle one)*	*How much? (circle one)*	*Circle one*	*Sneezing, exercising having sex, lifting, etc.*
Sample	Soda	2 cans	✓✓	(sm) med lg	(sm) med lg	Yes (No)	Running
7–8 p.m.				sm med lg	sm med lg	Yes No	
8–9 p.m.				sm med lg	sm med lg	Yes No	
9–10 p.m.				sm med lg	sm med lg	Yes No	
10–11 p.m.				sm med lg	sm med lg	Yes No	
11–12 midnight				sm med lg	sm med lg	Yes No	
12–1 a.m.				sm med lg	sm med lg	Yes No	
1–2 a.m.				sm med lg	sm med lg	Yes No	
2–3 a.m.				sm med lg	sm med lg	Yes No	
3–4 a.m.				sm med lg	sm med lg	Yes No	
4–5 a.m.				sm med lg	sm med lg	Yes No	
5–6 a.m.				sm med lg	sm med lg	Yes No	

I used _____ pads today. I used _____ diapers today (write number).

Questions to ask my health care team: _____

_____

_____

_____

_____

Let's Talk About Bladder Control for Women is a public health awareness campaign conducted by the National Kidney and Urologic Diseases Information Clearinghouse (NKUDIC), an information dissemination service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health.

Treatment: Non-pharmaceuticals

- Non-pharmaceuticals
  - Kegels
    - Tighten the pubococcygeal muscle (the one that stops stream of urine) without moving abdominal muscles
    - Perform this exercise 5 times per day, 10 in each set gradually increasing to 15-20 in each set
  - Scheduled/Prompted voiding
  - BSC
  - Manual dexterity


Minnie Pauz
ACHOO!
1998 © Dee Adams
Thank God for all those years of doing my Kegels!

Lifestyle Changes

- Losing weight
- Quite smoking
- Avoid alcohol
- Decaffeinated beverages
- Prevent constipation
- Depression screening

Consider:

- Incontinent products
- Adapting the bathroom
- Toilet mapping
- Timed voiding

Caregiver Burden or Stress

- Lack of understanding
  - Why this is occurring
  - How to manage at home
  - Results in increased laundry, time, odor, cleaning

Equipment for home or bedside

Vinyl flooring, waterproof mattress covers

Brand	Briefs	Undergarments	Pad & Pant Systems	Guards	Pads/Shields
					
	Full wrap around style fasten with tape tabs.	Fasten around the waist with elastic belts and buttons. Beltless style stays in place with an adhesive strip.	Disposable pads fit inside washable pants.	Slightly heavier than pads or shields. Attach with an adhesive strip.	Attach to your own underwear with an adhesive strip.
Reassure*	One style with elastic in the waist, four tape tabs, and a cottony lining (S,M,L)(H).	Belted style has cottony lining and a soft Cloth Like outer lining (M,MH).		Cup-shaped, foam-backed guards fasten with an adhesive strip (L,M).	Soft, elastic gathers shape pad to body and fasten with an adhesive strip (L).
Attends	Briefs with Perma-Dry have four tape tabs and a silky lining (S,M,L) (Youth size available without Perma-Dry)(H). Briefs with Perma-Dry and Waistband have elastic in the waist, six tape tabs and a cottony lining (M,L)(H).	Belted Perma-Dry style has a cottony lining (M,MH). Beltless style also has a cottony lining and an adhesive strip to keep it in place (M,MH).	Wrap-around style pants fasten with Velcro (S,M,L). Pads fasten with an adhesive square (M,MH).	Perma-Dry soft guards fasten with an adhesive strip (L,M).	Perma-Dry pad has elastic gathers to shape pad to body and fasten with an adhesive strip (L).
Depend/Poise	One style with elastic in the waist, six tape tabs and a cottony lining (S,M,L)(H). One style designed for nighttime has more absorbent padding in the center (M only)(H).	Original folded leg style has button straps (M,MH). Elastic leg style has button straps and a Cloth-Like outer lining (M,MH). Easy Fit style fastens with Velcro straps and has a Cloth-Like outer lining (M,MH).		Poise guards have a cup-shaped foam backing and fasten with an adhesive strip (L,M). Male style guard is cup-shaped and fastens with an adhesive strip (L,M).	Poise pads have elastic gathers so pad fits body and fastens with an adhesive strip (L). Shields are cup-shaped with no elastic and fasten with an adhesive strip (L).
Tranquility	One style with a cottony lining, an inner cuff and four tape tabs (Y,S,M,L)(H).	Slimline Adjustable Brief fastens with Velcro-like straps (M,MH). Fitted liner has elastic edging and fastens with an adhesive strip (M,MH).	Cotton pant with waterproof pouch and elastic loop for holding absorbent pads (XS,S,M,L,XL). Original or New High Capacity pads fit in pouch (M).		Thin shields come in a regular, super-plus and male style. All fasten with an adhesive strip (L).
Promise	One style with a cottony lining, four tape tabs and padding in the wings (S,M,L)(H).		Mesh pants (S,M,L,XL) hold pads (L,M,MH) in place.		
Surecys	One style with elastic waist, cottony lining and four tape tabs. Care Plus style has four tape tabs, cottony lining and padding in the wings (S,M,L)(H).	Belted style has button straps (M,MH). Beltless style has elastic side gathers and fastens with an adhesive strip (M,MH).	Light support pant (M,L,XL) may be used with any self-adhering absorbent product.	Elastic edging gives guard a cup shape and fastens with an adhesive strip (L,M).	Hourglass shaped shield has Dynaflow channels and fasten with an adhesive strip (L).
Serenity			Cottony, light support pant (S,M,L,XL) may be used with any self adhering absorbent product.	Cup-shaped, foam-backed guard fastens with an adhesive strip (L,M).	Thin pad and pad have a soft foam backing and fasten with adhesive strip (L). Curved pad has soft, elastic gathers and fastens with an adhesive strip (L).
Dignity		Briefmates fasten with an adhesive strip (M,MH) and come with a disposable mesh	Ladies' style (S,M,L,XL,XX) and men's style (S,M,L,XL) are used with liners		

Treatment: Pharmaceuticals

Pharmaceuticals

- Urge: anti-muscarinics- oxybutynin (Ditropan), Solifenacin (Vesicare), tolterodine(Detrol)
  - Disadvantage is anti-cholinergic effect
- Stress: Estrogen, Duloxetine(Cymbalta), Alpha adrengeric agonists (pseudo-ephedrine and phenylpropanolamine)
- Overflow: Bethanechol - Ureocholine(cholingeric receptor agonist), Tamsulosin – flomax (selective alpha reductase inhibitor)

UTIs

- 10% of older adult population per year affected
- Female/Male ratio is 2:1
- Symptoms can be atypical
- Asymptomatic bacteriuria: 20% of older adult population
  - Multiple causes
  - 80-90% of those with catheters have bacteriuria

Complications of Urinary Incontinence

- Skin issues
- UTIs
- Depression
- Isolation

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Insomnia

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So…..

- What percentage of older adults report disruptions with sleep?
- Do we need less sleep as we age?
- Can you make up for lost sleep on a weekend?

Insomnia

- Difficulty falling asleep
- Difficulty staying asleep
- Premature awakening

Stages of Sleep

- Stage 1 is the transitional period of drifting to sleep when one can be easily aroused.
- Stage 2 is a period of greater relaxation and light sleep will follow.
- Stages 3 and 4 are progressively deeper and more restorative periods when the blood pressure, pulse, and metabolism decrease or slow down.

Changes as We Age

- Increase in Stage 1 wakefulness
- Decreased deep NREM (stages 3 and 4) slow wave sleep
- Increase in night time awakenings
- Frequent arousals reduce the amount of nocturnal sleep
  - Common sleep interruptions include: nocturia and nocturnal incontinence, hypersomnia/insomnia, restless legs syndrome/periodic limb movements, sleep-disordered breathing

Given that older adults…..

- Are more easily awakened
- Cannot fall asleep as easily once they are awakened

Impact on care??

Impaired sleep

- Results in:
  - Daytime sleepiness
  - Lack of concentration
  - Poor nutrition
  - Mood shifts
  - Falls

Assessment

- Sleep history
  - Pittsburgh Sleep Quality Index
- Medical History
- Medication History
- Mobility

What is sleep hygiene?

Alternatives to Sleeping Medication

Soft music

Temperature

Lighting

Comfort

QUIET

Do we have a problem with NOISE?

What about sleeping pills?

Sleeping Medications in the Older Adult

- Increase sleep time by an average of 25 minutes
- Decrease length of time to fall asleep by 10 minutes
- Clinical benefits may be modest at best
- Increase in adverse effects
  - Daytime drowsiness
  - Nightmares
  - GI disturbances
  - Dizziness
  - Motor vehicle accidents
  - Falls
- Are the benefits worth the risks?

Glass, Lanctot, Herrmann, Sproute, busto, 2005

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Fall Prevention

Falls/Mobility/Dizziness/Vision Hearing

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The sad facts are….

Every 15 seconds an older adult is treated in the Emergency Department due to a fall.

CDC Statistics

- 1 in ___ older adults, 65 years of age and older, fall each year
- Falls are the leading cause of fatal and nonfatal injuries in seniors
- In 2013, the direct medical cost of falls was ____ dollars
- ___% of fall result in moderate to severe injuries

CDC Statistics

- In 2013, _____died of unintentional fall injuries
- A 75 year old who falls are 4-5 times more likely to be admitted to a nursing home for_____ or longer
- _____ hip fractures per year
- _____% of adults over the age of 65 report episodes of dizziness.

Fall Risk Checklist

Patient: Date: Time: AM/PM

Fall Risk Factor Identified	Factor Present?	Notes
Falls History		
Any falls in past year?	☐ Yes ☐ No	
Worries about falling or feels unsteady when standing or walking?	☐ Yes ☐ No	
Medical Conditions		
Problems with heart rate and/or rhythm	☐ Yes ☐ No	
Cognitive impairment	☐ Yes ☐ No	
Incontinence	☐ Yes ☐ No	
Depression	☐ Yes ☐ No	
Foot problems	☐ Yes ☐ No	
Other medical conditions (Specify)	☐ Yes ☐ No	
Medications		
Any psychoactive medications, medications with anticholinergic side effects, and/or sedating OTCs? (e.g., Benadryl, Tylenol PM)	☐ Yes ☐ No	
Gait, Strength & Balance		
Timed Up and Go (TUG) Test ≥12 seconds	☐ Yes ☐ No	
30-Second Chair Stand Test Below average score (See table on back)	☐ Yes ☐ No	
4-Stage Balance Test Full tandem stance <10 seconds	☐ Yes ☐ No	
Vision		
Acuity <20/40 OR no eye exam in >1 year	☐ Yes ☐ No	
Postural Hypotension		
A decrease in systolic BP ≥20 mm Hg or a diastolic bp of ≥10 mm Hg or lightheadedness or dizziness from lying to standing?	☐ Yes ☐ No	
Other Risk Factors (Specify)		
	☐ Yes ☐ No	
	☐ Yes ☐ No	

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

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First Things First: Risk factors

- Age
- Functionality
  - Vision
  - Hearing
  - Sensation
  - Movement, strength, balance
  - Dizziness
- Chronic health issues
- Medications
- Environmental factors

Visual Changes

- Decrease in the size of the pupil
- Decrease in ability to accommodate changes in levels of light
- By age 45, many adults need magnification to see fine details
- May impact the continuation of normal activities
- Color discrimination becomes difficult
- Yellowing of the lens occurs
- Depth perception may be affected

Yellowing of the lens

Abnormal Vision Changes

Diabetic Retinopathy

Macular Degeneration

Macular Degeneration

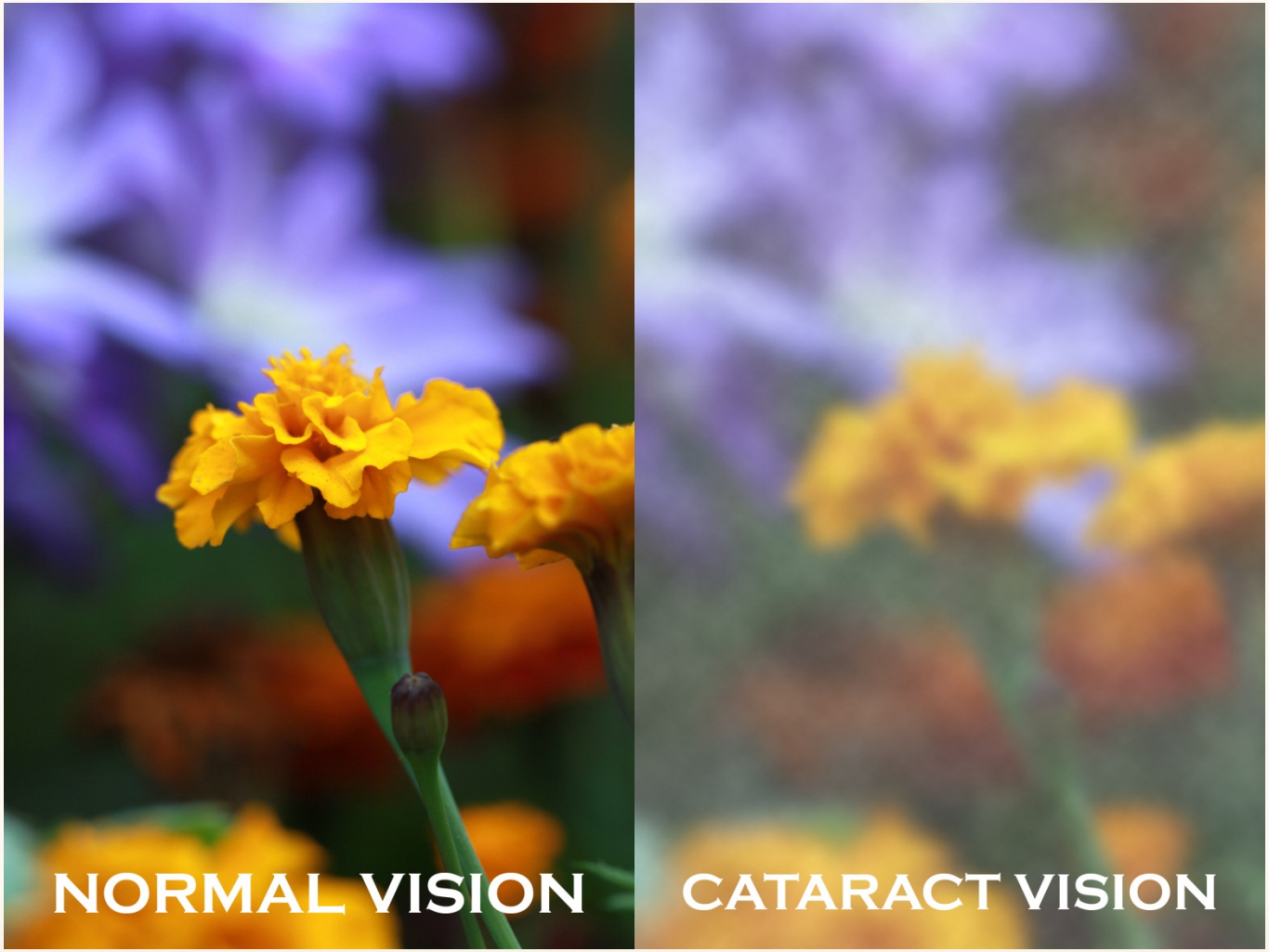
Abnormal Vision Changes

Cataracts

Glaucoma

Hemianopia

Cataracts



Cataracts

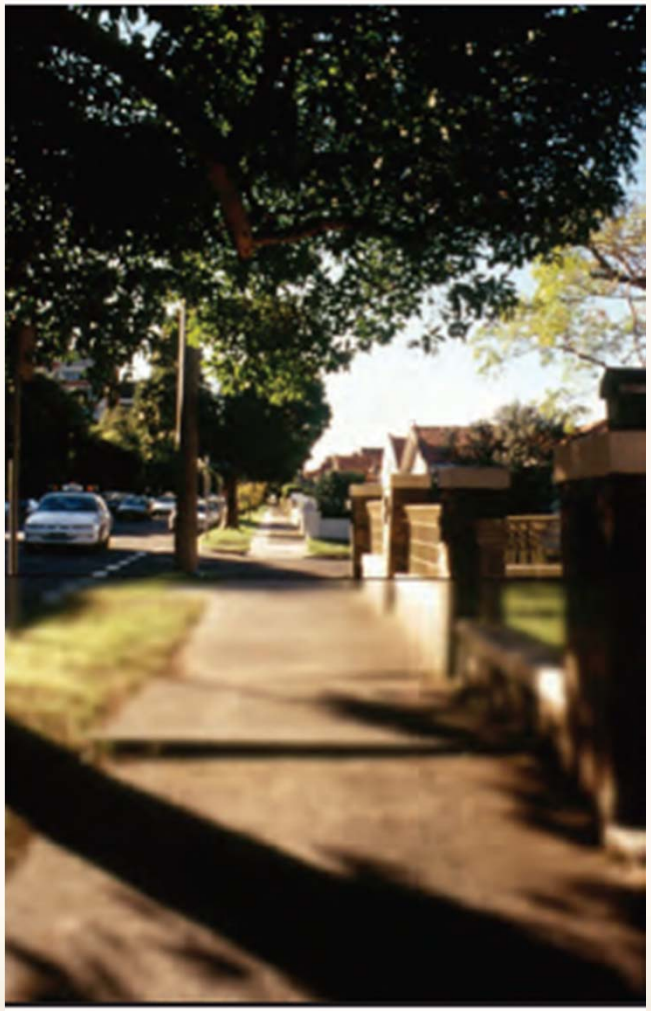
Cataracts


Look at the difference in these street scenes.
STOP
A healthy lens allows all of the incoming light to generate a clear image.
Cataracts scatter the incoming light resulting in hazing and lack of detail.

Things to Remember

- Use bright nonskid tape on stairs
- Wear your glasses
- Reduce glare
- Regular eye doctor visits
- Increase environmental lighting by 30%
- Use nightlights, place lamps at the entrance to a room

Use of Bifocals



Use of Bifocals

Glare

Hearing Loss

Normal Changes

- It is the third leading chronic health problem in the U.S.
- Hearing loss is worse at higher frequencies
- Affects approximately 1/3 of all adults between 65 and 74
- Affects about ½ of adults age 75 to 79

Abnormal Changes in Sensation

- Associated with diseases such as Parkinson's disease, stroke, diabetes, arthritis
- Can also be associated with medication and injury
- Decreased sensation is seen primarily in the fingertips, palms, and lower extremities
- Decreased ability to distinguish temperature and pain

Mobility, strength and Balance Assessment

- http://www.cdc.gov/steadi/videos.html

First Things First: Risk factors

- Age
- Functionality
  - Vision
  - Hearing
  - Sensation
  - Mobility, strength, balance
  - Dizziness
- Chronic health issues
- Medications
- Environmental factors

Chronic Health Issues

- Parkinson's disease
- Stroke
- Musculoskeletal
- Cardiovascular function
- Diabetes
- Respiratory function
- Dementia

Dizziness

- Common complaint of seniors
- Difficult to diagnose
- Can have multiple causes in the same individual

Types of Dizziness

- Vertigo
- Pre-syncope
- Disequilibrium
- Light-headedness

Tablonski, 2009, 309-311

Vertigo

- Peripheral
  - Benign Paroxysmal Positional Vertigo
  - Labyrinthitis
  - Recurrent vestibular syndromes
- Central
  - Disruption of blood flow to the cerebellum

Pre-Syncope

- Orthostatic Hypotension

  A drop of 20 mm Hg in systolic blood pressure or a 10 mm Hg drop in diastolic blood pressure

- Factors that may impact:

  Anemia

  Deconditioning

  Dehydration

  Hypokalemia

  Medications

Tablonski, 2009, 309-311

Screening

- Balance testing
- Blood pressure lying and standing

Healthy Steps

Physical Skills Screening Score Form

3 points = lower risk
2 points = moderate risk
1 point = higher risk

	Get Up and Go (How many seconds to tenth of second)		Chair to Stand (How many stands) If used hands throughout, score 1 point.	
Age	**Male**	**Female**	**Male**	**Female**
60-64	<3.8= 3 points 3.8–5.6=2points >5.6=1 points	<4.4=3 points 4.4–6=2 points >6=1 points	>19=3 points 19-14=2points <14=1 points	>17=3 points 17-12=2 points <12=1 points
65-69	<4.3=3 4.3–5.9=2 >5.9=7	<4.8=3 4.8–6.4=2 >6.4=1	>18=3 18–12=2 <12=1	>16=3 16–11=2 <11=1
70-74	<4.4=3 4.4–6.2=2 >6.2=1	<4.9=3 4.9–7.1=2 >7.1=1	>17=3 17–12=2 <12=1	>15=3 15–11=2 <11=1
75-79	<4.6=3 4.6–7.2=2 >7.2-1	<5.2=3 5.2–7.4=2 >7.4=1	>17=3 17–11=2 <11=1	>15=3 15–10=2 <10=1
80-84	<5.2=3 5.2–7.6=2 >7.6=1	<5.7=3 5.7–8.7=2 >8.7=1	>15=3 15–10=2 <10=1	>14=3 14–9=2 <9=1
85-89	<5.5=3 5.5–8.9=2 >8.9=1	<6.2=3 6.2–9.6=2 >9.6=1	>14=3 14–8=2 <8=1	>13=3 13–8=2 <8=1
90-94	<6.2=3 6.2–10=2 >10=1	<7.3=3 7.3–11.5=2 >11.5=1	>12=3 12–7=2 <7=1	>11=3 11–4=2 <4=1

One Leg Balance (How many seconds)
>15 = 3 15–5=2 <5=1

First Things First: Risk factors

- Age
- Functionality
  - Vision
  - Hearing
  - Sensation
  - Movement
  - Balance
  - Dizziness
- Chronic health issues
- Medications
- Environmental factors

Medications

- Honest review of what they are taking and why
  - In their own words
- Brown bag technique with the addition of supplements
- Medication

  Sedative-hypnotics

  Antidepressants

  Anxiolytics

  Diuretics

Beers Criteria 2105

- To identify potentially inappropriate medications that should be avoided in many older adults
- To reduce adverse drug events and drug related problems, and to improve medication selection and medication use in older adults
- Designed for use in any clinical setting; also used as an educational, quality, and research tool

Beers Criteria 2015

- The Beers Criteria have had many positive impacts
  - Use of many medications included in the Beers Criteria has declined
  - Increased appreciation of special considerations that should be applied when prescribing for older adults

Beers Criteria 2015

- Think of the Beers Criteria as a warning light

- Whenever you think about prescribing or renewing a Beers medication, the "warning light" should make you stop and think:
  - Why is the patient taking the drug; is it truly needed?
  - Are there safer and/or more effective alternatives?
  - Does my patient have particular characteristics that increase or mitigate risk of this medication?
  - But, keep in mind that there are situations in which use of Beers medications is justified and appropriate

First Things First: Risk factors

- Age
- Functionality
  - Vision
  - Hearing
  - Sensation
  - Movement
  - Balance
  - Dizziness
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Environmental Press

Does the home/facility lend itself to aging in place?

Problem Areas

- Stairs
- Lighting
- Bathroom
- Kitchen

Where to Begin?

- Honest assessment of abilities
- Availability of help
- Costs
- Resources

Safety Check

Do a safety check of the home to eliminate safety hazards:

- Poor lighting
- Use of throw rugs
- Electrical cords crossing pathways
- Lack of bathroom grab bars and non-skid mats
- Sidewalks in poor repair
- Too much clutter

Things to consider

- Encourage use of assistive aids such as walkers, canes, and proper footwear
- Foot disorders and ill-fitting shoes can contribute to gait problems.
- Ensure that vision and hearing are tested regularly
- Regular doctor visits to review medications

Appendix 1: FOOTWEAR ASSESSMENT TOOL

1. FIT

Foot length ☐ ***Thumb width*** ☐

Fit of shoe (length) – rule of thumb (wearer's thumb)

Palpation:	good ☐	too short (< ½ thumb) ☐	too long (> 1 ½) ☐
Straw =	good ☐	too short (< ½ thumb) ☐	too long (> 1 ½) ☐

Fit of shoe (width) – grasp test	good ☐	too narrow ☐	too wide ☐
Fit of shoe (depth)	good ☐	too shallow ☐	

2. GENERAL

Age of shoe 0 – 6 months ☐ 6 – 12 months ☐ > 12 months ☐

Footwear style

walking shoe ☐	athletic shoe ☐	oxford shoe ☐	moccasin ☐
boot ☐	ugg-boot ☐	high heel ☐	Thong/flip-flop ☐
slipper ☐	backless slipper ☐	court shoe ☐	mule ☐
sandal ☐	surgical/bespoke ☐	other (specify) ☐	

Materials (upper)	leather ☐	synthetic ☐	mesh ☐	other ☐	
Materials (outsole	rubber ☐	plastic ☐	leather ☐	other ☐	

Weight ☐ ***Length*** ☐ ***Weight/length*** ☐

3. GENERAL STRUCTURE

Heel height =

0 – 2.5 cm ☐ 2.6 – 5.0 cm ☐ > 5.0 cm ☐

Forefoot height (measured at point of the 1st and MTPJs) =

0 – 0.9 cm ☐ 1.0 – 2.0 cm ☐ > 2.0 cm ☐

Longitudinal profile (heel – forefoot difference) =

flat (0 – 0.9 cm) ☐ small heel rise (1 – 3 cm) ☐ large heel rise (> 3 cm) ☐

Last (centre goniometer at 50% shoe length) =

straight (< 5°) ☐ semi-curved (5 – 15°) ☐ curved (> 15°) ☐

Fixation of upper to sole

board ☐ combination ☐ slip-lasted ☐

Forefoot sole flexion point

at level of MTPJs ☐ proximal to 1st MTPJ ☐ distal to 1st MTPJ ☐

4. MOTION CONTROL PROPERTIES

Density single ☐ dual ☐

Fixation none ☐ laces ☐ Number of eyelets ☐ straps/buckles ☐ Velcro ☐ zips ☐

Heel counter stiffness (20mm above bottom or upper)

no heel counter ☐ minimal (> 45°) ☐ moderate (< 45°) ☐ rigid (0-10°) ☐

Midfoot sole sagittal stability

minimal (> 45°) ☐ moderate (< 45°) ☐ rigid (0-10°) ☐

Midfoot sole frontal stability (torsional)

minimal (> 45°) ☐ moderate (< 45°) ☐ rigid (0-10°) ☐

5. CUSHIONING

Presence none ☐ heel ☐ heel/forefoot ☐

Lateral Midsole hardness	soft		firm		hard		
Durometer readings	1st		2nd		3rd		mean
Medial Midsole hardness	soft		firm		hard		
Durometer readings	1st		2nd		3rd		mean
Heel sole hardness (centre of inside heel shoe interface)	soft		firm		hard		
Durometer readings	1st		2nd		3rd		mean

6. WEAR PATTERNS

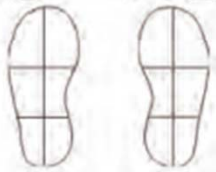
Upper medial tilt (> 10°) ☐ neutral ☐ lateral tilt (> 10°) ☐

Midsole medial compression signs ☐ neutral ☐ lateral compression signs ☐

Tread pattern ***A*** textured ☐ smooth (i.e. no pattern) ☐

B not worn ☐ partly worn ☐ fully worn ☐

Outsole wear pattern none ☐ normal ☐ lateral ☐ medial ☐



R L

Senior Friendly Environment

- Door levers
- Chairs with armrests
- Non glare surfaces
- Lighting
- Nightlights
- Flashlight under the bed
- Clear pathways

Senior Friendly Bathrooms


Translucent door provide the sense of privacy when supervision of self bathing is needed
Single lever faucet to avoid scalding, because the water temperature will gradually gets warmer as the dial is turned
New tub-surround wall with grab bar.
Hand-held scrubbers with handles.

Assessment and Fall Prevention

Fall Risk Checklist

Patient: Date: Time: AM/PM

Fall Risk Factor Identified	Factor Present?	Notes
Falls History		
Any falls in past year?	☐ Yes ☐ No	
Worries about falling or feels unsteady when standing or walking?	☐ Yes ☐ No	
Medical Conditions		
Problems with heart rate and/or rhythm	☐ Yes ☐ No	
Cognitive impairment	☐ Yes ☐ No	
Incontinence	☐ Yes ☐ No	
Depression	☐ Yes ☐ No	
Foot problems	☐ Yes ☐ No	
Other medical conditions (Specify)	☐ Yes ☐ No	
Medications		
Any psychoactive medications, medications with anticholinergic side effects, and/or sedating OTCs? (e.g., Benadryl, Tylenol PM)	☐ Yes ☐ No	
Gait, Strength & Balance		
Timed Up and Go (TUG) Test ≥12 seconds	☐ Yes ☐ No	
30-Second Chair Stand Test Below average score (See table on back)	☐ Yes ☐ No	
4-Stage Balance Test Full tandem stance <10 seconds	☐ Yes ☐ No	
Vision		
Acuity <20/40 OR no eye exam in >1 year	☐ Yes ☐ No	
Postural Hypotension		
A decrease in systolic BP ≥20 mm Hg or a diastolic bp of ≥10 mm Hg or lightheadedness or dizziness from lying to standing?	☐ Yes ☐ No	
Other Risk Factors (Specify)		
	☐ Yes ☐ No	
	☐ Yes ☐ No	

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

Aging Institut
and the Unive

TUTE
and the University of Pittsburgh

Physical Exam

- When was the last eye exam?
- When was the last hearing exam?
- Assessment of postural hypotension
- Mobility, strength, balance
- Osteoporosis

Shirley and the Body Builder

- http://www.youtube.com/watch?v=LgLopvyudM4

Fall Risk Reduction Interventions

- Environmental modifications
- Exercise
- Assistive devices
- Medication review

AGING INSTITUTE OF UPMC SENIOR SERVICES AND THE UNIVERSITY OF PITTSBURGH

Delirium

Sowing Seeds for More Rewarding Lives

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Our Aging Population

- In 2009: 39.6 million over 65, 13% of the U.S. population
  - Represent 60-70% of all hospital admissions
  - Average length of stay 5.6 days for seniors versus 4.8 days for all other ages
  - Incidence of delirium increases length of stay to 7.8 days (McCusker, J, Cole, MG, Dendukuri, N, Belzile, E, 2003)
- In 2030: 72 million over 65, 19% of the U.S. population
- Pennsylvania:
  - 2010 Older adults represented 16% of total population
  - 2030 Older adults will represent 22.6% of total population

Administration on Aging

Our Aging Body

Aging Changes

- Sensory
- Cardiovascular
- Gastrointestinal
- Pulmonary
- Skin
- Immune
- Neurologic
- Musculoskeletal
- Renal
- Endocrine

Baseline Mental Status

Why is it importance to establish baseline mental status?

Why is this often not established?

Is there a lack of standardized terminology?

- Not acting right
- Confused
- Behavior changes
- Lethargic
- Agitated
- Disoriented

“This is not my mom!”

- http://www.youtube.com/watch?v=9QURzexhWP4

Confusion in the Older Adult

- Accepted as a normal consequence of aging
- Term used as a general label for cognitive changes
- Typically implies an untreatable condition

3 D's of Dementia, Depression, Delirium

- Incidence increases as we age
- Occur separately or in combination
- Only delirium has a sudden onset
  - "Never acted like this before"
  - "Very agitated today"
  - "Kept him sitting at the nurses station so we could keep an eye on him"
  - "He needs something to settle him down"

Comparison Chart for the 3 D's

Comparison of the Clinical Features of Delirium, Dementia, and Depression

Clinical Feature	Delirium	Dementia	Depression
Onset	Sudden/abrupt; depends on cause; often at twilight or in darkness	Insidious/slow and often unrecognized; depends on cause	Coincides with major life changes; often abrupt, but can be gradual
Course	Short, diurnal fluctuations in symptoms; worse at night, in darkness, and on awakening	Long, no diurnal effects; symptoms progressive yet relatively stable over time; may see deficits with increased stress	Diurnal effects, typically worse in the morning; situational fluctuations, but less than with delirium
Progression	Abrupt	Slow but uneven	Variable; rapid or slow but even
Duration	Hours to less than 1 month; seldom longer	Months to years	At least 6 weeks; can be several months to years
Consciousness	Reduced	Clear	Clear
Alertness	Fluctuates; lethargic or hypervigilant	Generally normal	Normal
Attention	Impaired; fluctuates	Generally normal	Minimal impairment, but is distractible
Orientation	Generally impaired; severity varies	Generally normal	Selective disorientation
Memory	Recent and immediate impaired	Recent and remote impaired	Selective or "patchy" impairment; "islands" of intact memory; evaluation often difficult due to low motivation
Thinking	Disorganized, distorted, fragmented; incoherent speech, either slow or accelerated	Difficulty with abstraction; thoughts impoverished; judgment impaired; words difficult to find	Intact but with themes of hopelessness, helplessness, or self-deprecation
Perception	Distorted; illusions, delusions, and hallucinations; difficulty distinguishing between reality and misperceptions	Misperceptions usually absent	Intact; delusions and hallucinations absent except in severe cases
Psychomotor behavior	Variable; hypokinetic, hyperkinetic, and mixed	Normal; may have apraxia	Variable; psychomotor retardation or agitation
Sleep/wake cycle	Disturbed; cycle reversed	Fragmented	Disturbed; usually early morning awakening
Associated features	Variable affective changes; symptoms of autonomic hyperarousal; exaggeration of personality type; associated with acute physical illness	Affect tends to be superficial, inappropriate, and labile; attempts to conceal deficits in intellect; personality changes, aphasia, agnosia may be present; lacks insight	Affect depressed; dysphoric mood; exaggerated and detailed complaints; preoccupied with personal thoughts; insight present; verbal elaboration; somatic complaints, poor hygiene, and neglect of self
Assessment	Distracted from task; numerous errors	Failings highlighted by family, frequent "near miss" answers; struggles with test; great effort to find an appropriate reply; frequent requests for feedback on performance	Failings highlighted by individual, frequent "don't knows;" little effort; frequently gives up; indifferent toward test: does not care or attempt to find answer

Reprinted with Permission from Springer Publishing Company. Forman, M., Fletcher, K., Mion, L., & Trygstad, L.(2003). Assessing Cognitive Function in Mezey, M, Fulmer T, Abraham I, (editors); Zwicker, D, (managing editor). *Geriatric Nursing Protocols for Best Practice*. 2nd ed. New York (NY): Springer Publishing Company, Inc.; p. 102-103.

"In U.S. hospitals, five older patients become delirious every minute" (Inouye, 2014).

What is delirium?

Acute ***disease***

- Acute onset of confusion
- Impaired attention
- Disorganized thinking
- Altered level of consciousness

Videos

- Delirium Vignettes
  - Hypoactive
  - Hyperactive
  - ICU

Risk Factors for Atypical Presentation

- Over age 85 in particular
- Multiple co-morbidities
- Multiple medications
- Cognitive or functional impairment

What is it like to have delirium?

- Be less aware of what is going on around you.
- Be unsure about where you are or what you are doing there.
- Be unable to follow a conversation or to speak clearly.
- Have vivid dreams, which are often frightening and may carry on when you wake up.
- Hear noises or voices when there is nothing or no one to cause them.
- See people or things which aren't there.

What is it like to have delirium?

- Worry that other people are trying to harm you.
- Be very agitated or restless, unable to sit still and wandering about.
- Be very slow or sleepy.
- Sleep during the day, but wake up at night
- Have moods that change quickly.
- You can be frightened, anxious, depressed or irritable.
- Be more confused at some times than at others – often in the evening or at night.

Delirium is……

- Often unrecognized or attributed to dementia
  - Non-detection rates as high as 69% (Yanamadala, Wieland, Heflin, 2103)
- Preventable in 30-40% of cases (Inouye, 2014) through risk factor identification and modification
  - Also results in prevention of other geriatric syndromes
- Associated with:
  - increased mortality rate
  - functional decline
  - falls
  - increased nursing time
  - longer lengths of hospital stay
  - higher rates of new nursing home placement

Stats

Incidence of delirium per situation:

- At hospital admission – 14 to 24%
- During hospitalization – Another 6 to 56%
- Older postoperative patients – 15 to 53%
- Postoperative hip fracture patients – up to 65%
- Intensive care patients – 70 to 87%

- Mortality rates
  - among hospitalized patients with delirium range from 22 to 76%
    - Which is as high as those with sepsis and myocardial infarction
  - one year mortality rate associated with cases of delirium is 35 to 40%

Inouye SK, 2014

Predisposing Factors

- Advanced age > 70
- Dementia
- Depression
- Multi-morbidity
- Sensory deficits: hearing, vision
- TIA/stroke

Inouye SK, 2014

Precipitating Factors

- Medications
- Immobilization
- Indwelling bladders catheters
- Metabolic derangements
- Infections
- Iatrogenic events
- Surgery

Inouye SK, 2014

Medications and Older Adults

Medication Appropriateness

Is there an indication for the drug?
Is the medication effective for the condition?
Is the dosage correct?
Are the directions correct?
Are there clinically significant drug-drug interactions?
Are there clinically significant drug-disease interactions?
Are the directions practical?
Is this drug the least expensive alternative compared to others of equal utility?
Is there unnecessary duplication with other drugs?
Is the duration of therapy acceptable?

Hanlon JT et al. J Clin Epidemiol 1992;45:1045-1051.

Delirium Prevention = Modifying Risk Factors

- Determine baseline mental status: family, nursing facility
- Identify delirium risk factors
- Initiate preventative strategies to modify risk factors

Rate Your Preventative Strategies

- Ongoing assessment for high risk medications
- Early and regular mobilization
- Discontinue unnecessary medical equipment/tethers
- “Protect” sleeping during the night
- Address pain
- Address sensory deficits
- Prevent dehydration
- Gentle re-orientation
- Incorporate patient routine
- Monitor for metabolic and electrolyte abnormalities
- Educate and involve families

Key Factors if Delirium Develops

#1 Recognize it: bedside nurse is key

- Symptoms fluctuate throughout the day

#2 Address underlying causes

#3 Rarely a single reason; require multifactorial approach

Types of Delirium Assessments

Depending on hospital preference:

- CAM Confusion Assessment Method
- NU-DESC Nursing Delirium Screening Scale
- ICDSC for ICU Delirium

Confusion Assessment Method

Four Elements

Must have 1 and 2 and either 3 or 4

1. Acute onset, fluctuating course
2. Inattention
3. Disorganized thinking
4. Altered level of consciousness

Management of Delirium

- Include preventative strategies
- Identify and treat underlying causes
- Pharmacological approaches
- Non-pharmacological approaches

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Realities of Care Dementia Training

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“I am Sylvia. I was Sylvia before I was diagnosed, and I am still Sylvia after being diagnosed. **I'm still the same person** — treat me the same way. Talk to me the same way. Include me in the conversation as you would before."

Alzheimer's blog Voices of people with early-stage Alzheimer's By Angela Lunde October 5, 2010
http://www.mayoclinic.org/diseases-conditions/alzheimers-disease/expert-blog/early-stage-alzheimers/bgp-20055880

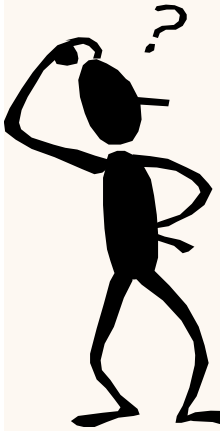
"When you've met one person with Alzheimer's, you've met one."

Alzheimer's disease and dementia are different By Angela Lunde September 27, 2007
http://www.mayoclinic.org/diseases-conditions/seo/expert-blog/alzheimers-disease-and-dementia/bgp-20055941
..

What are normal changes associated with memory as we age?

Normal Cognition and Aging

- ↓Speed of information processing
- Slowed “multi-tasking”: harder to “talk and walk” at same time
- Cognitive processing & reaction time
  (“hitting the buzzer”)



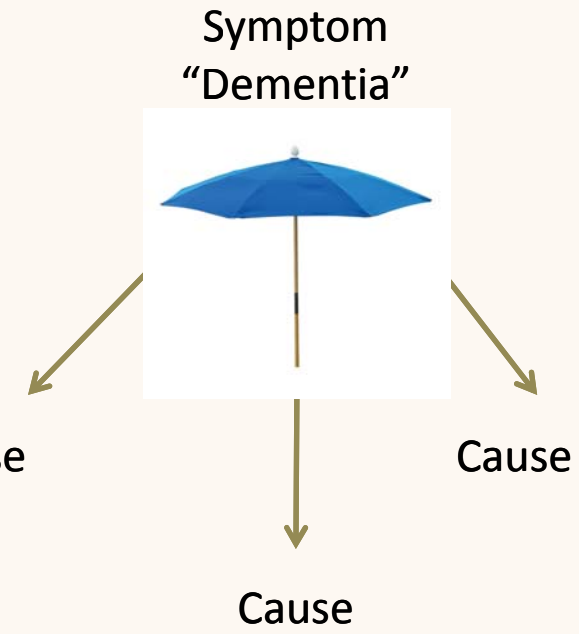
When do you start to question if your memory decline is normal or not normal?

- Are you noticing more of a decline in your memory?
- Are you forgetting important things such as appointments or recent events?
- Are you having difficulty with sequencing or completing a complex task that you could previously do?

MILD COGNITIVE IMPAIRMENT

What is Dementia?

- Umbrella term
- Encompasses all forms, not specific
- Affects cognitive, physical and social abilities



Types of Dementia

Alzheimer's Disease

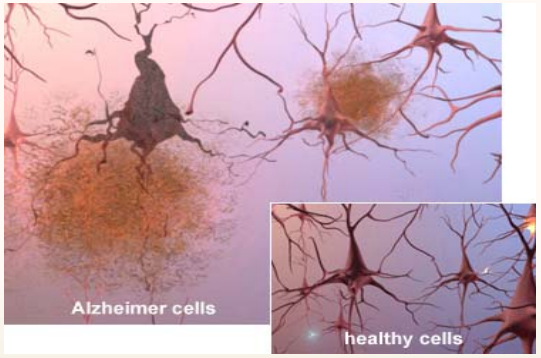
Most common form

Accounts for 60-70% of all dementia

Discovered in 1906

Life expectancy is typically 8-12 years from diagnosis

Plaques and Tangles



Source: alz.org

Vascular Dementia

Vascular Dementia is the 2nd most common dementia

Occurs after a stroke, or years of damage to blood vessels

Progression may be step like instead of steady and gradual

Source: alz.org

Types of Dementia

Lewy Body

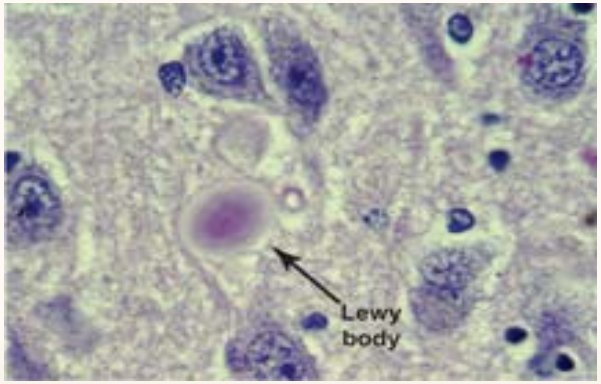
Parkinson's features

Hallucinations common

Wide variance in cognition

Alzheimer's (can overlap)

Symptoms may vary daily



Source: alz.org

Fronto-Temporal

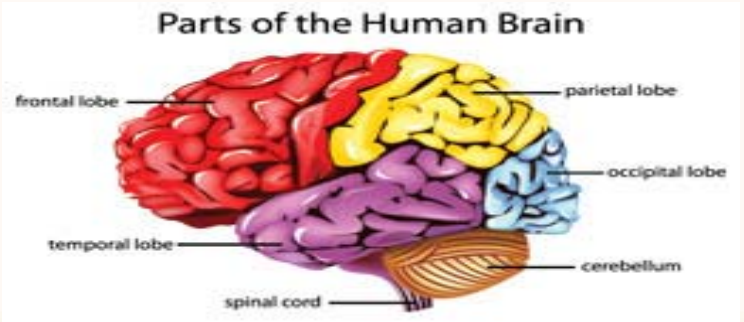
Extreme changes in behavior and personality

Inability to understand language

Tends to begin between ages of 40 & 70

Family history (common)

Social behavior problems – stealing, compulsive behavior



Source: alz.org

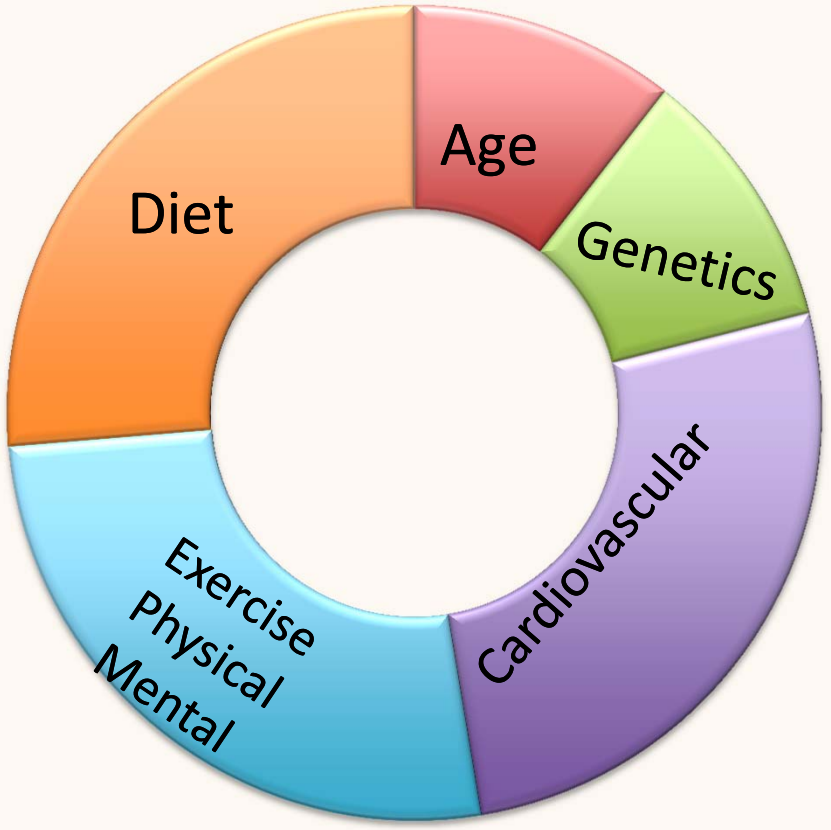
Comparison of Healthy Brain to AD

Source: nia.gov

Risk Factors

- **Risk factors that can not be changed**:
  - Genetics
  - Age

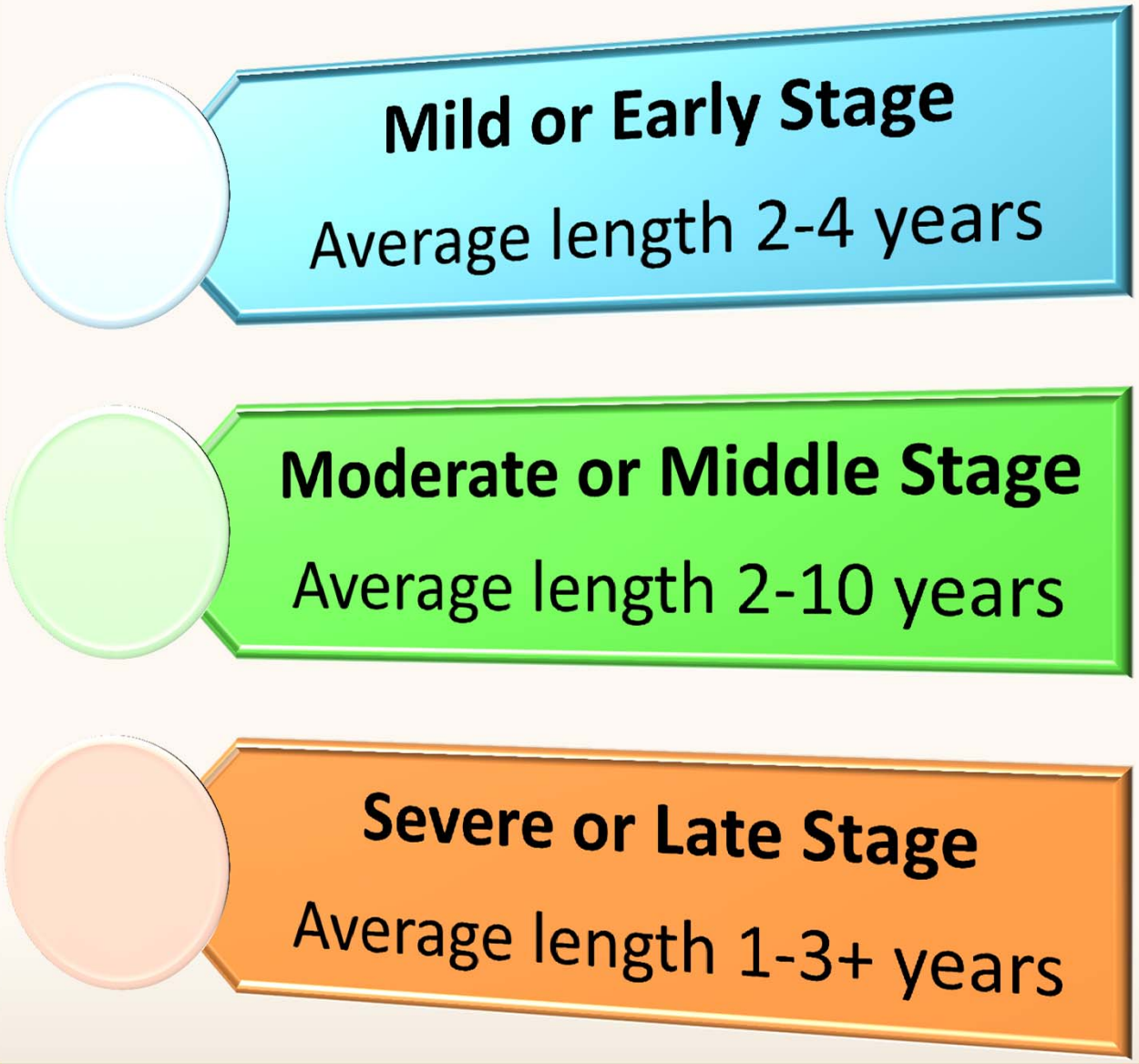
- **Risk factors that can be changed**:
  - Cardiovascular factors
    - Don't smoke; *maintain a healthy weight, keep your blood pressure, cholesterol and blood sugar within recommended limits*
  - Lack of exercise, both physical and mental
    - *"Evidence suggests exercise may directly benefit brain cells by increasing blood and oxygen flow to the brain"*
  - Diet
    - *"The best current evidence suggests that heart-healthy eating patterns, such as the Mediterranean diet, also may help protect the brain." Alzheimer's Association*



Assessment

- **Current symptoms**
  - Baseline
- **Detailed history**
  - Family/medical history
  - Depression
  - Alcoholism
  - Medication review
- **Exams and testing**
  - Neurological
  - Laboratory
  - CT or MRI
  - Cognitive testing

Stages of Alzheimer's



Stage 1: Mild Decline

- Short term memory loss
- Difficulty remembering recent events and names
- Getting lost while walking/driving
- Forgets how to balance a checkbook, make a grocery list, appointments
- Difficulty with conversation and finding words
- Takes longer for tasks
- Repeating questions

Stage 2: Moderate Decline

- Difficulty with ADL's/IADL's
- Restless, mood swings
- Wandering
- Impulsive behavior
- Problems with reading, writing and eating habits
- Lack of inhibition
- Difficulty with sequencing
- Delusions

Stage 3: Severe Decline

- Difficulty eating, swallowing
  - Weight loss
- Loss of motor skills
- Severe memory impairment
- Vocabulary very limited
  - Inability to communicate
- Lack of control of bowel and bladder
- Requires constant care

Challenging Behaviors

- Resistance
- Wandering
- Repetitiveness
- Accusatory/verbally abusive
- Frustration/agitation/aggression
- Withdrawal

Source: clip art

Behaviors Related to Caregivers

Knowledge deficit

Lack of teamwork

Rigidity: “My way!”

“Go through the motions”

Time factors

- “This is how we always did it.”

Source: clip art

Always remember…..

All **behavior** has meaning!

Interpretation is key!

Skills are paramount!

Top 5 Strategies

Source: clip art

- **1. Approach and Communication**
  - 3 C's
    - Calm
      - Verbal
      - Non verbal
        - » What are you saying
    - Caring
      - Touch
      - Never argue
      - Address by name
      - Respect
      - Listening skills
    - Communication
      - Look friendly
      - Talk friendly
      - Eye level
      - Approach from the front

Top 5 Strategies continued

- **2. Your ability to redirect (verbal/non-verbal)**
  - Know their history
  - Change the subject discretely
  - Don't say, "Don't you remember?"
  - The truth or not the truth
  - One step instructions
    - Cueing as needed: physical/verbal
      - » Actions speak louder than words

Source: clip art

- **3. Your ability to be flexible**
  - Go with the flow
  - Re-approach later
  - Never take it personally

Top 5 Strategies continued

- **4. Interpreting their verbal and nonverbal responses**
  - Crying?
  - Restlessness?
  - Distressed?
  - Pacing?
  - Grimacing?
  - Striking out?
  - Yelling?
  - Rocking back and forth?

Source: clip art

#5 Entering Their Reality

Source: clip art

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Late Life Depression

Sowing Seeds for More Rewarding Lives

AGING INSTITUTE
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Overview

- Most common mental health problem of late life
- Considered a serious medical condition
- Only 15% of older adults with depression receive appropriate treatment.
- Up to 50% of long term care residents suffer from depression.

Overview cont…

- Precise cause is unknown
- May be due to:
  - Stressful life events
  - Chronic stress
  - Imbalances of brain chemicals and hormones
  - Negative thought patterns
  - Lack of control over life circumstances

Risk Factors for Depression

- Family history
- Low self esteem
- Little or no social support
- Major life changes
- Chronic physical or mental illness
- Alcohol abuse
- Caregiving

Symptoms of Depression

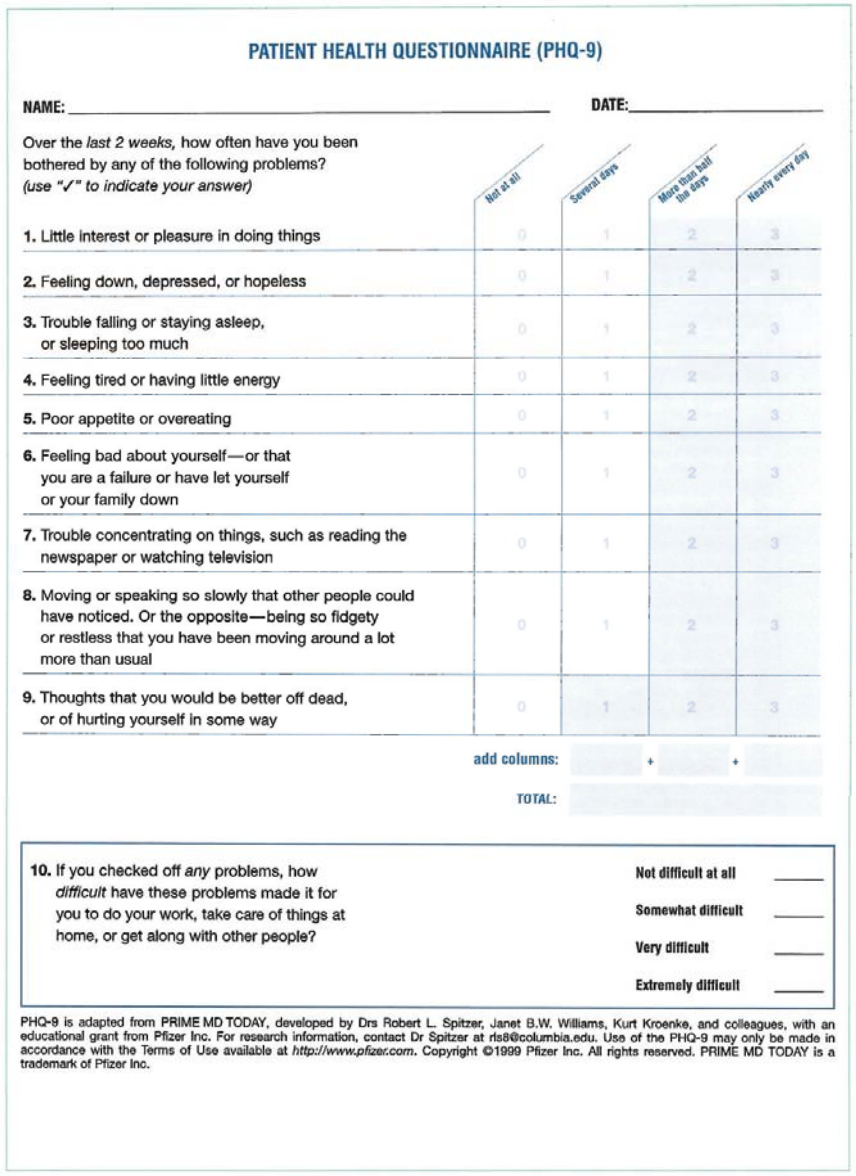
- Feeling hopeless and helpless
- Loss of interest in daily activities/hobbies
- Weight changes
- Insomnia or oversleeping
- Irritability
- Low energy
- Decreased ability to concentrate
- Recurrent thoughts of death
- Suicidal ideation

Assessment PHQ-2

Two question screening tool

- During the last month have you been bother by feeling down, depressed, or hopeless?
- During the past month, have you often been bothered having little interest or pleasure in doing things?
  - Yes to either question is a positive screen for depression

Assessment PHQ-9



PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ **DATE:** _____

Over the *last 2 weeks*, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3
add columns:		+	+	
TOTAL:				

10. If you checked off *any* problems, how *difficult* have these problems made it for you to do your work, take care of things at home, or get along with other people?

- **Not difficult at all** _____
- **Somewhat difficult** _____
- **Very difficult** _____
- **Extremely difficult** _____

Treatment for Depression

- Non-pharmacologic: psychotherapy
- Pharmacologic: antidepressants
- Electroconvulsive therapy (ECT)

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Malnutrition

Sowing Seeds for More Rewarding Lives

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Introduction

"Nutrition, hydration, and electrolyte balance are related and can have profound effects on a person's functional status, immune competence, and well-being."

Poor Nutrition

- Is not natural
- Not a normal aging change
- Has social and cultural significance
- Is not specific only to underweight individuals


Crabby Road
9-18-06
Greatest Hits
My body is a temple where junk food goes to worship.
©Hallmark Licensing, Inc.
Maxine.com

As you know……

Caloric requirements are a function of basal metabolic rate and activity level.

Certain dietary restrictions which may be necessary with chronic health issues can lead to excessive weight loss

Cultural and personal preferences must be considered

Nutritional Screening

- Multiple screening tools available for obtaining history
- Functional limitations
- Oral health
- Cognitive status
- Laboratory data:
  - Serum albumin
  - Transferrin
  - Total lymphocytic count
  - Hemoglobin and hematocrit

Oral Health and Swallowing

- https://vimeo.com/60944584

Factors Affecting Nutrition

- Taste and thirst perception
- Visual impairments
- Oral care
- Constipation
- Dependency
- Dining area
- Lighting

Swallowing Problems

- As many as 60% of LTC residents have some degree of dysphagia
  - Pocketing, drooling, increased congestion
  - Wet, gurgly voice
  - Coughing or choking

Nutritional Strategies

- Proper positioning
- Addressing basic needs
- Lighting/aids
- SLT and OT consults
- Thickening agent
- Feeding techniques
- Observational moments
  - Functional ability
  - Oral comfort
- Cueing
- Equipment
- Prepare tray
- Monitor weight/intake

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Pressure Sores

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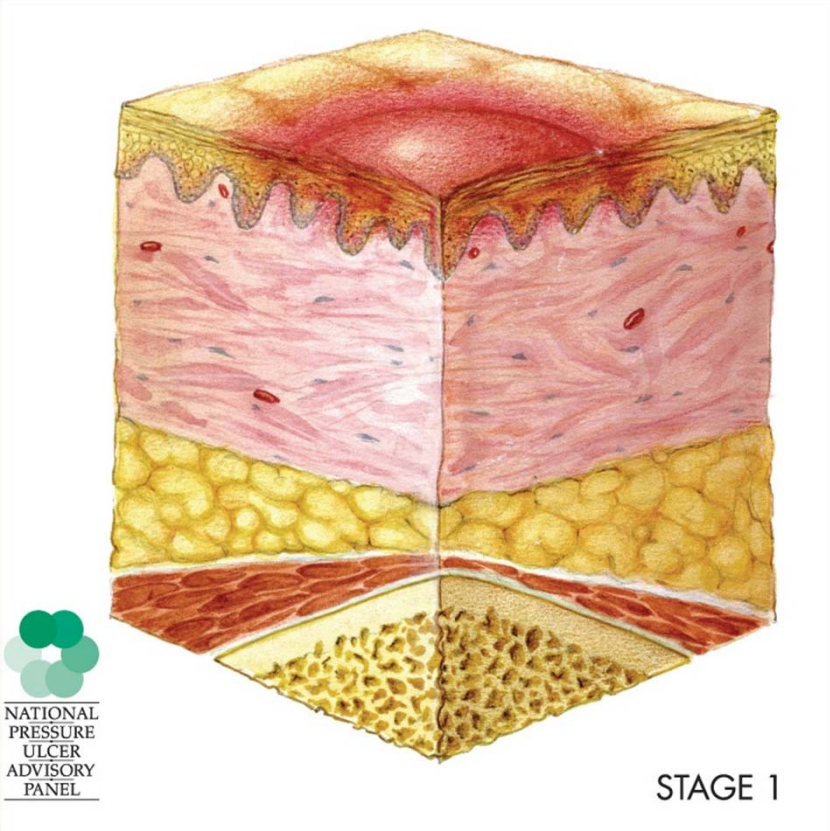
Aging Changes in Skin

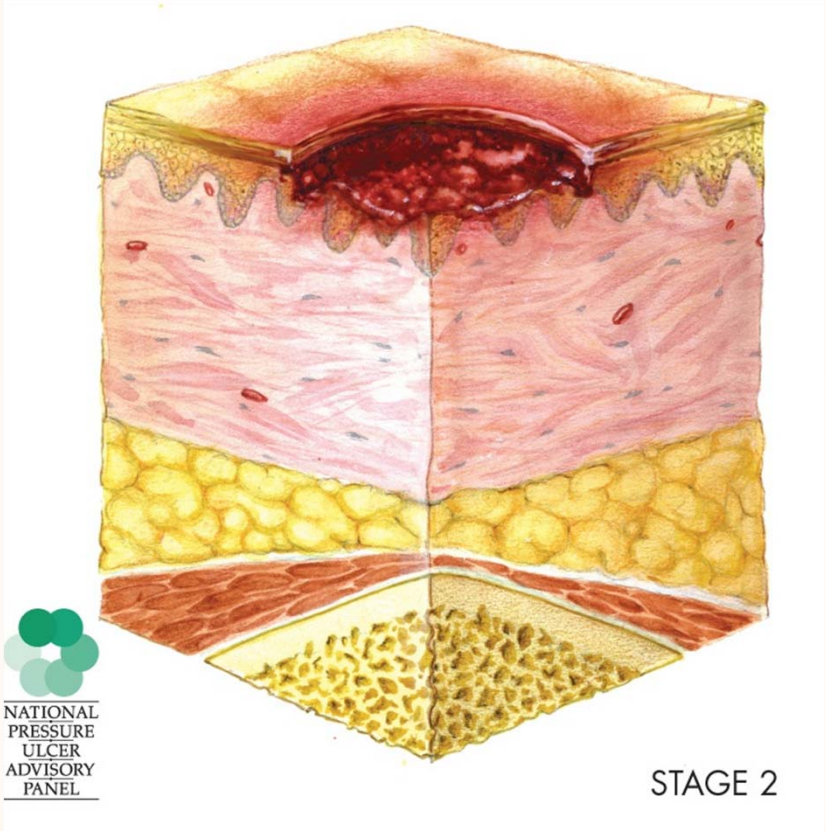
- Less elasticity
- Loss of subcutaneous tissue
- Drier

Stage I and II

Stage 1 Non-blanchable erythema

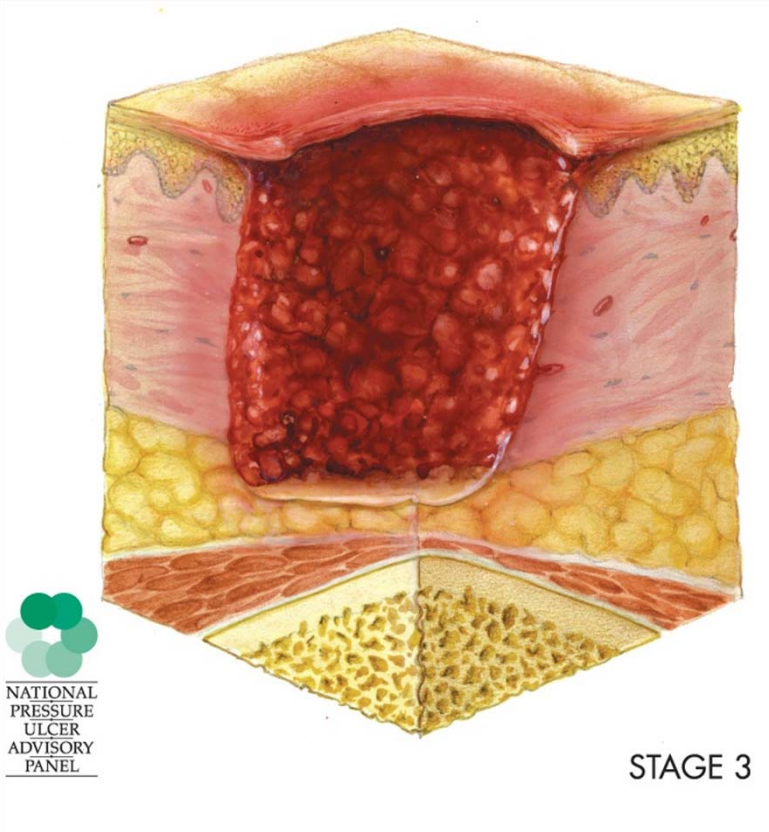


Stage 2 Partial thickness

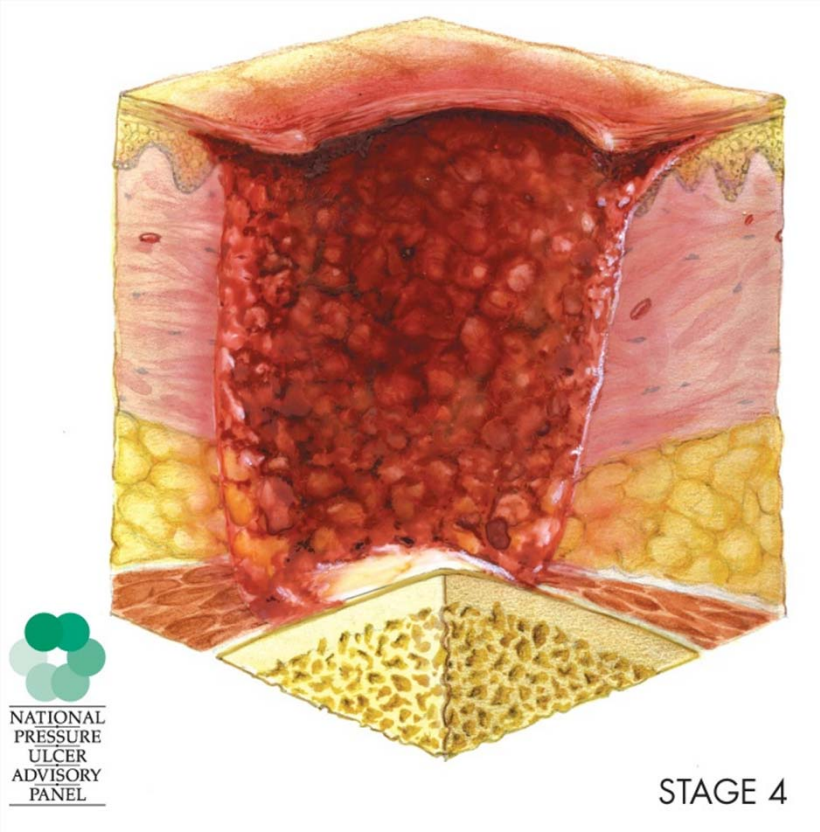


Stage III and IV

Stage III Full thickness skin loss

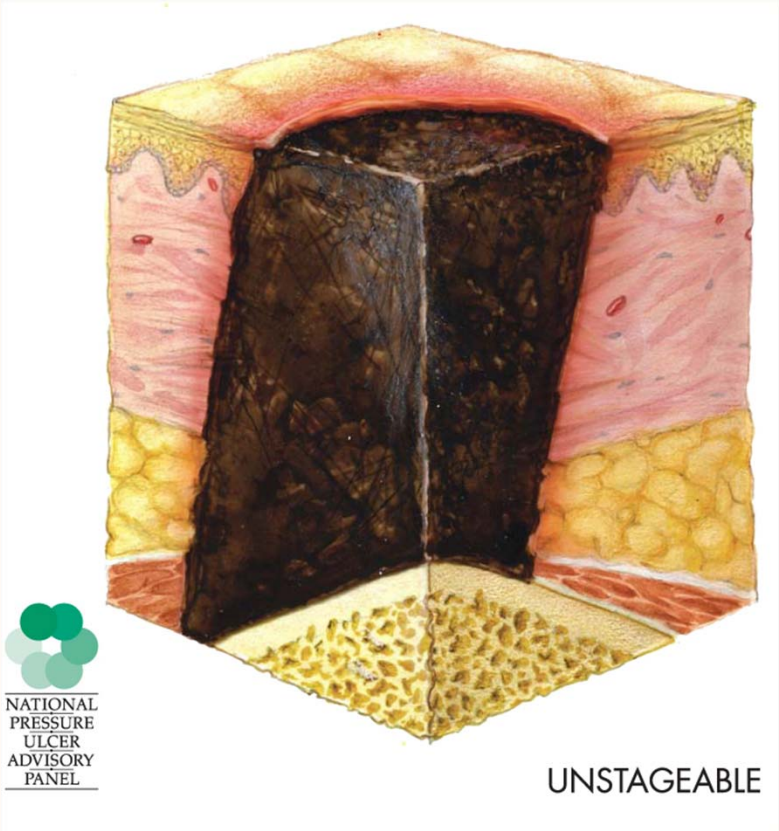


Stage IV Full thickness tissue loss



Unstageable

Unstageable Depth unknown



Risk Factors

- Advancing age
- Increased moisture
- Limited mobility
- Poor nutrition

Assessment

- Do not rely solely on the assessment tool in determining risk. Use clinical judgement as well.
- Norton-Braden Scales typically used for risk assessment.

Preventative Measures

- Specialized surfaces that come into contact with the skin may be able to alter the microclimate by changing the rate of evaporation of moisture and the rate at which heat dissipates from the skin.
- Heat increases the metabolic rate, induces sweating and decreases the tolerance of the tissue for pressure

Preventative Measures

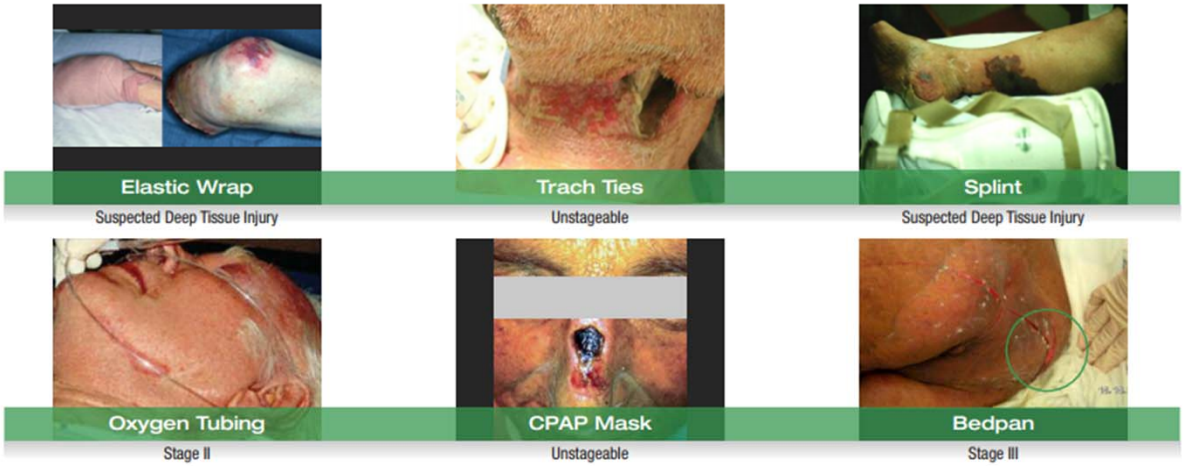
- Apply a polyurethane foam dressing to bony prominences (e.g., heels, sacrum) for the prevention of pressure ulcers in anatomical areas frequently subjected to friction and shear.
- Silk like fabrics reduce shear/friction
- Nutritional options may be necessary including fortified foods, supplements,

Medical Device-Related Pressure Sores

NATIONAL PRESSURE ULCER ADVISORY PANEL

Best Practices for Prevention of Medical Device-Related Pressure Ulcers in Long Term Care

- **Choose** *the correct size of medical device(s) to fit the individual*
- **Cushion** *and protect the skin with dressings in high-risk areas (e.g., nasal bridge)*
- **Inspect** *the skin in contact with device at least daily (if not medically contraindicated)*
- **Avoid** *placement of device(s) over sites of prior or existing pressure ulcer*
- **Educate** *staff on correct use of devices and prevention of skin breakdown*
- **Be aware** *of edema under device(s) and potential for skin breakdown*
- **Confirm** *that devices are not placed directly under an individual who is bedridden or immobile*



PUSH Tool

The National Pressure Ulcer Advisory Panel - NPUAP » Resources » Educational and Clinical Resources » PUSH Tool

PUSH Tool

The Pressure Ulcer Scale for Healing (PUSH Tool) was developed by the National Pressure Ulcer Advisory Panel (NPUAP) as a quick, reliable tool to monitor the change in pressure ulcer status over time.

- PUSH Tool (web version)
- PUSH Tool (pdf version)
- Reprint Agreement (pdf)
- Information and Registration Form
- Instructions for Using PUSH
- Copyright Policy & Contract

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Pain, Chronic or Persistent

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Definitions

- Pain: an individual's unpleasant sensory or emotional experience.
  - Acute pain occurs abruptly and escalates quickly, whereas chronic pain is persistent or recurrent.
  - A resident may have both acute and chronic pain simultaneously.
- How might someone who is non-verbal communicate pain?
- How might someone with dementia communicate pain?

Pain

- Pain is a highly personal experience for which there are no consistent ways people will react.

- This makes it hard to identify how people act when they are hurting!!!

Pain can cause:

- Gait disturbances
- Increased falls
- Fear of falling
- Slow rehabilitation
- Multiple medication use
- Malnutrition
- Depression
- Impaired sleep
- Increased health care costs

Hirschman, et al. (2005)
American Medical Directors' Association (1999)

Common Misconceptions

- Pain is a normal part of aging
- Cognitively impaired elders do not experience pain
- Pain perception is decreased as we age
- Older adults cannot tolerate opioids
- If pain is not reported, it does not exist
- Sleep = comfort

Need to assess……

- Facial Expressions:
  - Do they frown, look frightened, grimace, wrinkle his or her brow, keep eyes closed tightly, blink rapidly, or exhibit any distorted expression?
- Verbalizations/Vocalizations:
  - Does he or she moan, groan, sigh, grunt/chant/call out, breathe noisily, or become verbally abusive?
- Body Movements:
  - Is their body posture rigid and/or tense? Does he or she fidget, pace or rock back and forth, have restricted movement, gait or mobility changes? Cry out when you try to move them? Do they resist care such as bathing, showering or grooming?
- Behavioral Changes:
  - Does he or she refuse food or have an appetite change? Is there any change in sleep/rest periods? Has he or she suddenly stopped common routines or begun wandering? Do they strike out at you when you are providing care?
- Mental Status Changes.
  - Does he or she cry, become more confused, irritable or distressed?

- Retrieved from: www.healthinaging.org

PAIN-AD

Pain Assessment in Advanced Dementia (PAINAD) Scale

Description: The Pain Assessment in Advanced Dementia (PAINAD) Scale was developed to assess pain in patients who are cognitively impaired, non-communicative, or suffering from dementia and unable to use self report methods to describe pain. Observation of patients during activity records behavioral indicators of pain: breathing, negative vocalization, facial expression, body language, and consolability.

How to use: PAINAD is a five item observational tool with numerical equivalents for each of the five behavior items listed, with total scores ranging from 0 to 10. Each of the five assessments contains a range from 0 to 2 and the sum of each of the five categories results in the total numerical score. To use:

Assess the patient during periods of activity, such as turning, ambulating or transferring. Assess the patient for each of the 5 indicators and assign a numerical point value based on each of the 5 assessment indicators. Obtain a total score by adding scores of the 5 indicators. The total score ranges from a minimum of 0 to a maximum of 10.

Pain Assessment in Advanced Dementia (PAINAD) Scale

Items	0	1	2	Score
Breathing independent of vocalization	Normal	Normal	Noisy labored breathing	
Negative vocalization	None	Occasional moan or groan Low level speech with negative or disapproving quality	Repeated calling out. Loud moaning or groaning. Crying	
Facial Expression	Smiling or inexpressive	Sad. Frightened. Frown.	Facial grimacing.	
Body language	Relaxed	Tense. Distressed pacing. Fidgeting	Rigid. Fists clenched. Knees pulled up. Pulling or pushing away. Striking out.	
Consolability	No need to console	Distracted reassured by voice or touch	Unable to console, distract or reassure	
			Total	

With New Acute Pain

- When there is a **severe** change in condition or you are very concerned that something is wrong:
  - Perform a head to toe assessment
  - Call the physician or CNRP

CALM the Pain with Nonpharmacological Approaches

- **C**omforting
  - A soothing voice, gentle touch, and cozy environment can relieve stress and put the resident at ease.
- **A**ddress positioning
  - Soft pillows, warm blankets, chair cushions
- **L**istening to music
- **M**assage
  - Offer neck and back massages

Analgesic Trial

- Analgesic Trial: is used to assess and relieve pain through the use of pain medication.
- When the resident manifests signs of pain yet can't tell you or rate the pain... use of an analgesic trial is appropriate, if you suspect pain (e.g., UTI and bladder spasm, new gout flair, new decubitus).
  1) For mild to moderate pain- non-opioid analgesic may be given initially. (example: acetaminophen 500 every 6 hours for 24 hours)
  2) Continually assess for effect for the next 24 hours. If behaviors **improve** (as documented on PAIN-AD tools), assume pain is relieved and continue analgesic and CALM

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QUESTIONS

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