



Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

November 17, 2023





Conflict of Interest Disclosure: No members of the planning committee, speakers, presenters, authors, content reviewers and/or anyone else in a position to control the content of this education activity have relevant financial relationships with any entity producing, marketing, re-selling, or distributing health care goods or services, used on, or consumed by, patients to disclose.

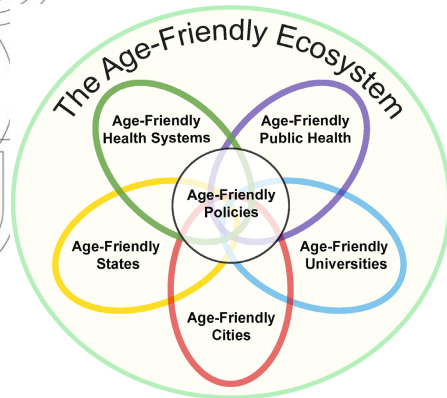
Agenda

- 8:30-9a Check In & Welcome: Dr. Stasa Tadic, MD
- 9a-9:45a Laura Poskin and Cassandra Masters: Age-Friendly
Greater Pittsburgh
- 9:45a-10:30a Sydney Hand, PharmD: Managing Geriatric Pain
- 10:30a-11:15a Amy Bridgman, DNP, NPD-BC, RN:
Assessing Frailty
- 11:15a-11:30a Break/Networking
- 11:30a-12:15p Leda Heidenreich, MSN, RN, CCRN:
Systemwide Geriatric Trauma Initiative
- 12:15p-12:30p Break/Networking
- 12:30p-1:15p Susan Pearson, LCSW, ACM-SW
Alyssa Lisle, LSW, ACM-SW:
Making What Matters Happen
- 1:15p-1:30p Evaluations/Q&A



Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

UPMC
LIFE CHANGING MEDICINE



Stasa D. Tadic, MD, MS
Chief of Geriatric Medicine,
UPMC Mercy hospital

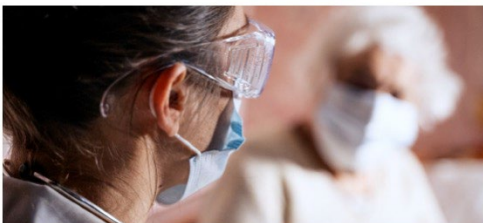
Welcome

UPMC | MERCY

UPMC MERCY FIRST ANNUAL 4MS CONFERENCE: LET'S GET AGE-FRIENDLY

October 15, 2021 | 8 a.m. – 2:30 p.m.
Virtual Event via Microsoft Teams

Using the documentary, "Fast Forward" as a catalyst for health care providers to join the Age-Friendly initiative, this program will provide an overview of UPMC Mercy's journey to establishing a Geriatric Center of Excellence through the 4Ms of the nationwide Age-Friendly movement.



Agenda

8-8:15 a.m.
Introduction to Age-Friendly & the 4Ms Framework
Melissa Jones, MSN, RN, GERO-BC, CDP, and Stasa Tadic, MD, MS

8:15-9:15 a.m.
Let's Get Age-Friendly: Fast Forward Documentary Screening
Melissa Jones, MSN, RN, GERO-BC, CDP

9:15-10:15 a.m.
Age-Friendly Mentation: Delirium Prevention
Stasa Tadic, MD, MS

10:15-10:30 a.m.
Break

10:30-11:30 a.m.
Age-Friendly Medication – How Not to Interfere With
What Matters, Mobility or Mentation
Abigail Steele, PharmD

11:30 a.m.-12:15 p.m.
Lunch Break

12:15-1:15 p.m.
Age-Friendly Mobility-Preserving Mobility and Preventing Falls
Nicole Guy, MSN, RN, CSRN, and

1:15-2:15 p.m.
Age-Friendly What Matters Most-Elder Care – What's Right
and What's Safe
Sheri Macaul, RN, MSN, ACM

2:15-2:30 p.m.
Wap-Up/Q&A

[Continued on back >](#)

UPMC | MERCY

UPMC MERCY SECOND ANNUAL 4MS CONFERENCE: AGE-FRIENDLY COMMITTED TO CARE EXCELLENCE

November 11, 2022 | 9:30 a.m. – 2:30 p.m. Clark A or Virtual



Agenda

9:30 a.m.
Registration

10-10:30 a.m.
Age-Friendly Committed to Care Excellence
of Older Adults
Dr. Stasa Tadic, MD

10:30 a.m.-12 p.m.
What Matters Most; Transitions of Care
Dr. Elizabeth Mohan
Susan Pearson, LCSW, ACM-SW

12-12:30 p.m.
Lunch Panel Discussion

12:30-1 p.m.
Medications: Geriatric Insomnia: how not to use
medications
Abigail Steele, PharmD, BCPS,BCGP

1-2 p.m.
Mobility & Mentation: TUCK IN
Melissa Jones, MSN, GERO-BC, CDP

Q&A

[Continued on back >](#)

UPMC Mercy Age-Friendly Conference
Friday, November 17, 2023
8:30 am-1:30 pm
Clark Auditorium Side A or Virtual

UPMC
LIFE CHANGING MEDICINE

We are part of something bigger!



Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

8:30-9a Check In & Welcome: Dr. Stasa Tadic, MD

9a-9:45a Laura Probin and Cassandra Blomberg Age-Friendly Greater Pittsburgh

9:45a-10:30a Sydney Hand, PharmD: Managing Geriatric Pain

10:30a-11:15a Amy Hindman, DNP, PhD BC, RN: Assessing Frailty

11:15a-12:30p Leda Heidenschreck, MSN, CCRW, RN: Systemwide:

Geriatric Trauma Initiative:

12:30p-1:15p Susan Pearson, LCSW, ACM-SW

Alyssa Lide, LSW, ACM-SW:

Minding What Matters Happen

1:15p-1:30p Evaluations/Q&A

Registration



Program



Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

- 8:30-8a** Check In & Welcome: Dr. Stasa Tadic, MD
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Making What Matters Happen
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Registration



'Age-Friendly'

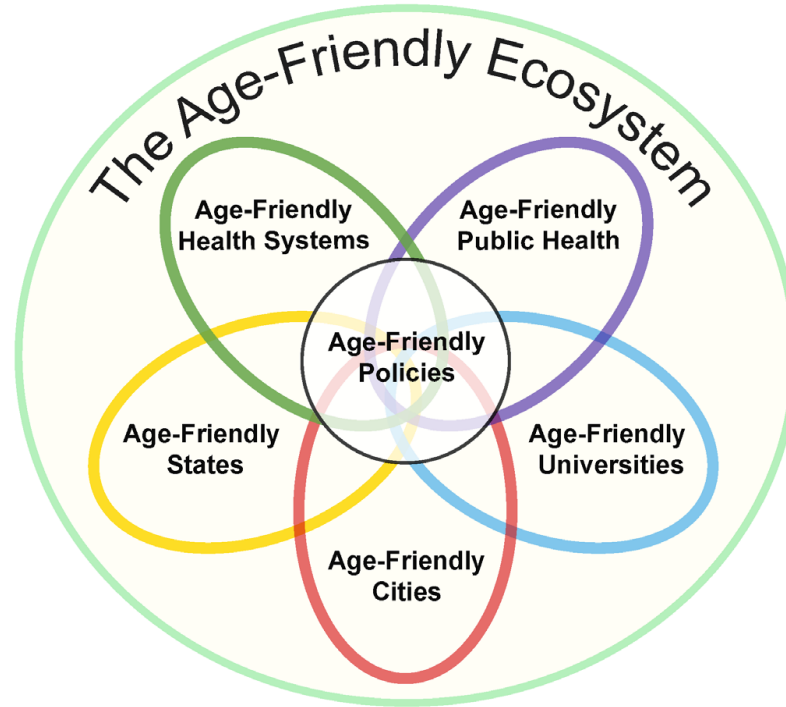
- At the *Second World Assembly on Aging in 2002*, WHO introduced a new ideological approach to aging
- Used construct - **“age friendly”** to expand efforts - include cities, communities, states, businesses, universities, healthcare systems, and public HS via an **age-friendly ecosystem**
- Launching its *Active Aging Policy Framework* including **8 dimensions of age-friendliness**:
 - outdoor spaces and public building, transportation,
 - housing, social participation, respect and social inclusion,
 - civic participation and employment,
 - communication and information, community support,
 - **health services.**

JAGS 68:1936-1940, 2020. Fulmer et al.

'Age-Friendly'

- Revolution in longevity
 - **advances** in public health, infection control, health promotion/disease prevention, and chronic disease management
 - **populations not equally impacted, reflects social inequalities**
- **'Age-friendly ecosystem'** – to **address inequalities** by reconfiguring environments, policies, services, and products to enable and enhance independence and capacity in older age

'Age-Friendly' Ecosystem



The age-friendly ecosystem: a synthesis of age- friendly programs.

Age-Friendly Ecosystem

Laura Poskin and Cassandra Masters

Age-Friendly Greater Pittsburgh

- dedicated to making our region more inclusive and respectful of all ages.
- mission to bring generations together to reimagine how our neighborhoods are built to **advance equity** through advocacy, education, and innovation.
- Part of World Health Organization/AARP Network of Age-Friendly States and Communities (s.2015) (**WHO Domains of Livability framework**)
- describe the framework, illustrate current priorities, and **collaborations** between local AFHS, AFPHS, and Age-Friendly Communities.

Age-Friendly Health Systems

- WHO *Global Network of **Age-Friendly** Cities and Communities (AFCC)*
- *AARP Network of **Age-Friendly** States and Communities* (an affiliate of the WHO)
- In 2015, The **John A. Hartford Foundation (JAHF)** began conceptualizing a **program** that could reduce healthcare-related harms to older adults, deliver most satisfactory/best care possible to older adults across all care settings in partnership with **American Hospital Association** and the **Catholic Health Association** of the United States
- JAHF partnered with the **Institute for Healthcare Improvement (IHI)** to review evidence and develop the model/design for Age-Friendly Health Systems (AFHS) movement

4Ms/5Ms

- Convening geriatric experts with health system leaders in 2016 to obtain input how to create AFHSs
- IHI conducted comprehensive review of evidence-based interventions and existing practices in U.S. health systems
- synthesized core elements of 17 evidence-based models, common design element and constraints, developed a first draft of age- friendly evidence-based care.
- Findings were distilled into **a framework for quality geriatric care** known as the **4Ms**: knowing/acting on **what Matters** to older person; **Medication**; **Mentation**; and **Mobility** (and latest: Morbidity/**Multicomplexity**, 5th M)

Age-Friendly Health Systems

Table 1. Seventeen Care Models with Level I or 2a Evidence of Impact.

1. ACE Unit
2. CM+
3. Care Transitions Program
4. Center to Advance Palliative Care
5. Geriatric Emergency Department
6. Geriatric Interdisciplinary Team Training
7. GRACE
8. Guided Care
9. HomeMeds
10. Hospital at Home and Mount Sinai's MACT
11. HELP
12. IMPACT
13. NICHE
14. Patient Priority Care
15. PACE
16. TCM
17. University of California at Los Angeles Alzheimer's and Dementia Care Program

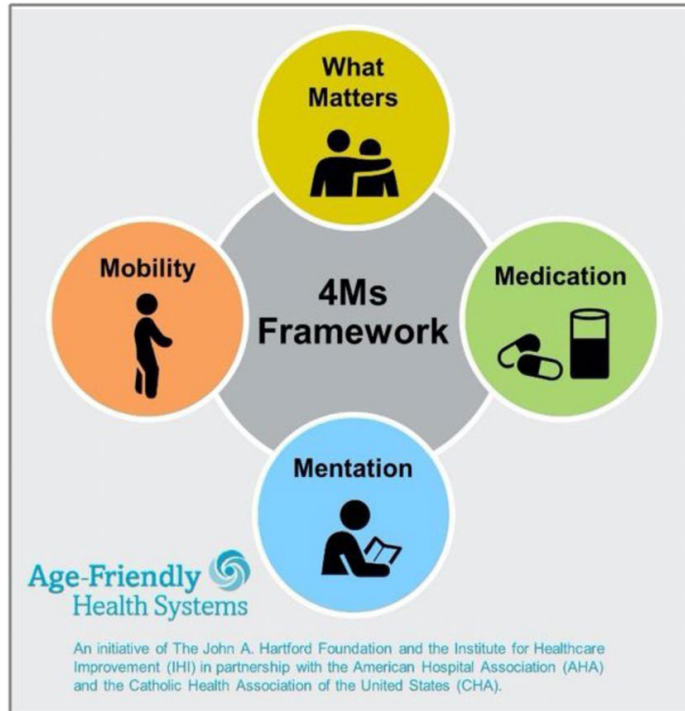
Journal of Aging and Health 33(7–8) 469–481, 2021

Table 1. The 4Ms of Age-Friendly Health Systems

4Ms	Specific high-level interventions
What Matters	<p>Know what matters: health outcome goals and care preferences for current and future care, including end of life</p> <p>Act on what matters for current and future care, including end of life</p>
Medications	<p>Implement a standard process for age-friendly medication reconciliation</p> <p>Deprescribe and adjust doses to be age friendly</p>
Mobility	<p>Implement an individualized mobility plan</p> <p>Create an environment that enables mobility</p>
Mentation	<p>Ensure adequate nutrition, hydration, sleep, and comfort</p> <p>Engage and orient to maximize independence and dignity</p> <p>Identify, treat, and manage dementia, delirium, and depression</p>

JAGS 68:1936-1940, 2020

Age-Friendly Health Systems



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Graphic files and guidance at ihc.org/AgeFriendly

What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

4Ms Presentations

- Sydney Hand, PharmD, Mercy: Managing Geriatric Pain
 - specifics, inappropriate prescribing, adverse effects/opioids (Medications/Morbidity)
- Amy Bridgman, DNP, NPD-BC, RN, Mercy: Assessing Frailty
 - Incorporating movements in older patients to preserve function/prevent falls (Mobility)
- Leda Heidenreich, MSN, CCRN, RN, Mercy: Systemwide Geriatric Trauma Initiative
 - Building age-friendly trauma service (education/guidelines/orders) (5 Ms)
- Susan Pearson, LCSW, ACM-SW and Alyssa Lisle, LSW, ACM-SW, Mercy: Making What Matters Happen
 - Asking every patient, most popular answers, utilizing resources to help



Age-Friendly 4Ms Conference: Age-Friendly Communities

Friday, November 17, 2023 | 9 – 9:45 a.m. | Clark Auditorium, UPMC Mercy

Close your eyes.

This is about us.



The Age-Friendly movement is about making our region more inclusive and respectful of every generation.

Our mission is to bring generations together to reimagine how our neighborhoods are built, and to advance equity through:

- **advocacy**
- **education**
- **innovation**

Domains of Livability



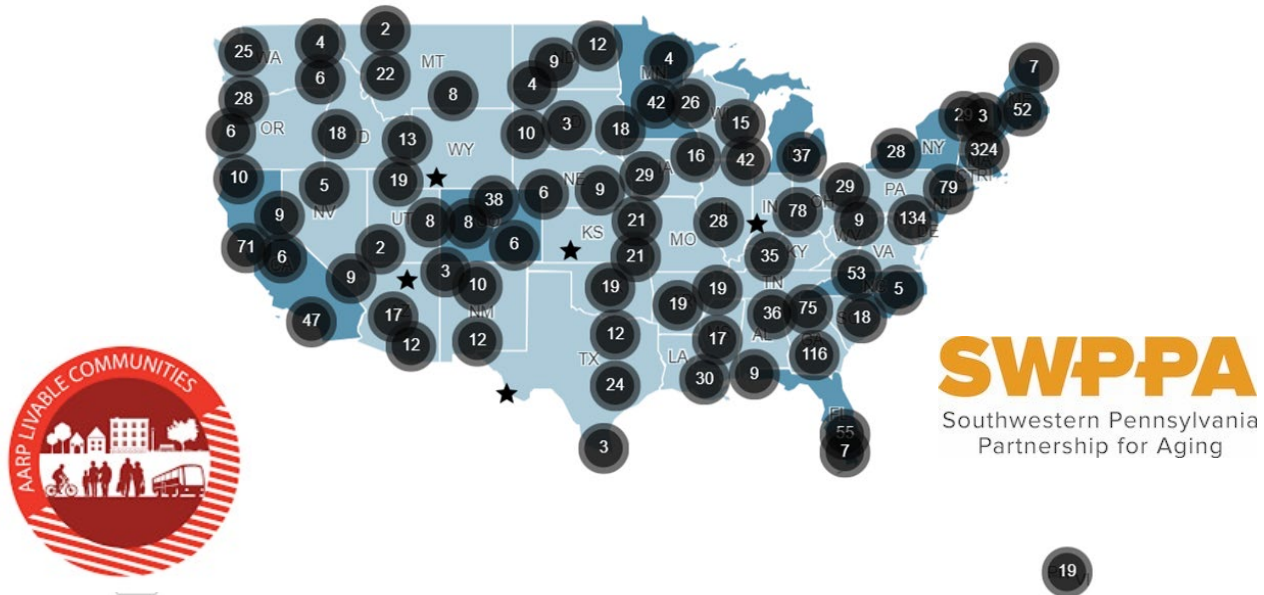
**World Health
Organization**

The eight domains of livability from the World Health Organization's report, *Global Age-Friendly Cities: A Guide* (2007).

Age-Friendly Network

Joined WHO/AARP network in 2015

Viewing 808 AARP Age-Friendly Members

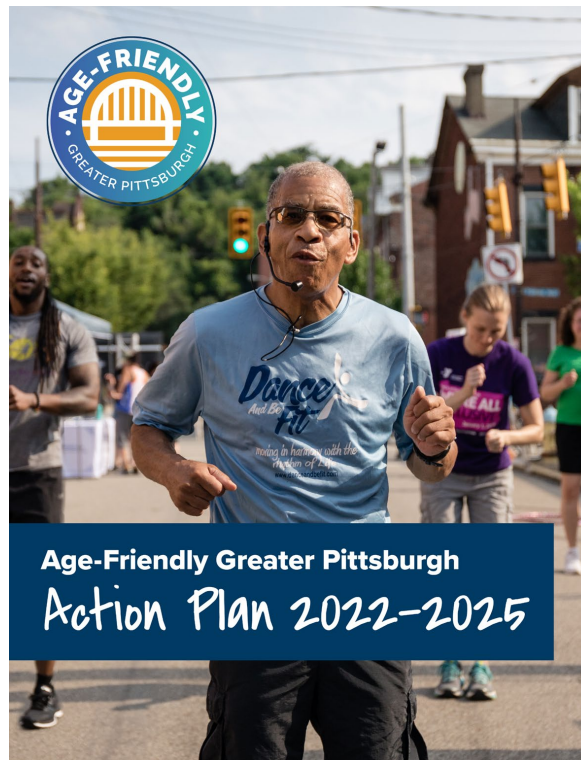


Age-Friendly Action Plan



**Age-Friendly
Greater Pittsburgh**

Action Plan 2017–2020



Age-Friendly Greater Pittsburgh

Action Plan 2022–2025

By the Numbers

- Every day, **10,000** Baby Boomers turn 65.
- By **2030**, we will be a “super-aged” society. By **2035**, older adults projected to outnumber children.
- Locally, nearly **19.3%** of Allegheny County population is 65+. (That number is 16.8% nationally.)
- White women in our region can expect to **live to 78**, while Black men can expect to **live to 64**.
- **8 in 10 Americans** want to age in place.
- **More than half** of Allegheny County residents ages 75+ live alone.

Language matters

- Sub out “elderly” and “seniors,” and replace with “**older**” adults, people, residents, neighbors, generations
- Use an **age range** (60+) or skip altogether!
- Frame an older population as **an asset**
- Skip Silver Tsunami and “anti-aging”
- Nix the “cute” and “adorable” to stop infantilization
- **Living with** > suffering from
- Generations learning from each other reciprocally

Age-Friendly Survey

RATING OF COMMUNITY AS A PLACE FOR PEOPLE TO LIVE AS THEY AGE

ADULTS
45 - 64



OLDER ADULTS
65+

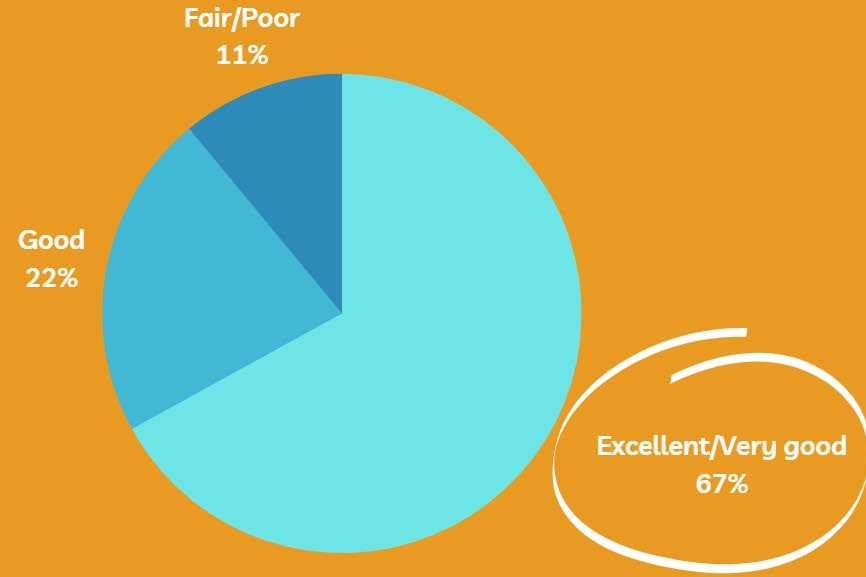


RATING OF COMMUNITY AS A PLACE FOR PEOPLE TO LIVE AS THEY AGE

BLACK/AFRICAN AMERICAN 65+



WHITE/CAUCASIAN 65+



COMMUNITY FEATURES

TOP 3 FEATURES

50%

Well-maintained parks

35%

Accessible and convenient public transportation

33%

Free access to computers and Internet in public places

BOTTOM 3 FEATURES

Job training opportunities for older adults

6%

A range of flexible jobs for older adults

9%

Well-maintained, safe low-income housing

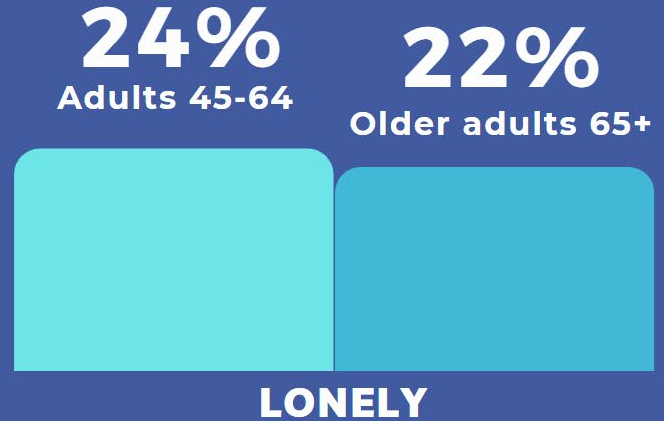
11%

LONELINESS

UCLA SCALE

How often do you feel...

- lack companionship
- left out
- isolated from others



How do we address this?

Age-Friendly Neighborhoods



Age-Friendly Community Panel



Essential Numbers



General Assistance

24/7 help connecting with everyday needs (food, rent, utilities)

2-1-1



ACCESS

Shared-ride service for people with disabilities & 65+

412-562-5353



Allegheny Link

Assistance with housing, aging & disability resources

866-730-2368



PA Medicare Education & Decision Insight

Counseling for Medicare, Medicaid & long-term care

800-783-7067



Older Adult Protective Services

Reporting abuse or neglect of people 60+

412-350-6905



SeniorLine

Info on in-home care, transportation, senior centers & more

412-350-5460



Social Security Administration

Retirement, disability & Medicare benefits

866-770-2965



Emergency

Always dial 9-1-1 in an emergency

9-1-1



AGEISM

refers to

HOW WE THINK
(STEREOTYPES),

FEEL

(PREJUDICE)

and ACT

(DISCRIMINATION)

towards others
or ourselves
based on age

#AWorld4AllAges



GLOBAL
CAMPAIGN
TO COMBAT
AGEISM

Campaign to Counter Ageism

- **Media Campaign** featuring a diverse set of residents
- **Learning Campaign** with university partners and employers



Health Systems That Care



Age-Friendly Ecosystem

Age-Friendly Communities

- Led by AARP Livable Communities and World Health Organization

Age-Friendly Health Systems

- Led by the John A. Hartford Foundation and Institute for Healthcare Improvement

Age-Friendly Public Health Systems

- Led by Trust for America's Health

Join us!
Next Convening: February 2024



Email: cassandra@agefriendlypgh.org

Thanks.

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Cassandra Masters | cassandra@agefriendlypgh.org

agefriendlypgh.org | [@AgeFriendlyPGH](https://www.instagram.com/AgeFriendlyPGH)

412-532-7144



SWPPA

Southwestern Pennsylvania
Partnership for Aging

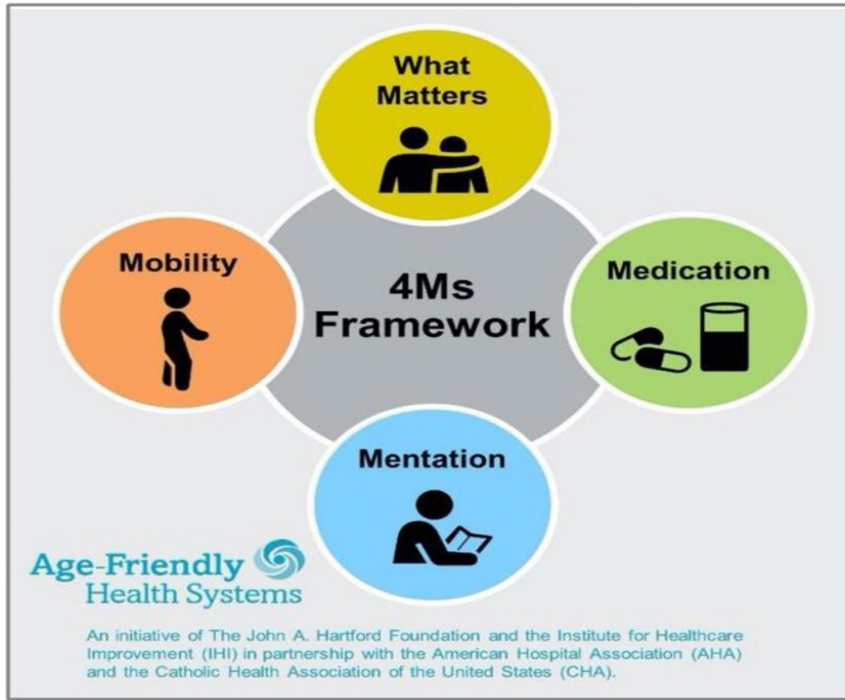


University of
Pittsburgh

School of Social Work

Extras

Health Systems That Care



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Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

Health Systems That Care



WHAT IS THE AGE-FRIENDLY ECOSYSTEM



Other Things We Can Do

- **Celebrate our own age**
 - age drop
- **Use an aging lens**
- **Update images, language, framing**
- **Foster intergenerational connection**
 - Reciprocal mentoring
 - Neighbors, friends from different generations



Geriatric Pain: balancing risk versus benefit

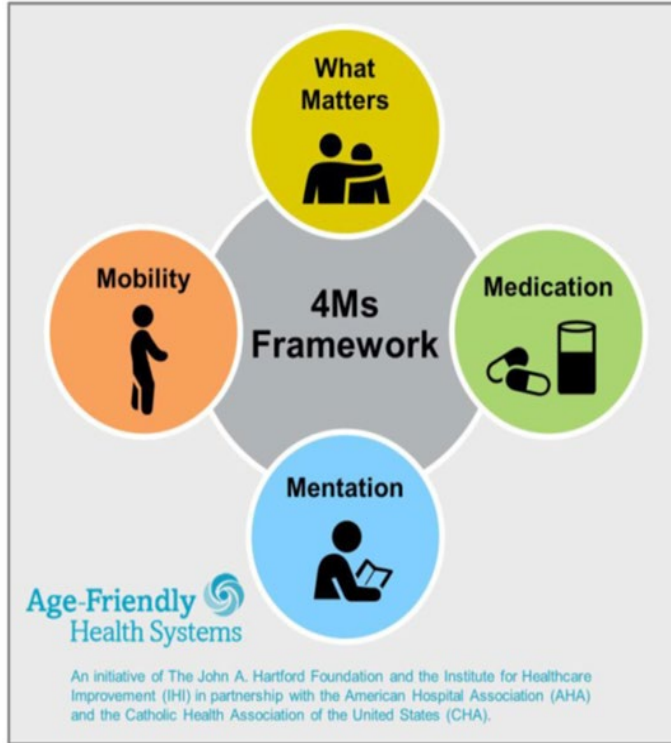
Sydney Hand, PharmD
Department of Pharmacy
UPMC Mercy
November 17, 2023

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Disclosure

I have no actual or potential conflicts of interest in relation to this presentation.

4Ms Framework



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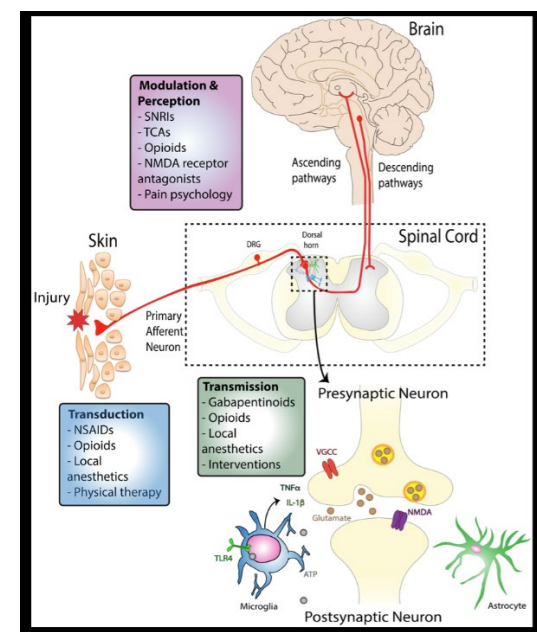
Ensure that older adults move safely every day in order to maintain function and do What Matters.

Objectives

1. Understand the pathophysiology of pain and how it differs in older adults
2. Describe changes associated with age on pharmacokinetics and pharmacodynamics in older adults
3. Define potentially inappropriate medication use according to the American Geriatric Society Beers Criteria[®]
4. Discuss appropriate pain management in older adults
5. Recognize possible adverse drug effects of opioid use in older adults

Pain

- Complex phenomenon caused by noxious sensory stimuli and neuropathological mechanisms
- Sensory, affective, cognitive, and behavioral components involved
- 'Persistent pain' is the preferred term for pain that continues for a prolonged period
- Persistent pain=pain that persists beyond 12 weeks



Schwan J, et al. Chronic Pain Management in the Elderly. *Anesthesiol Clin*. 2019 Sep;37(3):547-560.

Causes of Persistent Pain in Older Adults

- Musculoskeletal disorders
 - Most common
 - Spine degeneration and arthritis
- Neuropathies from diabetes, herpes zoster, chemotherapy, and surgery
- Pain related to cancer and cancer treatments
- Pain from advanced stages of chronic diseases including heart failure, chronic obstructive pulmonary disease, and end stage renal disease
- Pain from joint repair and replacement surgeries
- Pain from vertebral fractures

Consequences of Persistent Pain

- Functional impairment
- Falls
- Slow rehabilitation
- Mood changes
- Decreased socialization
- Sleep and appetite disturbance
- Greater healthcare use and cost
- Caregiver burden
- Treatment side effects



Makinohealthcare.com

Differences of Pain in Older Adults

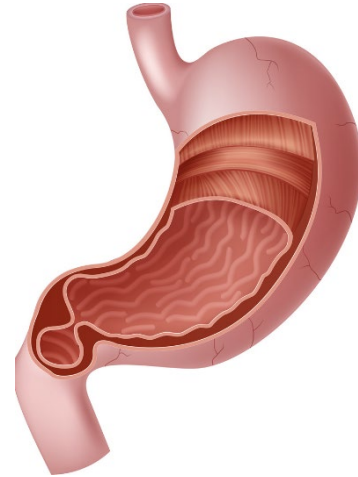
- Geriatric pain differs from that in a younger patient
 - Clinical manifestations are complex and multifactorial
 - Pain may be underreported
 - Normal part of aging, tendency toward stoicism, fear of addiction
 - Concurrent illness and multiple problems make management more difficult
 - Older patients are more likely to have medication-related side effects and complications to procedures

Pharmacologic Changes with Aging



Gastrointestinal Absorption or Function

- Decreases in gastric secretion and intestinal motility
 - Decreased and altered absorption
- Slowing of transit time
 - Prolonged effects
- Increased prevalence of constipation
- Disorders that alter gastric pH
 - Altered absorption



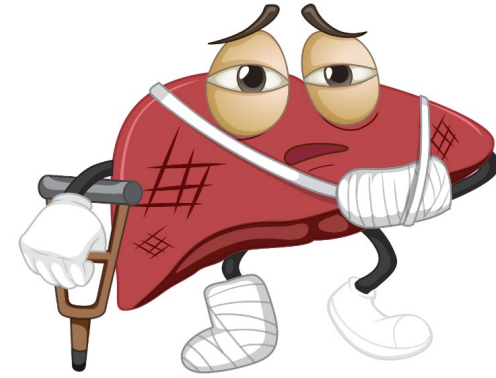
VectorStock.com

Distribution

- Increased body fat and decreased lean body mass, total body water, and serum albumin
 - Increased volume of distribution and half-life of lipophilic drugs
 - Increased plasma concentrations of hydrophilic and highly protein-bound acidic drugs
- Aging and obesity can result in longer half-life of certain drugs

Liver Metabolism

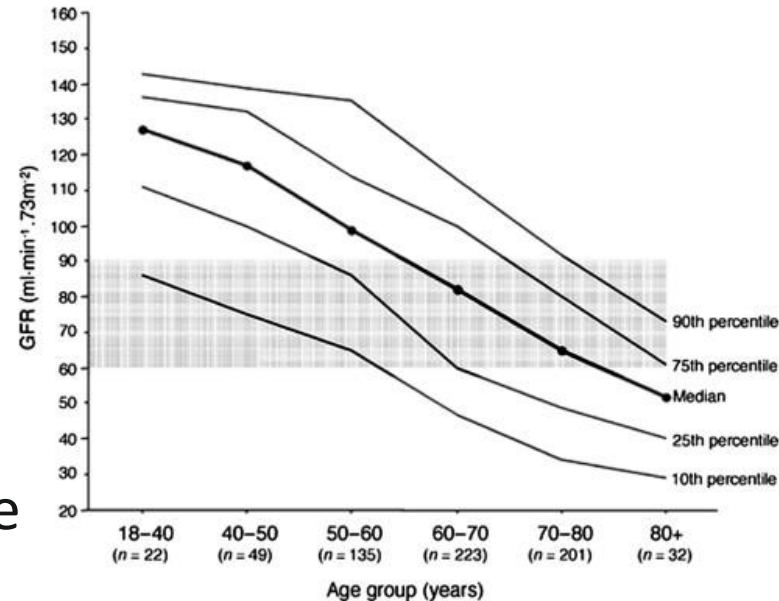
- Hepatic blood flow and volume decline with age
- Slight reductions in drug metabolism
- Concurrent cirrhosis and chronic liver disease also impact drug metabolism
- Increased risk of AEs and drug-drug interactions



Vecteezy.com

Renal Excretion

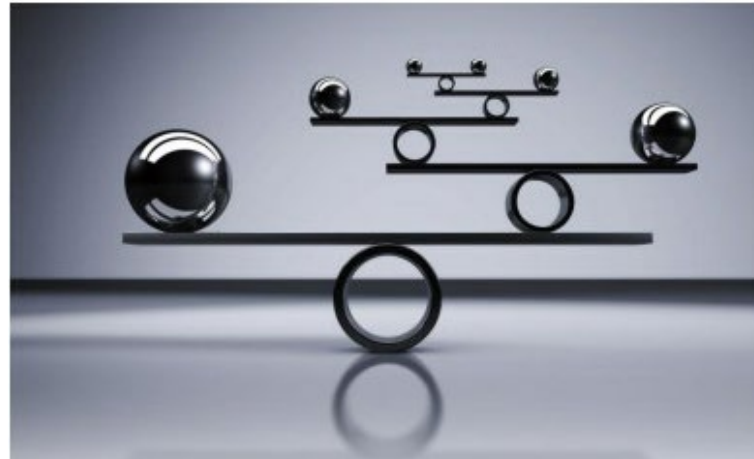
- Glomerular filtration rate decreases with advancing age
- Creatinine, a surrogate marker of kidney function, is affected by muscle mass (decreased in elderly)
- Reduced renal clearance results in increased half-life of renally excreted medications
 - Dose reductions often required in older patients



Williams, ME. Med Clin North Am. 2013;97(1):75-89

Geriatric PK Changes Summarized

- Increased concentrations + less metabolism + decreased excretion = more drug to affect its target



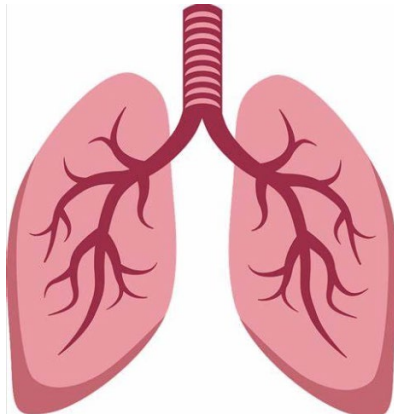
www.shutterstock.com

Geriatric Pharmacodynamic changes

- Central nervous system: pre-existing cognitive deficits, decreased myelination of nerves and decreased receptor density
 - Opioids: increased analgesic effects, sedation, possibly delirium
 - Anticholinergics: increased confusion, constipation, incontinence, movement disorders

Geriatric Pharmacodynamic Changes

- Respiratory system: decreased elasticity of lung and increased chest wall rigidity
 - Opioids: increased risk of respiratory depression



4Ms: Medication Domain

- Review for high-risk medication use and document in electronic health record
 - American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication (PIM) Use in Older Adults
- Deprescribe or do not prescribe high-risk medications
- Provide ongoing patient/caregiver education about potentially high-risk medications through all care settings to help improve safe medication use and informed decision making

4Ms High-Risk Medications

1. Benzodiazepines
2. **Opioids**
3. **Tricyclic antidepressants (TCAs)**
4. **Muscle relaxants**
5. Antipsychotics
6. Highly-anticholinergic medications
7. All prescription and over-the-counter sedatives and sleep medications

Approach to the Geriatric Patient with Pain

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Comprehensive Pain Assessment

- Administer standardized pain assessment tool
- Ascertain the impact of chronic pain on function
- Identify attitudes and beliefs about pain as well as goals and expectations
- Gather data from family members and caregivers
- Review comorbidities and drugs

Listen to the Patient

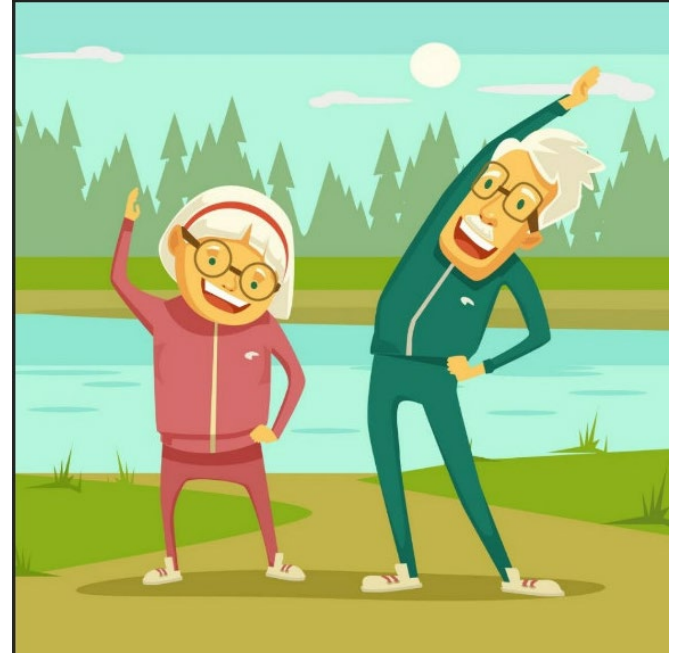
- Screening tools for patients with cognitive impairment
- Approaches to evaluating pain in nonverbal patients
 - Facial expressions, vocalizations, guarding
- AGS guidelines for assessment can be found at <http://www.americangeriatrics.org>

General Principles of Pharmacological Management

- Any pain complaint affecting quality of life or physical function needs addressed
- Clinicians should be knowledgeable about therapies they prescribe
- Patients should have realistic expectations
- Pharmacologic therapy is based on weighing risks and benefits
- Nonpharmacological treatments should be tried and used in addition to pharmacological therapy

Nonpharmacologic Therapy

- Physical therapy
- Cognitive behavioral therapy
- Patient and caregiver education interventions
- Acupuncture
- Massage
- Tai Chi
- Aqua-aerobics



tmphysio.com.au

Topical Analgesics

- Avoid systemic adverse effects
- Limited to patients with conditions in which there is evidence of efficacy
 - Localized pain
- Examples include diclofenac gel, capsaicin cream or patch, and lidocaine cream or patch
- Useful in combination with systemic therapies for reducing medication doses required

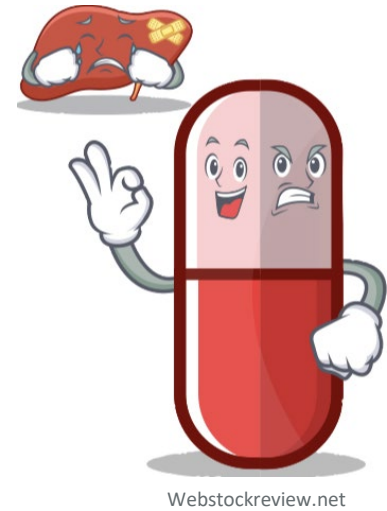


Interventional Therapies

- Epidural steroid injections, lumbar facet injections, percutaneous vertebral augmentation, sacroiliac joint injections, hip and knee joint injections
- Fewer systemic side effects
- Can be included in a multimodal therapy approach
- May help reduce need for larger surgeries

Acetaminophen

- First line systemic therapy for pain
- Effective for osteoarthritis and low back pain
- Less effective for chronic inflammatory pain
- Not associated with gastrointestinal bleeding, adverse renal effects, or cardiovascular toxicity
- Maximum safe dose <3gm/24 hours
 - Calculate total dosing of acetaminophen from all sources
- Caution in patients with hepatic impairment or active liver disease



NSAIDs

- Effective for acute, inflammatory pain
- Use should be no longer than 1-2 weeks in older adults
- Boxed warning for cardiovascular thrombotic events and gastrointestinal bleeding, ulceration, and perforation
- Older adults are at higher risk of adverse effects
 - Co-administration with proton pump inhibitors or H₂ receptor antagonists may reduce gastrointestinal risk
 - Combination with systemic corticosteroids, anticoagulants, or antiplatelets increase gastrointestinal risk
- Caution should be taken in patients with renal impairment, hepatic impairment, gastropathy, cardiovascular disease, and intravascularly depleted states (CHF)
- Avoid use in patients with CrCl_≤30ml/min



Medications for Neuropathic Pain

- Tricyclic antidepressants
 - Beer's List: **NOT recommended** due to highly anticholinergic activity
 - Sedation, orthostatic hypotension
 - Gradual taper is required upon discontinuation
- Serotonin/Norepinephrine Reuptake Inhibitors (SNRIs)
 - duloxetine, venlafaxine
 - Duloxetine excreted renally, avoid with CrCl<30ml/min
 - Risk of serotonin syndrome, increased blood pressure

Medications for Neuropathic Pain

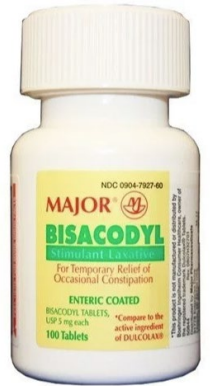
- Anticonvulsants
 - gabapentin, pregabalin
 - Start low and go slow
 - Dizziness, somnolence, fatigue, weight changes
 - In combination with opioids, increased risk of central nervous system depression
 - Renally eliminated
 - Carbamazepine, oxcarbazepine
 - Should be avoided due to risk of hyponatremia and SIADH

Skeletal Muscle Relaxants

- Carisoprodol, chlorzoxazone, cyclobenzaprine, metaxalone, methocarbamol, orphenadrine
- **Beers List: Avoid**
- Poorly tolerated by older adults due to anticholinergic adverse effects, sedation, and increased risk of fractures
- Questionable efficacy at doses tolerated
- Does not apply to muscle relaxants used for spasticity though these drugs can also cause adverse effects
- Caution with any combination of CNS-active medications

Opioids

- Non-pharmacologic and non-opioid treatments preferred; careful risk-benefit analysis essential
 - Assess for medical risk (i.e. frequent falls, sleep apnea)
 - Potential for misuse
- Never use long-acting opioids in an opioid naïve patient
- Start low and go slow
- Extremely constipating-Add a bowel regimen!!
- Delirium-can occur upon initiation and discontinuation
 - Never stop abruptly!!
- Risk of respiratory depression

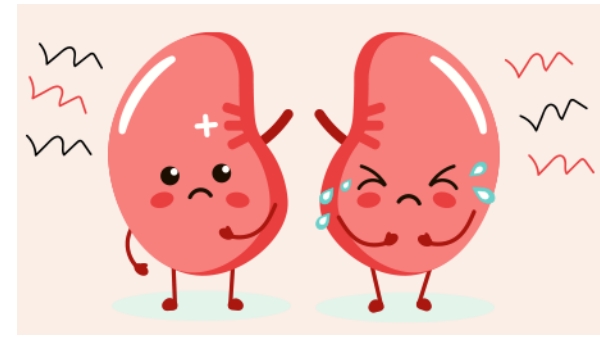


Clinical Pearls Among Opioids

UPMC
LIFE CHANGING MEDICINE

Morphine

- Available in liquid and concentrated liquid formulations
- Available in short- and long-acting oral formulations
- Available in intravenous formulation
- Active metabolites are renally eliminated so should be avoided in patients with renal impairment (CrCl<15ml/min)
- Older adults: Reduce dose



Oxycodone

- Available in liquid formulation
- Available in short- and long- acting oral formulations
- No intravenous formulation
- No toxic metabolites
- Older adults: Initiate at lower end of normal adult dosing range
 - i.e. oxycodone 2.5mg/5mg for moderate/severe pain vs 5mg/10mg

Hydromorphone

- Use short-acting formulations only in older adults for breakthrough pain
- Available in both oral and intravenous formulations
- Older adults: Lower initial doses by 25% to 50%

Fentanyl

- Available in short-acting formulation (IV) for breakthrough pain and long-acting (patch) for chronic pain
 - Never in opioid naïve patients
- Can be used in patients with mild-moderate renal and hepatic dysfunction
- Older adults: twice as sensitive as younger patients to the effects of fentanyl

Buprenorphine

- Available as patch and oral formulation
- High-affinity partial mu-opioid receptor agonist
 - Ceiling to respiratory depression but not to analgesia at higher doses
- Can be safely used in renal impairment
- Incidence of nausea, vomiting, and constipation lower than with other opioids
- Older adults: Use with caution and titrate slowly

Methadone

- Acts on mu-opioid receptors as well as the NMDA receptors
- Should only be initiated by clinicians who are familiar with prescribing due to variable pharmacokinetics and pharmacodynamics
- Both oral and IV formulations available
- Very long half-life
- Dose adjustment in renal impairment
- Older adults: Initiate at lower end of dosing range (10-20mg) and titrate slowly

Tramadol

- Serotonin-norepinephrine reuptake inhibitor that produces a weak opioid metabolite
- Variable effect due to pharmacokinetics of metabolite
- Potential adverse effects include seizures, serotonin syndrome, and hypoglycemia
- Avoid in patients with seizure disorder and those at high risk of orthostatic hypotension
- For adults >65 years to ≤ 75 years: use with caution and initiate at lower end of dosage range
- For adults >75 years: maximum 300mg IR/day; ER formulation only used with extreme caution

Older Adults with Chronic Kidney Disease

- Risk for accumulation of parent drug and associated active metabolites
- Opioids to **AVOID**: morphine, codeine, meperidine
- Use with dose adjustment: hydromorphone, oxycodone, methadone, fentanyl
- No dose adjustment: buprenorphine

Conclusions

- Pain is a complex phenomenon that is experienced differently by everybody
- Pain should be treated with nonpharmacologic therapy first, medication may be tried if not adequate pain relief
- Age-related changes in pharmacokinetics and pharmacodynamics affect the efficacy and safety of pain medications in older adults
- General principle is to **start low and go slow**

Questions??



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UPMC Age-Friendly Conference

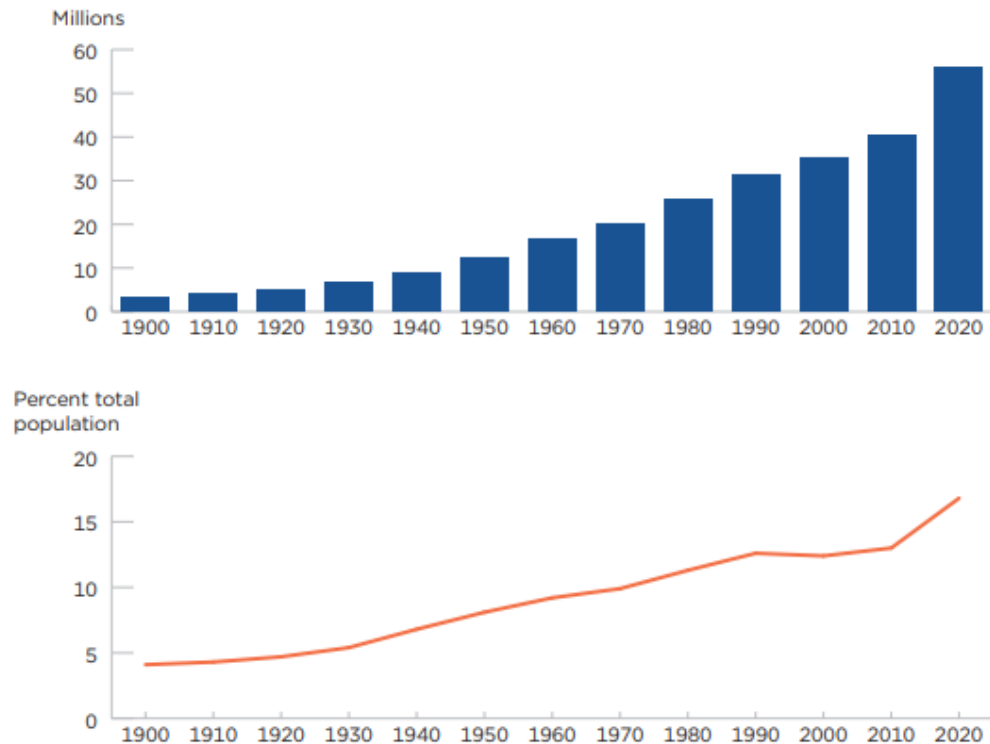
Mobility and Preventing Falls
Amy Bridgman, DNP, RN, CPPS

National Aging Population

- 2010-2020
 - Population >65 years largest and fastest growth
 - 55.8 million or 16.8% of total population
- >65 years grew 5x faster than total population.
 - 38.6% compared to 7.4%

Figure 2.

Population 65 Years and Over by Size and Percentage of Total Population: 1900 to 2020



Note: For information on data collection, confidentiality protection, nonsampling error, and definitions, refer to <https://www2.census.gov/programs-surveys/decennial/2020/technical-documentation/complete-tech-docs/demographic-and-housing-characteristics-file-and-demographic-profile/2020census-demographic-and-housing-characteristics-file-and-demographic-profile-techdoc.pdf>.

Source: U.S. Census Bureau, Decennial Census of Population, 1900 to 2000; 2010 Census Summary File 1, and 2020 Census Demographic and Housing Characteristics File (DHC).

Allegheny County Aging Population



19.3%

of Allegheny County's population is 65+, compared to 16.8% nationally.



Between 2015–2030, Southwestern Pennsylvania will experience a

40% increase

in residents ages 65+.

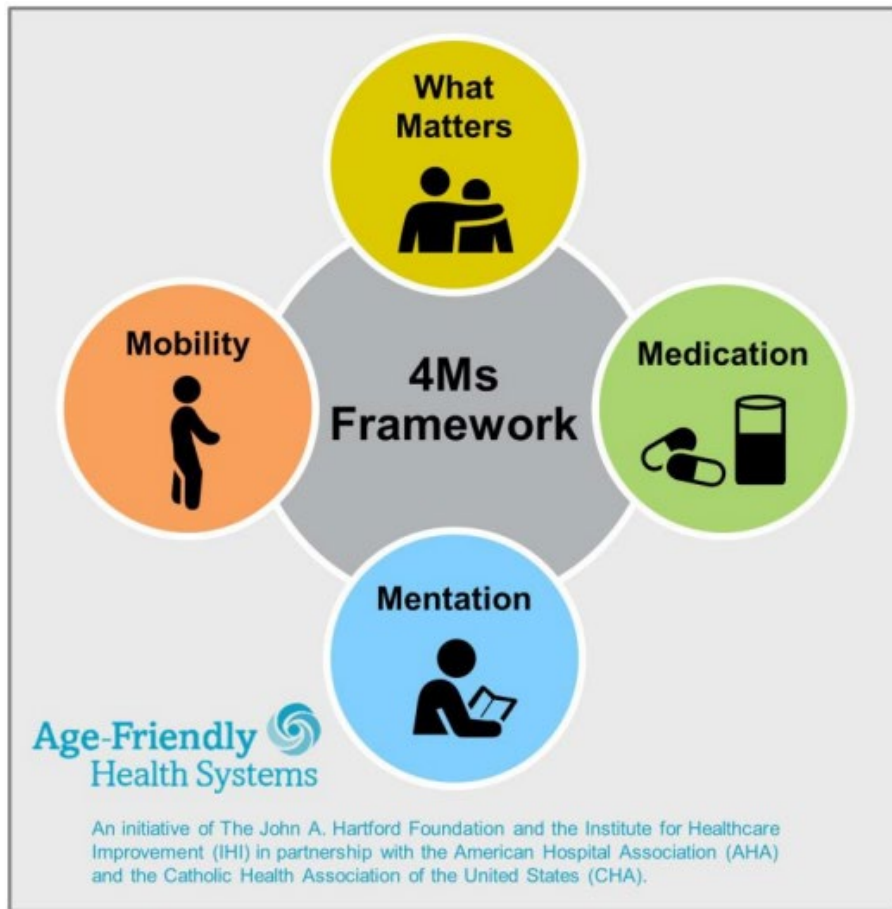
Between 2030–2045, we will experience a

75% increase

in people ages 85+.



Nearly half of Allegheny County residents ages **75+ live alone.**



What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

4Ms Framework: Mobility



- Ensure that each older adult moves safely everyday to maintain function and do **What Matters**
- Screen for mobility limitations and document results
- Ensure early, frequent, and safe mobilization

Mechanism of Injury in Older Adults

- Falls are the leading cause of injury in older adults
- Approximately 28-35% experience falls per year
- History of falls is the most influential predictor of future falls

The Impact of Falls: A Negative Cycle



99 doi:
10:3389/pubh.2022.902599

The Impact of Falls: A Negative Cycle

Physical

Reduction of activity due to:

- Pain
- Loss of balance
- Polypharmacy
- Malnutrition
- Frailty
- Smoking
- Alcohol consumption
- Chronic Illness


The Impact of Falls: A Negative Cycle

Social

Reduction of activity due to:

- Living alone
- Living in Urban areas > risk of falls
- Lack of support system

The Impact of Falls: A Negative Cycle



Emotional

Reduction of activity due to:

- Fear of falling
- Fear of losing independence
- Fear of forced to leave home
- Perceived Quality of Life

The Impact of Falls: A Negative Cycle

Financial

Reduction of activity due to:

- Lack of resources: food, housing, transportation, health care
- Increased costs of health care related to injury or illness
- Loss of income/ ability to work

Manage Predictive Factors

- **Physical Activity**
 - *Effective in reducing injuries related to frailty in older adults*

Frailty in Older Adults

- Frailty:
 - An age-related condition that is defined as a state of decreased physiological reserve and increased vulnerability to adverse outcomes due to the accumulation of biological aging processes.

Frailty in Older Adults

- Frailty can be:
 - Cumulative
 - Predictive of both positive and negative health outcomes
 - Functional status should be evaluated on admission

Assessing Frailty in Hospitalized Older Adults

- Frail adults more vulnerable to adverse health outcomes when exposed to internal or external stressors.

Frailty in Hospitalized Older Adults

- Predisposes patient to:
 - Falls
 - Delirium
 - Low quality of life
 - Clinical deterioration
 - Dependency
 - Increase in length of hospital stay
 - ICU admission
 - Rise in healthcare expenditures
 - Institutional placement
 - Earlier death



Preventing Falls in Hospitalized Older Adults

- Nutritional assessment and plan
- Mobility assessment and plan
 - AM-PAC Functional Screen done on admission
 - Evaluates mobility
 - Evaluates activity
 - Score drives care
 - Lower score= nursing follows mobility care
 - Higher score= PT screening

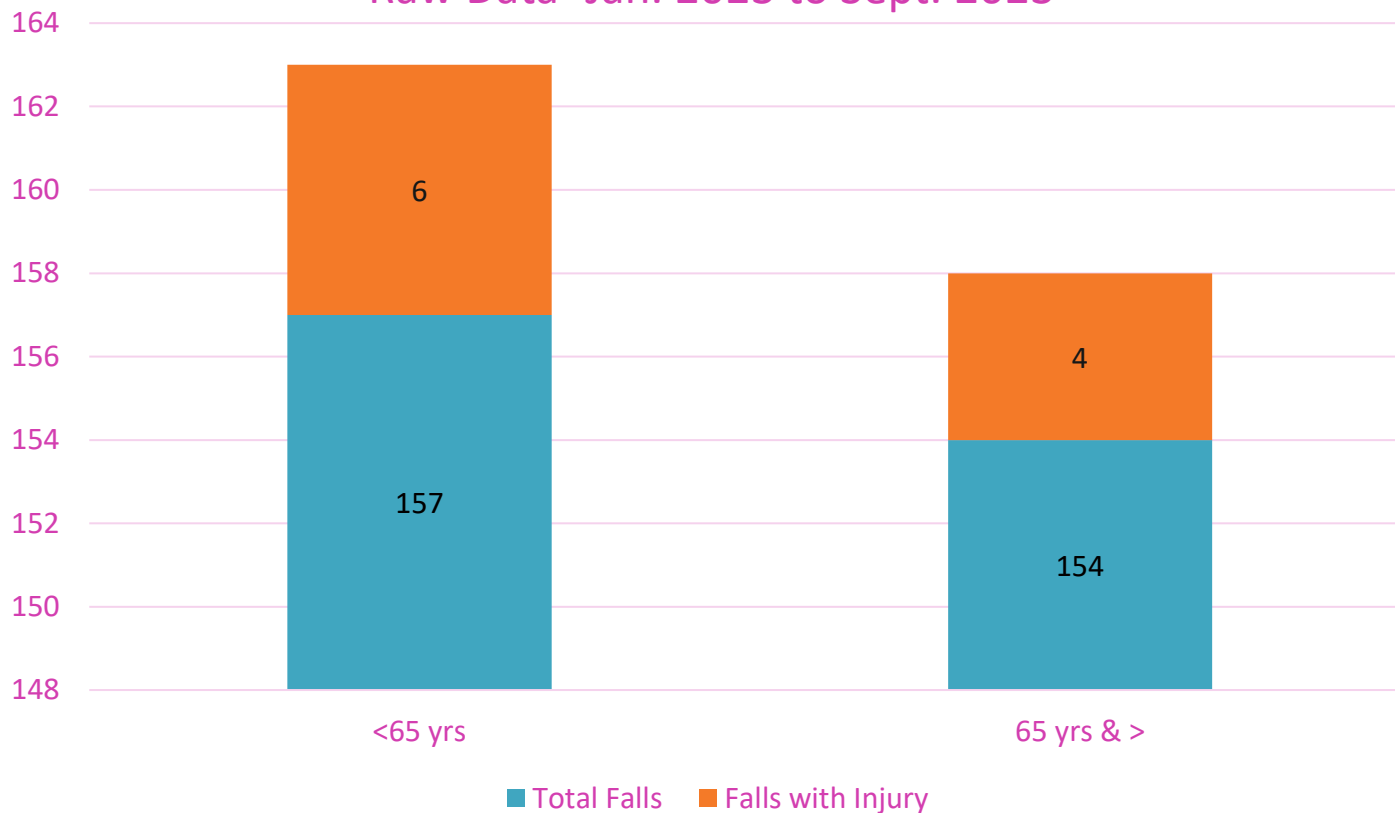
Preventing Falls in Hospitalized Older Adults

- Fall/Harm Assessment
- Bed Alarms
- Posey Alarms
- Telesitters and 1:1 Sitters
- Safe Patient Handling Policy and Procedures
- Safe Patient Handling Equipment Available for Use
- Hourly Rounding
- Weekly Updates on Daily Patient Safety Huddle
- Trial of Redesigned Model of Care on 9E

Preventing Falls in Hospitalized Older Adults

- Fall Risk Assessment
 - Prevention interventions based on risk level
 - Universal Risk
 - Level 1 Risk
 - Level 2 Risk
- Fall prevention interventions
 - Nurse driven based on Fall Risk Level

Falls and Falls with Injury by Age Group Raw Data- Jan. 2023 to Sept. 2023



Preventing Falls in Hospitalized Older Adults- Next Steps

- Multidisciplinary Approach:
 - Fall Reduction Committee
 - Engage front line staff
 - Assess barriers of use for Fall Reduction Interventions
- Reassess level of compliance with Fall Reduction Interventions
 - Identify unit specific data
- Reassess need for additional staff education

Preventing Falls in Hospitalized Older Adults- Next Steps

- Expansion of Care Model
- Use of Mobility Techs in Acute Care setting
- Specific role to focus on getting patients moving while in the hospital
- Potential for reimplementation of formal Mobility Program
 - Use of AM-PAC assessment (already in use)
 - Mobility rounds
 - PT involvement

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Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

November 17, 2023



UPMC Trauma System Geriatric Initiative

Leda Heidenreich, MSN, RN, CCRN

Trauma Program Manager

UPMC Mercy Age Friendly Conference

11/17/2023

UPMC
LIFE CHANGING MEDICINE

Objectives

- Describe the roll of a trauma center and care provided
- Recognize the need for frailty assessment in geriatric trauma patients using the AM-PAC score
- Identify the 3 new trauma system initiatives to improve the care of the geriatric trauma patient.

What is a Trauma Center?

- A hospital capable of providing specialized medical services and resources to patients suffering from traumatic injuries.
- Appropriate treatment by specially trained staff has been shown to reduce the likelihood of death and permanent disability to injured patients.
- Accredited trauma centers must be continuously prepared to treat the most serious life threatening and disabling injuries.

Pennsylvania Trauma Systems Foundation (PTSF)

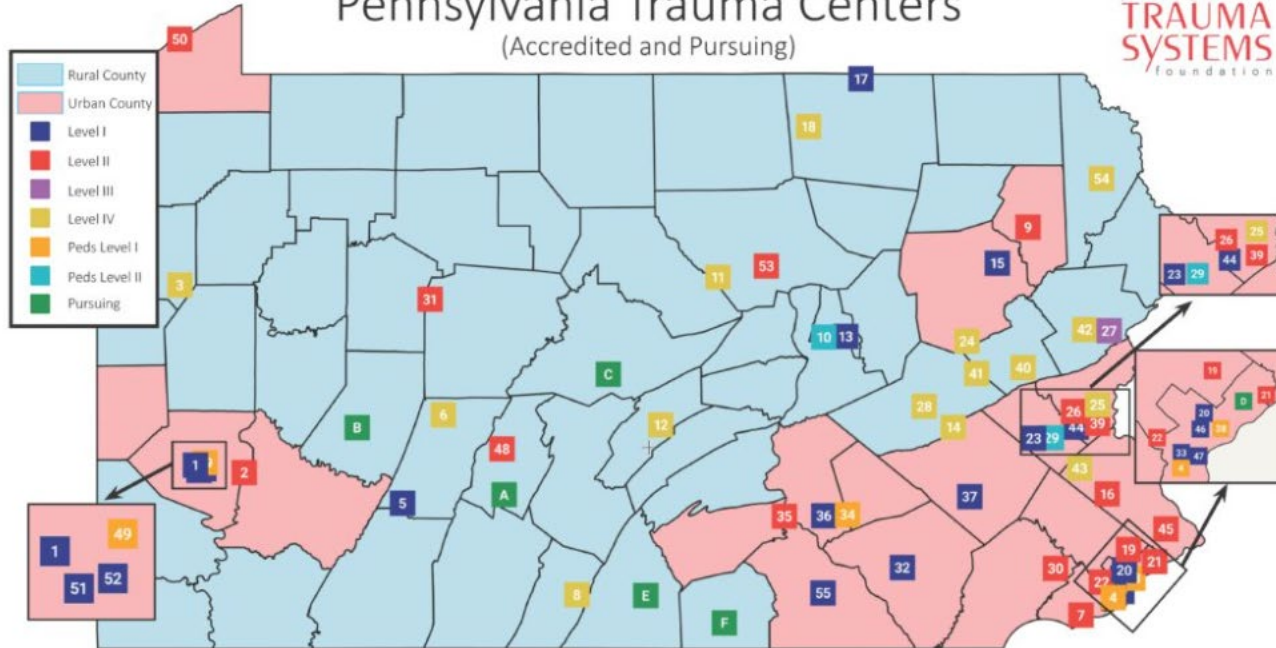
- A non-profit Pennsylvania corporation recognized by the Emergency Medical Services Act (Act 1985-45).
- The PTSF is the organization responsible for accrediting trauma centers in the Commonwealth of Pennsylvania.
- It has been accrediting applicant hospitals since May of 1986.
- PTSF also has a vital role in trauma system development, education and integration
- A trauma system, unlike a trauma center, is a network of trauma hospitals and many additional services including *Emergency Medical Services (EMS)*, rehabilitation facilities and trauma prevention organizations.
- Research shows that in states where there is a trauma system in place, the death rate is drastically reduced.

Trauma Centers

Trauma centers vary in their specific capabilities and are identified by **Level** designation. In Pennsylvania there are four levels of trauma centers.

- **Level I** trauma centers provide multidisciplinary treatment and specialized resources for trauma patients, require trauma research, and a surgical residency program.
- **Level II** trauma centers provide similar specialty medical services and resources, but do not require the research and residency components.
- **Level III** trauma centers are typically smaller community hospitals that have services to care for patients with moderate injuries and rapidly stabilize and transport the severely injured trauma patient to a higher-level trauma center. Level III trauma centers do not require neurosurgical resources.
- **Level IV** trauma centers, often smaller in size and located in a rural area, can provide initial care and stabilization of traumatic injuries while arranging transfer to a higher level of trauma care.

Pennsylvania Trauma Centers (Accredited and Pursuing)



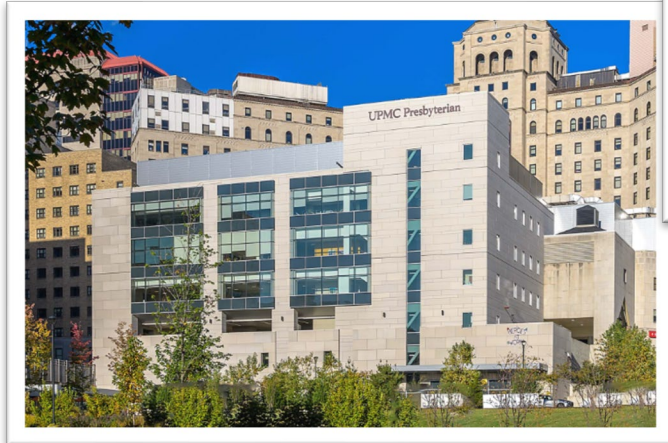
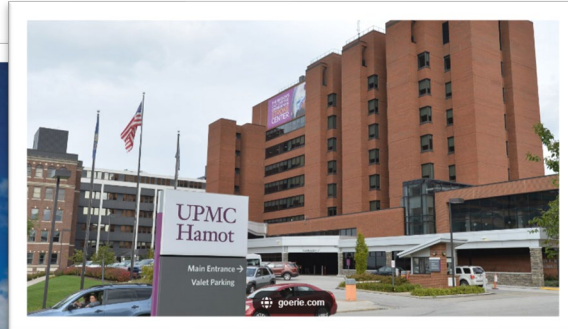
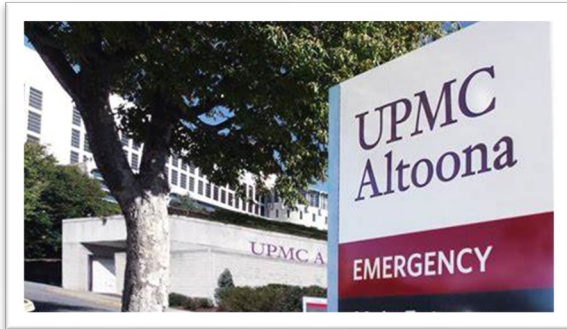
- | | | | |
|--|---|--|--|
| 1. AHN Allegheny General Hospital | 17. Guthrie Robert Packer Hospital | 33. Penn Presbyterian Medical Center | 49. UPMC Children's Hospital of Pittsburgh |
| 2. AHN Forbes | 18. Guthrie Troy Community Hospital | 34. PennState Children's Hospital | 50. UPMC Hamot |
| 3. AHN Grove City | 19. Jefferson Abington Hospital | 35. PennState Holy Spirit Medical Center | 51. UPMC Mercy |
| 4. Children's Hospital of Philadelphia | 20. Jefferson Einstein Hospital | 36. PennState Milton S. Hershey Medical Center | 52. UPMC Presbyterian |
| 5. Conemaugh Memorial Medical Center | 21. Jefferson Torresdale Hospital | 37. Reading Hospital | 53. UPMC Williamsport |
| 6. Conemaugh Miners Medical Center | 22. Lankenau Medical Center | 38. St. Christopher's Hospital for Children | 54. Wayne Memorial Hospital |
| 7. Crozer-Chester Medical Center | 23. Lehigh Valley Hospital-Cedar Crest | 39. St. Luke's Hospital- Anderson Campus | 55. WellSpan York Hospital |
| 8. Fulton County Medical Center | 24. Lehigh Valley Hospital-Hazleton | 40. St. Luke's- Carbon Campus | |
| 9. Geisinger Community Medical Center | 25. Lehigh Valley Hospital-Hecktown Oaks | 41. St. Luke's Hospital- Miners Campus | |
| 10. Geisinger Janet Weis Children's Hospital | 26. Lehigh Valley Hospital-Muhlenberg | 42. St. Luke's Hospital- Monroe Campus | |
| 11. Geisinger Jersey Shore Hospital | 27. Lehigh Valley Hospital-Pocono <i>(Relocating to DR)</i> | 43. St. Luke's Hospital- Upper Bucks Campus | |
| 12. Geisinger Lewistown Hospital | 28. Lehigh Valley Hospital-Schuylkill | 44. St. Luke's University Hospital | |
| 13. Geisinger Medical Center | 29. Lehigh Valley Reilly Children's Hospital | 45. St. Mary Medical Center | |
| 14. Geisinger St. Luke's Hospital | 30. Paoli Hospital | 46. Temple University Hospital | |
| 15. Geisinger Wyoming Valley Medical Center | 31. Penn Highlands DuBois | 47. Thomas Jefferson University Hospital | |
| 16. Grand View Health | 32. Penn Medicine Lancaster General Health | 48. UPMC Altoona | |

Pursuing Level IV

- A. Conemaugh Nason Medical Center
- B. Indiana Regional Medical Center
- C. Mount Nittany Medical Center
- D. Nazareth Hospital
- E. WellSpan Chambersburg Hospital
- F. WellSpan Gettysburg Hospital



Who is the UPMC Trauma System?



UPMC LIFE CHANGING MEDICINE

6 Adult Trauma Centers

UPMC Altoona (Level 2)

UPMC Hamot (Level 2)

UPMC Mercy (Level 1)

UPMC Presbyterian (Level 1)

UPMC Western Maryland (Level 3),

UPMC Williamsport (Level 2)

Geriatric Trauma

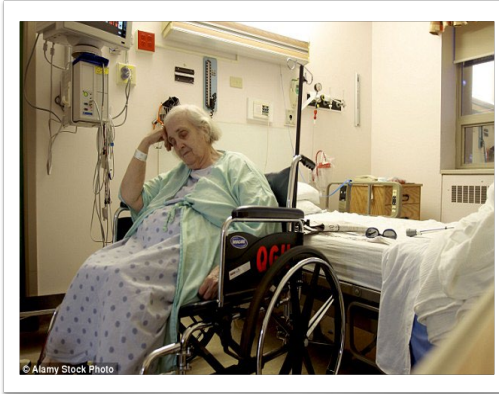
- Rapidly growing segment of our population
- A vulnerable population
- Advanced age is a major determinant of poor outcome after injury
- Why?
 - Changes in physiology
 - Co-morbidities
 - Polypharmacy
 - Cognitive Disorders
 - FRAILITY

Geriatric Trauma Mechanism

- **Falls--Most Common**
 - Constitutes the most common cause of trauma and the leading cause of trauma-related deaths.
 - Six risk factors that could be used to predict falls in the geriatric population
 - Previous falls, living alone, need for a walking aid, depression, cognitive deficit and >6 , medications (polypharmacy)
- **Motor Vehicle Collisions—Most Fatal**
 - Elderly patients are more likely to present with severe injuries, even from low-speed impacts
 - Crash fatality rates are much higher
 - Judgement, vision and reaction times decreased

Traumatic injury in patients over 65

- Traumatic injury in trauma patients over 65 is associated with higher mortality and complication rates as compared with younger patients
- Many geriatric trauma patients have decreased physiological reserve, presence of various comorbidities, and increased risk of complications
- Geriatric trauma patients have basic needs, and when a hospital becomes a “bed-rest” environment, a multitude of hospital-acquired issues can result:
 - Delirium
 - Falls
 - VTEs
 - Longer LOS
 - Pressure ulcers
 - VAPs
 - Decreased patient satisfaction
 - Decreased quality of life post-discharge



Background

- The UPMC Trauma System treats over 12,000 patients annually.
- Patients aged 65 and older represent over 45% of our trauma population.
 - At Mercy it's 55%
- During 2022, approximately 5,500 geriatric trauma patients were treated across the UPMC Trauma System.

Hospital Events in the Geriatric Trauma Population

Top 3 hospital events in 2022 for the system:

1. Delirium
2. Unplanned admission to the ICU
3. UTI

Top 3 hospital events for Mercy

1. Unplanned admission to ICU
2. Delirium
3. UTI

Hospital Events

- These hospital events affect approximately 13% of our patients system-wide
- This represents vast opportunities for clinical, operational, and financial improvement.
- Reflects patient safety issues for many of our patients.
- Because our geriatric patients are at risk every day in developing complications, the UPMC Trauma Service Line formed a multidisciplinary sub-committee/workgroup to improve care for our geriatric population.

Key Stakeholders

- System Trauma Physician Director
 - System Trauma Nursing Director
 - Trauma Program Medical Directors and Physicians
 - Trauma Program Managers and PI Coordinators
 - Physician Leaders in Geriatric Medicine
 - Geriatric Programmatic Nurse Specialist
 - Director of Operations for Geriatrics
 - Critical Care Physicians
 - Advanced Clinical Education Specialists
 - Hospital Finance Representatives
 - System Analysts
- The subcommittee has been meeting on a bi-weekly cadence that began in 2023 to advance an age-friendly culture of safety and service line

Action Item #1

- Identify a Frailty Tool and develop Geriatric Trauma Education E-Learning Module/Curriculum
 - AM-PAC 6 Clicks form- Frailty tool
 - Age-Friendly Framework- “5 M’s”
 - Introduction to Delirium in Hospitalized Elderly
 - Special Consideration for Older Adults

Screening tool to identify frail elderly trauma patients: AM-PAC Mobility Score

- A functional screening tool has been in use at UPMC since 2014: the AM-PAC -Activity Measure-Post Acute Care Form
- Identify patients with frailty who are most at risk for complications using a meaningful functional screening tool, and implement elderly-specific protocols within our trauma service model

Activity Measure – Post Acute Care (AM-PAC) form

- This inpatient-based functional screening tool (AM-PAC “6-Clicks” Forms) is comprised of 12 questions which have been developed, tested and derived from the larger computerized data base out of Boston University.
- The AM-PAC tool has been established as a more meaningful, valid tool to measure patient function across the entire health care continuum.

Correct
Date/Time?

Basic Mobility & Daily Activity AM-PAC "6 Clicks" Inpatient Short Form 1

How much help from another person do you currently need... (If the patient hasn't done an activity recently, how much help from another person do you think he/she would need if he/she tried?)

* Right click for
reference text

(1) Total (2) A Lot (3) A Little (4) None

Turning from your back to your side while in a flat bed without using bedrails?

Total A Lot A Little None

Moving from lying on your back to sitting on the side of a flat bed without using bedrails?

Total A Lot A Little None

Moving to and from a bed to a chair (including a wheelchair)?

Total A Lot A Little None

Standing up from a chair using your arms (e.g. wheelchair, or bedside chair)?

Total A Lot A Little None

To walk in a hospital room?

Total A Lot A Little None

Climbing 3-5 steps with a railing?

Total A Lot A Little None

Raw Mobility
Score*

AM-PAC- “6 Clicks Form”

Why is this important?

- Patients over 65 years old with traumatic injuries are at greater risk of mortality and complications than younger adults. Geriatric trauma patients with frailty are at an even greater risk for poor outcomes.

AM-PAC Objectives

1. Understand the use of the AM-PAC “6 Clicks” in assessing functional mobility and risk for frailty in older adults.
2. Recognize the importance of timely completion of the AM-PAC “6 Clicks” within 24 hours of admission.
3. Relate the AM-PAC “6 Clicks” score 18 or less to function focused care and targeted interventions for the older adult.

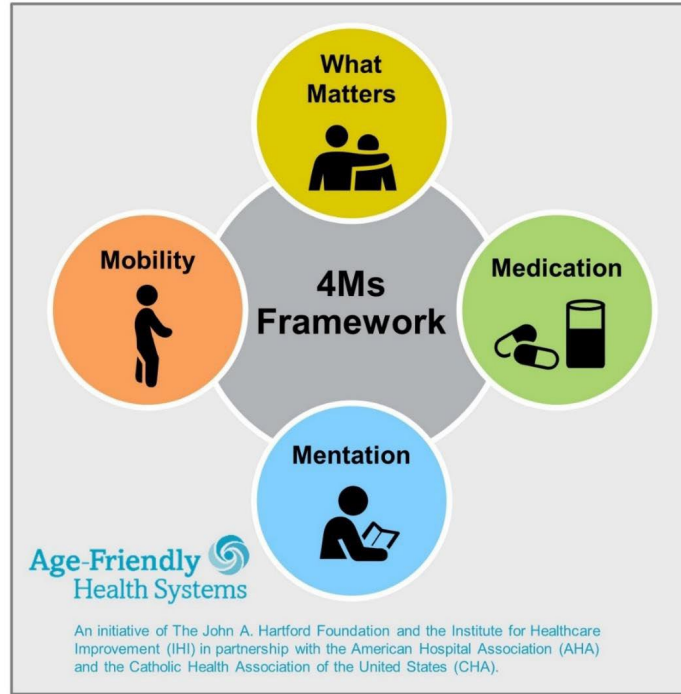
AM-PAC

- Nursing, PCT, PT/OT-GOAL: to explain why we are focusing on mobility score, and how to assure patients are scored appropriately/consistently
- Physicians, Residents, APPs-GOAL: to explain why we are focusing on mobility score, and how score will be a trigger for focused functional care for at-risk patients

The 5M Framework of Age-Friendly Care

(Thanks to Melissa)

- Represents core health issues for older adults
- Builds on strong evidence base
- Simplifies and reduces implementation and measurement burden on systems while increasing effect
- Components are synergistic and reinforce one another



For related work, this graphic may be used in its entirety without requesting permission.
Graphic files and guidance at ihi.org/AgeFriendly

Delirium in Hospitalized Elderly

(Thanks to Dr. Tadic)

1

Define delirium and recognize risk factors

2

Recognize screening tools for delirium

3

Become familiar with prevention and management of delirium

4

Discuss strategies to identify and manage challenges

Special Considerations in the Care of the Elderly

(Thanks to Dr. Tadic)

1

Describe the impact of physiological and psychosocial changes when caring for an older adult

2

Understand risks of hospitalization in elderly patients

3

Learn about frailty and how it affects hospital outcomes

4

Screening/preventing most common complications in hospitalized elderly

4 E-Learning- U Learn Modules

1 Title: The 5Ms Framework of Age-Friendly Care

Audience: UPMC Adult Trauma Centers designated trauma units for Nurses, PCT, NA, Advanced Practice Providers, Residents, Physicians

Description: This educational module will provide an overview of what an Age-Friendly Health System means and how to care for older adults who have suffered traumatic injuries.

2. Title: Special Considerations for Care of the Hospitalized Elderly

Audience: UPMC Adult Trauma Centers designated trauma units for Nurses, PCT, NA, Advanced Practice Providers, Residents, Physicians

Description: This module is an overview of special considerations when caring for older adults with trauma.

3. Title: Use of the AM-PAC Mobility Score to Identify Frailty in Elderly Patients

Audience: UPMC Adult Trauma Centers designated trauma units for Nurses, PCT, NA, Advanced Practice Providers, Residents, Physicians

Description: This module is meant to provide you with evidence-based tools and resources that will help you identify frailty in older adults.

4. Title: Delirium in Hospitalized Elderly

Audience: UPMC Adult Trauma Centers designated trauma units for Nurses, Advanced Practice Providers, Residents, Physicians

Description: This module provides evidence-based tools and resources to help you identify, manage, and prevent delirium in older adults with trauma.

Intervention

- Our subcommittee/workgroup defined these four educational modules
- Our workgroup enlisted the resources from the Wolff Center to create interactive self-paced modules
- The recommendation was to deploy this new Geriatric Education Module with the UPMC Annual Mandatory Education in September 2023 for the adult trauma centers and trauma credentialed staff.

Results

3054 employees- Trauma Surgeons, General Surgery residents, Advanced Practice Providers, Trauma program nurses, nurses (this includes Case Managers, Nursing Educators, Directors of Nursing and CNOs), Nursing Assistants, and PCTs on the trauma credentialed units completed the training

- NA/PCT Bundles: $853/933 = 91\%$
- Nurse/Physician/APP Bundles = $2201/2308 = 95\%$
- Overall completion rate: $3054/3241 = 94\%$

Action Item #2

- Comprehensive UPMC System Geriatric Trauma Practice Management Guideline development
 - Trauma Clinical Practice Guidelines aim to provide recommendations for managing patient populations or injury types with special considerations to trauma care providers
 - Examples: Traumatic Brain Injury, Blunt Spleen Injury, Open Fracture Management, Mangled Extremity, Penetrating Abdominal Trauma

Action Item #2 cont.

- Each trauma center had their own geriatric practice guidelines
- UPMC Trauma System has several system guidelines that all centers monitor for compliance
- Each center contributed to the development of the new comprehensive geriatric practice guideline
- This new Geriatric Trauma Guideline required by PTSF standard to incorporate all phases of care: Resuscitation, Critical Care, Med Surg, & Discharge Planning.

Geriatric Trauma Practice Management Guideline**Background**

Elderly injured patients are at higher risk for complications during acute hospitalization compared to younger patients. Infectious and functional complications predominate. Predisposing factors in addition to injury severity include multiple medical problems, decreased baseline functional capacity, and polypharmacy.

Purpose

These guidelines will codify and standardize the approach to hospital management of injured patients ≥ 65 years of age and older based upon nursing care unit.

Resuscitation

Evaluation of all blunt trauma in geriatric patients should include CT scans of the head, cervical spine, chest, abdomen and pelvis with reconstruction of the thoracic, lumbar and sacral spine. For the stable patient, initial imaging may be done without IV contrast unless there is a high index of suspicion for aortic, solid organ or pelvic hemorrhage. Abnormal non-contrast imaging may be repeated with contrast if indicated. Identification of any spine fracture should prompt complete spine imaging to assess for concomitant spine injuries.

- **Arterial Blood Gas analysis**

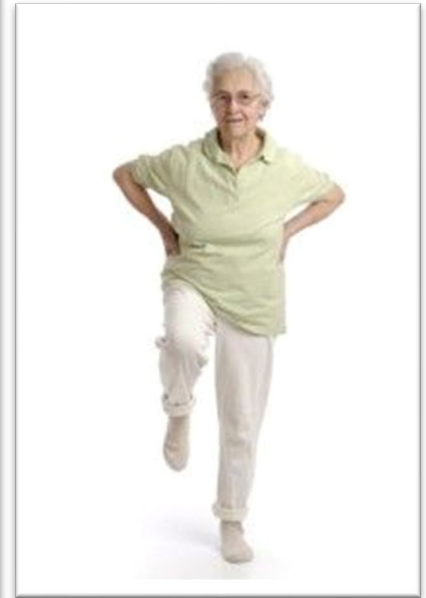
Patients who meet criteria for highest tier activation are required to have an arterial blood gas analysis during the resuscitation phase of care.

- Patients ≥ 65 years older with Level II activation or Trauma Consult where shock is suspected should have a blood gas analysis within one hour of their encounter with the trauma service
- Patients ≥ 65 years older with base deficit >6 and/or lactate >2 will be admitted to an ICU.
- If an arterial blood gas is not able to be obtained, venous blood gas is recommended.

Consultation

All patients ≥ 65 admitted to the Trauma Service will have the following consultations considered:

Internal Medicine or Geriatric Medicine
Physical therapy
Occupation therapy
Physical Medicine and Rehabilitation
Palliative Care



UPMC System Trauma PMG

Intensive care unit guidelines

1. All intubated patients will receive ventilator associated pneumonia prevention care except when contraindicated:
 - a. Head of bed elevation
 - b. Gastric acid suppression
 - c. Oral care
 - d. Daily sedation interruption unless contraindicated
 - e. Daily spontaneous breathing trial unless contraindicated
 - f. Lung protective ventilation strategy
2. Institute aspiration precautions (i.e. HOB elevation, sitting upright while eating, evaluate for swallowing deficits).
3. Review all invasive devices. Unnecessary devices will be removed. The indication for, and strategy for removal of, currently necessary devices will be reviewed. This will include the following:
 - a. Vascular access lines: peripheral venous, PICC, central venous and arterial
 - b. Foley catheters
 - c. Surgical drains
 - d. Ventriculostomy catheters and other intracranial monitoring devices
4. All traumatic, burn and surgical wounds will be inspected daily by the provider for evidence of infection. The care plan for each wound will be reviewed with nursing staff. All dressings should be dated and timed.
5. Review activity restrictions daily. All patients should be mobilized out of bed to chair unless contraindicated. If the patient was ambulatory prior to admission, ambulate as early as possible.
6. Following C-spine clearance protocol, remove cervical collar as soon as possible after radiographic and clinical clearance are complete.
7. Review thromboembolism prophylaxis or treatment daily.
8. Discuss goals of care and code status and document. Family meeting per CCM should be within 48 hours, establish code status within 24 hours. Clinical deterioration should warrant another family meeting with GOC discussion.
 - a. Geriatric head injured patients with GCS<8 on presentation should be treated aggressively, including but not limited to
 1. Emergent neurosurgical consultation
 2. Admission to ICU
 - b. If substantial improvement in GCS is not realized within 72 hours of injury, consideration should be given to limiting further aggressive therapeutic interventions, including but not limited to:
 1. Family/POA Meeting with Trauma/CCM/NSGY to discuss goals of care
 2. Palliative Care Service consultation
9. Reconcile medications per UPMC Policy and Procedure HS-NA0420.
10. Review medication list daily with specific attention to antimicrobial medications (spectrum, dose, route, frequency and treatment duration).
11. Complete Fall/Harm Assessment and Interventions per HS-NA0410.

12. Evaluate for delirium and monitor for reversible causes.

PREVENTION IS KEY:	
HOB elevated	Obtain sensory supports (i.e. glasses, hearing aids) and nutrition supports (i.e. dentures)
Review invasive lines daily	Encourage PO intake
Early mobilization	Encourage the family to stay
OOB in chair with meals	Blinds up, lights on during the day and off and night
Daily BM: avoid constipation	Activity boxes
Promote sleep-wake cycle (lab holiday)	Music therapy
Fall risk assessment	Oral Care
Pain assessment	
Know the patient's home routine	

13. Begin discharge planning with social work and care management involvement.

Out of ICU transfer guidelines

1. Consider at least 24 hours of telemetry in addition to vital signs with pulse oximetry at least every shift for all transfers out of the ICU.
2. All patients with a tracheostomy will have at least 24 hours of telemetry and continuous pulse oximetry.
3. For patients who will receive a Geriatric Consultation, consider placing the order the day before anticipated floor transfer to facilitate successful transition to a lower level of care.

Floor guidelines

Abnormal vital signs, increased oxygen requirement or mental status change will prompt consideration of transfer to ICU. The following items will be reviewed and clarified daily:

1. Institute aspiration precautions (i.e. HOB elevation, sitting upright while eating, evaluate for swallowing deficits).
2. Assess need for telemetry or continuous pulse oximetry (HS-NA0425: Nurse Driven Cardiac Monitor Protocol)
3. Following C-spine clearance protocol, remove cervical collar with clinical clearance as soon as possible after radiographic clearance and clinical clearance are complete.
4. Assess all invasive devices. Unnecessary devices will be removed. The indication for, and strategy for removal of, currently necessary devices will be reviewed. This will include the following:
 - a. Vascular access lines: peripheral venous, PICC, and central venous
 - b. Foley catheters
 - c. Surgical drains

5. Review activity restrictions daily. All patients should be mobilized out of bed to chair unless contraindicated. If patient was ambulatory prior to admission, ambulate as early as possible.
6. Provide pulmonary toilet (incentive spirometer, respiratory therapy consult if indicated)
7. Review daily thromboembolism prophylaxis or treatment.
8. Complete Fall/Harm Assessment and Interventions per HS-NA0410.
9. Evaluate for delirium and monitor for reversible causes.

PREVENTION IS KEY:	
HOB elevated	Obtain sensory supports (i.e. glasses, hearing aids) and nutrition supports (i.e. dentures)
Review invasive lines daily	Encourage PO intake
Early mobilization	Encourage the family to stay
OOB in chair with meals	Blinds up, lights on during the day and off and night
Daily BM: avoid constipation	Activity boxes
Promote sleep-wake cycle (lab holiday)	Music therapy
Fall risk assessment	Oral Care
Pain assessment	
Know the patient's home routine	

10. Reconcile medications and Review medication list daily with specific attention to antimicrobial medications (spectrum, dose, route, frequency and treatment duration).
11. Order consultations for internal medicine/geriatric medicine, PT, OT, Physical Medicine and Rehabilitation, and neuropsychology in addition to injury specific surgical specialist consultation
12. Discuss goals of care and code status and document. Family meeting per CCM should be within 48 hours, establish code status within 24 hours. Clinical deterioration should warrant another family meeting with GOC discussion.
13. Continue discharge planning with social work and care management involvement, including home care referral for safety assessment for those patients being discharged to home.
14. For patients with multiple chronic conditions and /or polypharmacy, consider involving geriatrics in discharge medication reconciliation.
15. Provide patient education for fall prevention for patients ≥ 65 years.

REFERENCES:

TQIP. (2013). *Best Practice Guidelines: Geriatric Trauma Management*.
https://www.facs.org/media/314or10q/geriatric_guidelines.pdf

EAST. (2010). *Geriatric Trauma Practice Management Guideline*.
https://www.east.org/Content/documents/practicemanagementguidelines/GPMG-Manuscript_2010_final.pdf

Action Item #3

- Recommended revisions of an existing Trauma Surgery Geriatric Admission Non-ICU Power Plan which was currently active only at UPMC Presbyterian

Geriatric Power Plan

Proposed Changes


Trauma Surg Geriatric (>=7065y/o) Admission Non-ICU PowerPlan

Component	Order Details
Condition/Status	
<input checked="" type="checkbox"/> VTE Risk Assessment Done High Risk	
<input type="checkbox"/> Trauma Venous Thromboembolism (VTE) Prophylaxis <u>SubPhase</u>	Add on view for Mercy, Altoona, Hamot, Williamsport, Chautauqua
<input type="checkbox"/> Admission Order/Bed Request	
<input type="checkbox"/> Restraints <u>NonViolent</u> (Q2hr Documentation) Sub Phase	
<input type="checkbox"/> TLS Spine Precautions	
<input type="checkbox"/> C Spine Precautions	No pillows
<input type="checkbox"/> <u>Trendelenberg</u> , Reverse	30 degrees
<input type="checkbox"/> Elevate Head of Bed	30 degrees
<input type="checkbox"/> Notify, Other	Notify: House Officer, <u>if</u> : Arrival of patient to nursing unit
<input type="checkbox"/> Notify MD for: Vital Signs	Notify: Physician, T< 36, T> 38.5, HR< 50, HR> 120, SBP< 90, SBP> 150, DBP< 60, DBP> 100, RR< 10, RR> 30, O2 Sat< 92%, UOP< 250ml/8hr
<input type="checkbox"/> Notify MD for: Bloodwork	Blood Sugar< 70, Blood Sugar> 350, Notify Physician
<input type="checkbox"/> Notify, Other	Notify: Physician, <u>if</u> : New onset of lethargy, difficulty waking, or <u>agitation</u> .





Nursing Interventions

<input type="checkbox"/>	Communication to Nursing	Limit use of restraints
<input type="checkbox"/>	Communication to Nursing	Bladder scan: Check for post void residual and sign/sx retention, call for st cath order if >500cc. only if foley not in place
<input type="checkbox"/>	Communication to Nursing	Monitor bowel: Assessment for last BM. Call MD if unknown or 72 hours or longer
<input type="checkbox"/>	Communication to Nursing	Pain: Notify MD if non-verbal pain score is positive, or pain score is 4 or higher and not responsive to prn medication. If consistently (3 or more times) > 7, consider pain block
<input type="checkbox"/>	Communication to Nursing	Daytime sensory support: Ensure lights on outside of intentional quiet time. Use glasses/hearing aids/amplifiers during the day for patients with vision and/or hearing impairment. Consider ordering items from the Sensory Toolkit if needed and obtaining coloring pages and pencils from local resources (email #: UPMC-2431). Sensory Toolkit Information Flyer
<input type="checkbox"/>	Communication to Nursing	Nighttime sensory support: Glasses, hearing aids/amplifiers off at night. Ensure quiet environment by turning off the tv and keeping the lights off at night. Offer eye mask to patients sensitive to light and ear plugs to patients sensitive to noise to support sleep. Consider addressing toileting, unmet needs, comfort, and pain before bed.
<input type="checkbox"/>	Communication to Nursing	Consider geriatric consult/neurology/psychiatry if initial interventions do not work
<input type="checkbox"/>	Communication to Nursing	Initiate Bedside Dysphagia Screening
<input type="checkbox"/>	Orthostatic BP and Pulse	
<input type="checkbox"/>	Orthostatic Blood Pressure	Daily, 3 Day(s), once allowed OOB (evaluation for syncope)
<input type="checkbox"/>	Pulse Ox Continuous.	
<input type="checkbox"/>	Vital Signs	Q4H

Vital Signs/Activity, Lines , Tubes and Drains

<input type="checkbox"/>	Vital Signs	No Vital signs between 10p and 6am
<input type="checkbox"/>	Vital Signs with Oximetry	Q4H
<input type="checkbox"/>	Fall Precautions	
<input type="checkbox"/>	Neurological Checks	
<input type="checkbox"/>	Neurovascular Checks	
<input type="checkbox"/>	Complete Bedside Dysphagia Screen	
<input type="checkbox"/>	Please order the syncope evaluation order set outside of the plan	Ask if we can embed Syncope PP
<input type="checkbox"/>	Bedrest	
<input type="checkbox"/>	Log Roll	Q2
<input type="checkbox"/>	Out of Bed with Assistance	Up to chair TID with Meals if eating
<input type="checkbox"/>	Ambulate	
<input checked="" type="checkbox"/>	Intake and Output	Q8H
<input type="checkbox"/>	Please order the Bed Low Bed Order Set outside of PowerPlan	Ask if we can embed order set
<input type="checkbox"/>	Foley Catheter  Policy and Procedures reference text	
<input type="checkbox"/>	NG Tube	Low Continuous, (60-80 mmHg)
<input type="checkbox"/>	Nasogastric Tube	Low Intermittent, (60-80 mmHg)
<input type="checkbox"/>	Chest Tube	




Activity and Nutrition

<input type="checkbox"/>	Cervical Collar	at all times
<input type="checkbox"/>	Carter Pillow	
<input type="checkbox"/>	Sling	
<input type="checkbox"/>	Abductor Pillow	
<input type="checkbox"/>	Traction	Bucks
<input type="checkbox"/>	Traction	Skeletal
<input type="checkbox"/>	D/C IV Fluids	When Taking PO Well
<input checked="" type="checkbox"/>	AM PAC Basic Mobility + Activity Rule (approved by Geri workgroup)	
<input type="checkbox"/>	NPO-Diet	Exception: meds
<input type="checkbox"/>	Regular Diet  Policy and Procedures reference text	
<input type="checkbox"/>	Regular-Diet	
<input type="checkbox"/>	Clear Liquid Diet  Policy and Procedures reference text	
<input type="checkbox"/>	Clear Liquid-Diet	
<input type="checkbox"/>	Consistent Carbohydrate Diet  Policy and Procedures reference text	
<input type="checkbox"/>	Consistent Carb Standard (60g/meal)-Diet  CarePlan Information reference text	



IV Fluids

<input type="checkbox"/>	D5 1/2 NS	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 NS	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 LR	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	1/2 NS	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 1/2 NS + KCL 20 mEq premix	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 LR + KCL 20 mEq 1000 mL	20 mEq
<input type="checkbox"/>	D5 LR + KCL 20 mEq 1000 mL	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	Lactated Ringers	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 1/2 NS + KCL 40 mEq	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 NS + KCL 20 mEq	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	D5 NS + KCL 40 mEq	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	Sodium Chloride 0.9% intravenous solution	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	NS + KCL 20 mEq premix*	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	NS + KCL 40 mEq	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
<input type="checkbox"/>	1/2 NS + KCL 20 mEq	IV, Start: <u>T-N</u> , Duration: 24 HR, Infuse Rate: 40 mL/hr.
	Prescriber: Please order any other type of IV Fluid separately outside of this care set .	

Medications – anticoagulation and pain control

<input type="checkbox"/> Order (free text)	Hold Heparin/ Lovenox due to: Head Bleed
<input type="checkbox"/> Order (free text)	Hold Heparin/ Lovenox due to: Solid Organ Injury
<input type="checkbox"/> Order (free text)	Hold Heparin/ Lovenox due to: Impending Surgery
<input type="checkbox"/> MiraLax	17 gm, By Mouth, Daily, Drug Form: Powder rec, PRN, Constipation, <u>Mix</u> in 8 oz of fluid; hold if loose stool
<input type="checkbox"/> Senna	2 tab(s), By Mouth, AtBedtime, Drug Form: Tab, Each tab contains 8.6mg Sennosides equivalent to 187mg Senna
<input type="checkbox"/> Zofran	4 mg, IV Push, Q8H, Drug Form: Injection, PRN, Nausea or Vomiting (Emesis), For patients 65 years old or older
Medications	
<input type="checkbox"/>  PCA <u>Dilaudid PowerPlan</u>	
<input type="checkbox"/>  PCA <u>fentaNYL PowerPlan</u>	
<input type="checkbox"/>  PCA Morphine PowerPlan	
<input type="checkbox"/> Tylenol	975 mg, By Mouth, TID, Drug Form: Tab Acetaminophen: At home: Use no more than 3000mg/24hrs <u>In</u> hospital: Use no more than 4000mg/24hrs
<input type="checkbox"/> Tylenol	1000 mg, By Mouth, TID, Drug Form: Liquid
<input type="checkbox"/> Tylenol	650 mg, By Mouth, Q4H, Drug Form: Tab or Liquid, PRN, Temp above 38.5 C
<input type="checkbox"/> Tylenol	650 mg, Per Rectum, Q4H, Drug Form: Supp, PRN, Temp above 38.5 C
<input type="checkbox"/> Lidocaine patch PP	Embed in PP
<input type="checkbox"/> Gabapentin	

Medications


<input type="checkbox"/>	ibuprofen	400 mg, By Mouth, TID, Drug Form: Tab, Give around the clock for pain; Use if sulfa allergy present
<input type="checkbox"/>	oxyCODONE	2.5 mg, By Mouth, Q4H, Drug Form: Tab, PRN, Pain, Severe (7-10)
<input type="checkbox"/>	oxyCODONE	5 mg, By Mouth, Q4H, Drug Form: Tab, PRN, Pain, Severe (7-10)
<input type="checkbox"/>	oxyCODONE	10 mg, By Mouth, Q4H, Drug Form: Tab, PRN, Pain, Severe (7-10)
<input type="checkbox"/>	morphine  Nurse Preparation reference text	2 mg, IV Push, Q1H, Drug Form: Tubex, PRN, Pain, Severe (7-10)
<p>Reserve pharmacologic treatment as a last resort for severe agitation, psychotic symptoms, disruptive behavior. Do NOT use benzodiazepines. Recommended medications below, low dose and titrate to effect. (NOTE)* If a pharmacologic treatment is needed, first line approach is Quetiapine, second line approach is Zyprexa, last option is Haldol. (NOTE)*</p> <p>All patients on scheduled antipsychotics should have QTc monitoring. Please monitor EKG for QTc prolongation.</p>		
<input type="checkbox"/>	Melatonin	3mg PO QHS, PRN, insomnia. Maximum dose should not exceed 6mg in 24 hours.
	Trazadone	25mg, By Mouth, At Bedtime, Drug Form: Tab, PRN, Insomnia
<input type="checkbox"/>	Quetiapine	25 mg, By Mouth, BID, Drug Form: Tab, PRN, Other – observed actions impede recovery/healing, limit 2 doses
<input type="checkbox"/>	ZyRREXA Zydis	5 mg, By Mouth, Daily, Drug Form: Tablet, disintegrating, PRN, Other – observed actions impede recovery/healing, limit 2 doses at bedtime within 24 hours Comments: Only give disintegrating tablet if unable to give regular tablet
<input type="checkbox"/>	ZyRREXA Zydis	2.5mg, IM, once, Drug Form: Powder  , PRN, Other – observed actions impede recovery/healing, Comments: only if patient is refusing PO or impeding care, limit 2 doses in 24 hours
<input type="checkbox"/>	Haldol	0.5 mg, IV Push, Q30min, Drug Form: Injection, PRN, Other – observed actions impede recovery/healing, <u>Do</u> not exceed 2 mg per episode and / or 5 mg in 24 hrs, Comments: Only compatible with D5W. If administering into running IV line containing sodium chloride, must flush BEFORE and AFTER with D5W Note: Should not be given to patients with a history of Lewy Body Dementia or Parkinson's disease.
<input type="checkbox"/>	Haldol	0.5 mg, IM, Q30min, Drug Form: Injection, PRN, Other – observed actions impede recovery/healing, <u>Do</u> not exceed 2 mg per episode and / or 5 mg in 24 hrs.

LABS




General Lab/AP

No routine labs between 10p and 6am


In the AM

<input checked="" type="checkbox"/> Lytes (Na,K,Cl,Co2)  Policy and Procedures reference text	Next 8 AM
<input checked="" type="checkbox"/> BUN (Blood Urea Nitrogen)	Next 8 AM
<input checked="" type="checkbox"/> Glucose Level	Next 8 AM
<input checked="" type="checkbox"/> CBC and Diff with Platelet	Next 8 AM
<input type="checkbox"/> Platelet Ct	Next 8 AM
<input type="checkbox"/> Prothrombin Time (PT), Level	Next 8 AM
<input type="checkbox"/> Activated PTT, Level	Next 8 AM
<input type="checkbox"/> Sodium (Na) Level	Next 8 AM
<input type="checkbox"/> Magnesium Level	Next 8 AM
<input type="checkbox"/> Vitamin D (25 Hydroxy) Level	Next 8 AM
<input checked="" type="checkbox"/> Albumin Level	Next 8 AM
<input type="checkbox"/> Phosphorus Level / PO4 Level	Next 8 AM
<input checked="" type="checkbox"/> Calcium Level	Next 8 AM
<input type="checkbox"/> Hematocrit	Next 8 AM

RADIOLOGY and THERAPIES

Radiology		
<input type="checkbox"/>	XR Chest 1 View Exam	
<input type="checkbox"/>	CT Head with Contrast  Nurse Preparation reference text	
<input type="checkbox"/>	CT Head without Contrast  Nurse Preparation reference text	
Diagnostic Tests/Procedures		
<input type="checkbox"/>	EKG 12 Lead  Policy and Procedures reference text	
Consults/Therapies		
<input type="checkbox"/>	Respiratory Consult	
<input checked="" type="checkbox"/>	Cough and Deep Breathe	Q2H
<input type="checkbox"/>	Oxygen (O2) Respiratory	

CONSULTS

<input checked="" type="checkbox"/>	Incentive Spirometry (Nursing)	PRN, While <u>Awake</u>
<input type="checkbox"/>	Comprehensive Rehab Services	
<input type="checkbox"/>	Occupational Therapy consult	
<input type="checkbox"/>	Social Services consult	
<input type="checkbox"/>	Social Services consult	Substance abuse treatment referral
<input type="checkbox"/>	Medicine, A Service Consult  Policy and Procedures reference text	Syncope or near syncope episode, mental status change, multiple comorbidities
<input type="checkbox"/>	MD Consult	Diabetes Mellitus - glycemic control
<input type="checkbox"/>	Dietitian Consult (not TPN)	
<input type="checkbox"/>	Consult Respiratory	
<input type="checkbox"/>	Consult Home Care	
<input type="checkbox"/>	Geriatric Consult	Consider in all pt's over 65, especially with underlying frailty and/or pre-existing cognitive dysfunction. AMPAC Mobility \leq 18
<input type="checkbox"/>	Speech/Language Pathology Consult	Evaluate and treat patient, develop plan of care, and implement plan of care.
<input type="checkbox"/>	Pharmacy Consult	
<input type="checkbox"/>	Neurology Consult	
<input type="checkbox"/>	Palliative Care Consult	

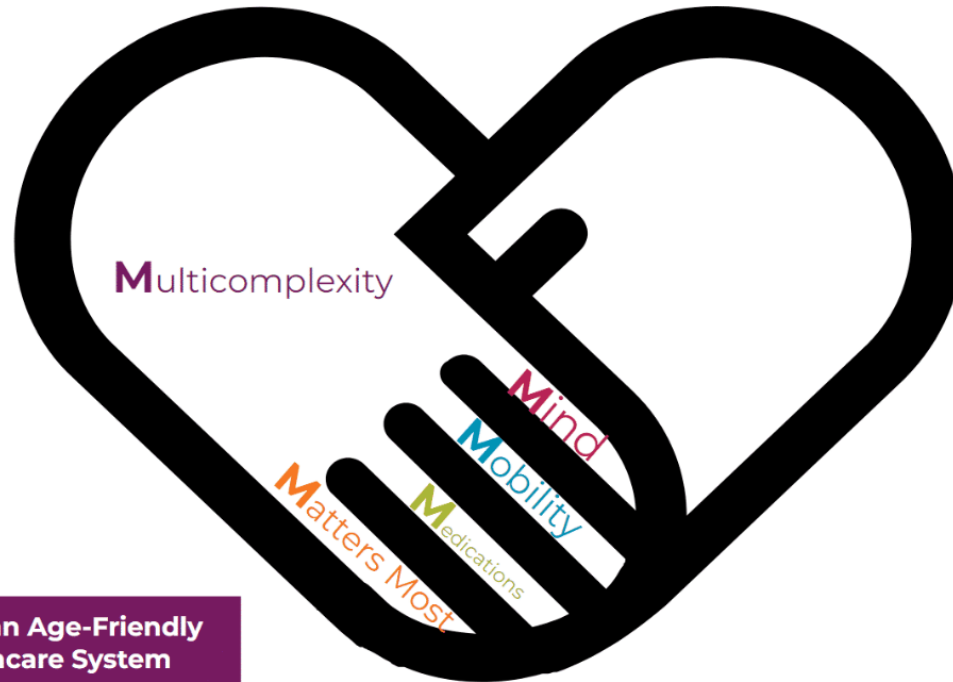
Pending Proposal

- Our subcommittee/workgroup requested this updated Power Plan be active for all the adult trauma centers in the UPMC system.
- This is enormous ask in view to our future transition to UPMC Bridges-powered by EPIC, however our workgroup feels this is vital in the success of changing the culture of how we care for geriatric trauma patients.
- These updates are immediately necessary for our initiative to promote safety, reduce variability, and reduce geriatric hospital events that affect over 13% of our elderly trauma patients.
- The new geriatric initiative including the U-Learns, in conjunction with a revised Power Plan will potentially reduce our hospital events by 2/3 across the UPMC Trauma System and help approximately 500 of our elderly patients each year.

Next steps

- Proposal was approved by the UPMC EPG committee 10/19/2023
- The proposal has been escalated to the UPMC Operational Excellence committee for final review on 12/7/2023

UPMC Trauma System



5 Ms of an Age-Friendly
Healthcare System

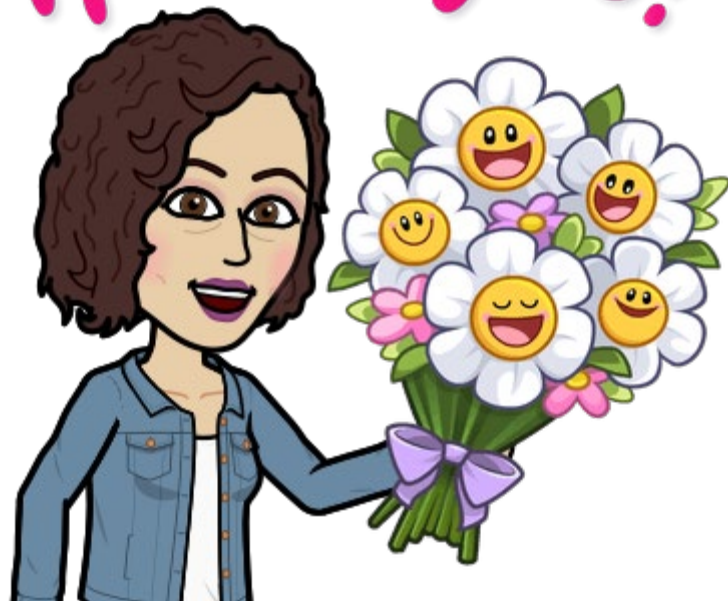
Future Implications

- This system-wide geriatric trauma education initiative has the potential to impact quality and safety in the care of older adults who have experienced trauma across the UPMC trauma service line. Ultimately, contributing to better care in the communities served by UPMC across Pennsylvania and Western Maryland.

This makes it all worth what we do...
our geriatric trauma survivors



THANK YOU!





Third Annual Age-Friendly 4Ms Conference: The Age-Friendly Ecosystem

November 17, 2023



Making What Matters Happen

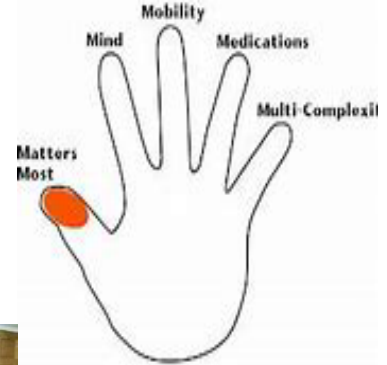
Susan Pearson, LCSW, ACM-SW

Alyssa Lisle, LSW, ACM-SW

What do we mean “What Matters Most?”

Taking each patient’s own meaningful health outcome goals and care preferences into consideration:

Making What Matters Happen



BINGO				
1	27	33	48	75
8	19	45	56	61
3	18	FREE SPACE	49	69
15	26	41	53	66
2	21	37	46	65



IN HOME
Urgent Care Plus



- Programs through health insurance
- Community Life/Life Pittsburgh
- ETIPs
- EMS Connect
- Next Day In Home Urgent Care Plus
- Waiver services
- AAA –Meals on Wheels, senior farmer's markets
- OSN
- Team PSBG
- AHN River Clinic
- Street Medicine
- MATP
- Go Go Grandparent
- Access
- Home care/Home infusion
- Home hospice
- DME
- Paws Across Pittsburgh SAFE Temporary Foster
- Collaboration with outpatient/community providers
- Mobile Notary
- Disease-specific foundations/organizations
- Diabetic Educator
- Food bank
- Mom's Meals
- VA
- SUD/Mental health treatment & linkage to services
- Support groups
- Utility payment assistance
- Rent payment assistance
- APS
- Multi-generational household services
- Dialysis
- Home modification organizations/resources
- Advance Directives
- Assisted Living/Personal Care placement agencies

EMS Connect

- Resident of Allegheny County
- Visit by community paramedic in the home to help keep medically fragile, complex patients out of the hospital



The **evolution** of Community Paramedicine in Western Pennsylvania.



2003 **February**
The RK Mellon Foundation generously donates \$150,000 to the Center for Emergency Medicine of Western Pennsylvania Inc. to launch Emed Health, one of the earliest community paramedic programs in the country.

2011 **August**
Allegheny County EMS Council, the CONNECT Congress of Neighboring Communities and Center for Emergency Medicine of Western Pennsylvania, Inc. meet to develop the CONNECT Community Paramedic program. This initiative was the first attempt to create a multi-agency, multi-hospital and multi-payer Community Paramedic program in the country.

2013 **September**
Two-year funding received from UPMC, Highmark, and the Highmark Foundation .
CONNECT Community Paramedics begin to visit patients.

2016 **September**
269 patients helped by CONNECT Community Paramedics. Program continues on no-cost extension from original grant and continues to transition to self-sustaining model.

Future **Vision**
CONNECT Community Paramedic programs evolves into a regional program, with sustained funding through Pennsylvania Medicaid, commercial health insurance and other population health initiatives.

Community Life/Life Pittsburgh

Eligibility

- 55 years and older
- Meet level of care needs for skilled nursing facility or special rehab facility
- Meet financial requirements determined by county assistance office (Medicaid) or be able to private pay
- Able to be safely served in the community



Services Offered

- Medical services – primary care, behavioral health, 24/7 on-call MD/RN, vision, dental, audiology, home health, PT/OT/SLP, imaging, prescriptions, medical equipment, SNF
- Day center
- Free transportation to day center/medical appointments
- Respite care and education for caregivers



In-Home Urgent Care Plus *(formerly Stac Lite)*

- Allegheny County residents with UPMC health insurance
- Divert ER patients from a CDU or inpatient admission
- Next day in-home visit from community paramedic and video appointment with a provider
- EKG, Defibrillation, X-Ray, Dopplers, Ultrasound
- O2, urinalysis/urine cultures, labs, viral swabs
- Limited wound care, suture/staple removal
- Medication administration
- DME
- Referrals to AID, Remote Monitoring, Health Plan Special Programs



Here's what you need to know about a new program,
In Home Urgent Care Plus.

Health Plan Special Programs

Living-At-Home Program

Geriatric Care Coordination

The Living-at-Home Program provides care coordination for ongoing in-home care for older adults.

The program makes referrals for a range of services, to help older adults live independently for as long as possible, such as:

- Home-delivered meals
- Grocery shopping
- Housekeeping
- Yard work

Personalized Treatment

The nurse and social worker will develop a care plan for you and recommend services to provide any needed care. Your personalized care plan will be developed with input from you, your family, and caregiving friends, as well as our health care professionals.

“I want to go home”

Where is home?

What resources does this patient already have at home?

What resources is it going to take to get this patient home?

When what matters to the patient and family differ

Are there safety concerns? What resources are available to address safety concerns?

Are specific interventions needed which can't be done at home?

Is mediation or compromise a possibility?

Does the concerned family live local or are they concerned from afar?



Case Studies

Home is not Pittsburgh



Mr. U is an 86 year old male in Pittsburgh from New Jersey with his wife. They were planning to stay overnight and board a riverboat cruise. He fell outside of the hotel, his injuries included right acetabulum fracture and a right rotator cuff tear. Neither him or his wife Donna were familiar with Pittsburgh. Pt's wife initially said all that mattered to her was for the patient to be "okay". As the hours progressed, what mattered most to the patient and wife was for the patient to get back to New Jersey and for her to have a safe place to stay.

Go Go Grandparent

Uber

Westin/Marriot/Family House

Skilled Nursing Facilities in New Jersey



Home Alone ????? On Hospice??



Ms M is a 78 yo female with history of metastatic esophageal ca, vocal cord paralysis, with trach, living alone in community. Her cancer was originally diagnosed in 2018, reoccurrence with trach and Jtube in 2/23. Pt was discharged to a SNF initially after trach placement and has since refused to return to a skilled setting. Patient has been declared competent to make her own decisions. She has minimal local supports; known supports are a niece and a cousin. Since her cancer reoccurred patient has had 6 inpatient admissions and 12 Emergency Department visits. Most visits related to SOB/Anxiety/Trach problems. (18 ALS trips home)

Previous Home Care

New Home Care

Connect EMS

Insurance fax, email and call (no results or assistance)

Hospice – return to Emergency Department

New Hospice agency with specialized respiratory services

Home Means Pittsburgh



TH is a 67 yo male with history of cirrhosis, substance use disorder, seizure disorder, and bilateral cataracts who was recently released from jail and is unhoused. Multiple trips to the ED related mostly to falls due to inability to see. Declined at Medical Respite and homeless shelters due to inability to see and therefore inability to care for self. Declined from Life Pittsburgh due to not having housing. Referrals sent to 945 SNFs in PA, OH, WV, NY, VA, and MD

Operation Safety Net
AHN River Clinic

Home is Where the Wife Is



JS is a 95 yo male who presented as a Level 2 trauma after a fall, found to have R IPH and L SDH. JS is the primary caregiver of his 89 yo wife w/ Alzheimer's and their adult sons live in eastern PA. PT recommended SNF, JS was not interested and wanted to be back with his wife. Sons expressed concerns about JS returning home and caring for wife given multiple recent falls. Provided information for county senior lines, Community Life, and ALF/PCH placement organizations to sons. PT then changed recommendation to IPR, which JS was agreeable to.

UPMC Health Plan Transitions Case Manager
discharged from IPR to ALF in central PA where he and his wife could live together



Thank you

