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# Geriatric Bootcamp: Week 1

## Kickoff Session!

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# The IPRO QIN-QIO

## The IPRO QIN-QIO

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- 12 regional CMS QIN-QIOs nationally

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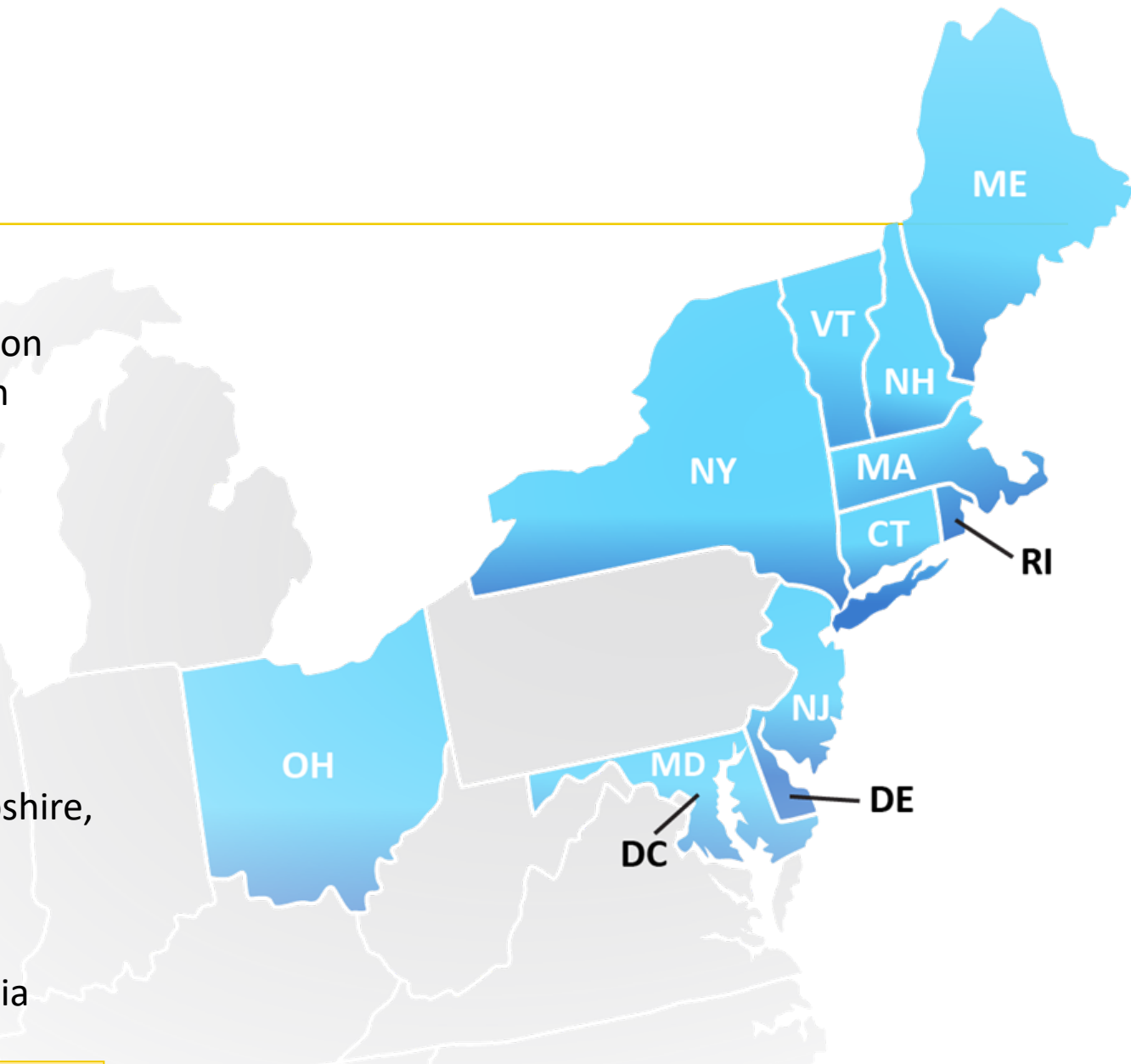
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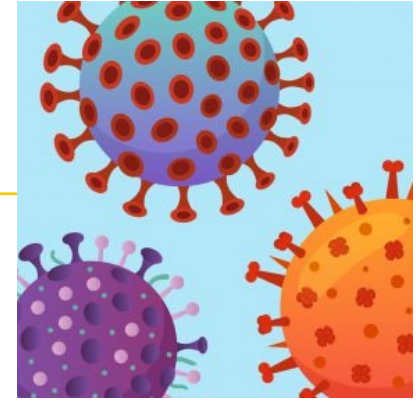


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# COVID-19 Update

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## Hospitalizations (as of 7.29.23)

- **2.73 per 100,000** COVID-19 admissions
- **Increase of 12.5%**

## Deaths (as of 8.5.23)

- 10% increase from prior week

## Latest Variants (as of 8.5.23)

- EG5: 17.3%
  - “Eris”
  - Similar to XBBB1.5 (carries one mutation to its spike protein)
  - No evidence of increase in disease severity per WHO

## Vaccine Update

- Pfizer, Moderna, and Novavax
- Expected to be widely available in the U.S. by the 3<sup>rd</sup> or 4<sup>th</sup> week in September



# Geriatric Bootcamp Kickoff

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Lynn McNicoll, MD



Photographer Arianne Clément

# Outline

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- Review the basic principles of the comprehensive geriatric exam and the intersection of aging, disease, and frailty
- Incorporate new insights from medical literature
- Discuss how to incorporate preventive care strategies into our routine practice
- Discuss the top 10 reasons for readmission in the Northeast

# Objectives

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1. List the key principles of a comprehensive geriatric assessment
2. Describe how to interpret medical literature for the frail nursing home population
3. Describe the most common reasons for readmission to the hospital and how to prevent it

# Series Overview

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- Offers a practical review of common medical and surgical conditions as well as aging principles
- Led by a team of academic geriatricians and providers who care for older adults in nursing homes as well as teach and perform research
- Divided into conditions most commonly found in skilled care short-term rehabilitation residents and long-term care residents, with recognition that there is some overlap
- Provide updates on recent medical advances, standards of care, and best practices regarding these common topics that nurses and aides may utilize daily to improve the care of their residents

# Series Topic Areas

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## **Skilled Care Topics**

- Postoperative Management
- Delirium
- Trauma Care
- Acute GI Bleed
- AKI and Retention
- Heart Failure
- UTIs

## **Long Term Care Topics**

- Parkinson's Disease
- Diabetes
- Dysphagia and Malnutrition
- Polypharmacy and Deprescribing
- Stroke Management
- Staff Retention and Training



# Keys to a Proper Comprehensive Geriatric Assessment

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- Full medical and problem-based assessment including psychological and social determinants of health
- Cognitive and functional evaluation
- Complete medication review
  - Including under prescribing (e.g., calcium, vitamin D, etc.)
  - Prescription and OTC
  - Recent changes by PCP in the hospital or at the facility (review changes done by other providers on the team)
  - Beer's list
- Review of interactions of diseases, medications, and functional or cognitive decline, in the context of goals of care

# Key Elements of Geriatrics Care

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Comprehensive assessment: cognitive, physical (mobility, strength, balance), social function (hearing, vision)

Identify and intervene on social determinants of health

Shared decision-making (patient-directed care): patients, caregivers, clinicians

All interventions consider the value proposition: likelihood of help or harm informed by comprehensive assessment

Goals of care conversations are vital

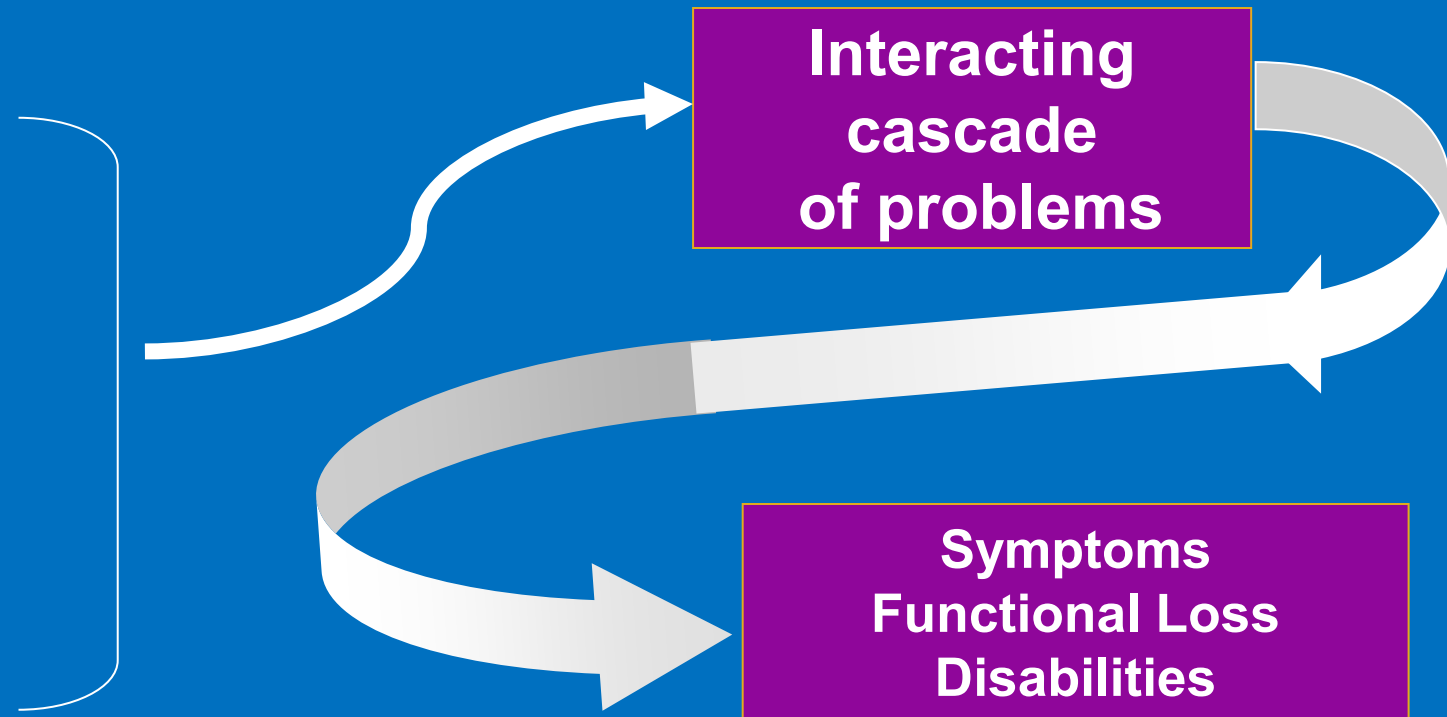
Communication among interdisciplinary team members across health care settings

# Disease Cascade in Older Persons

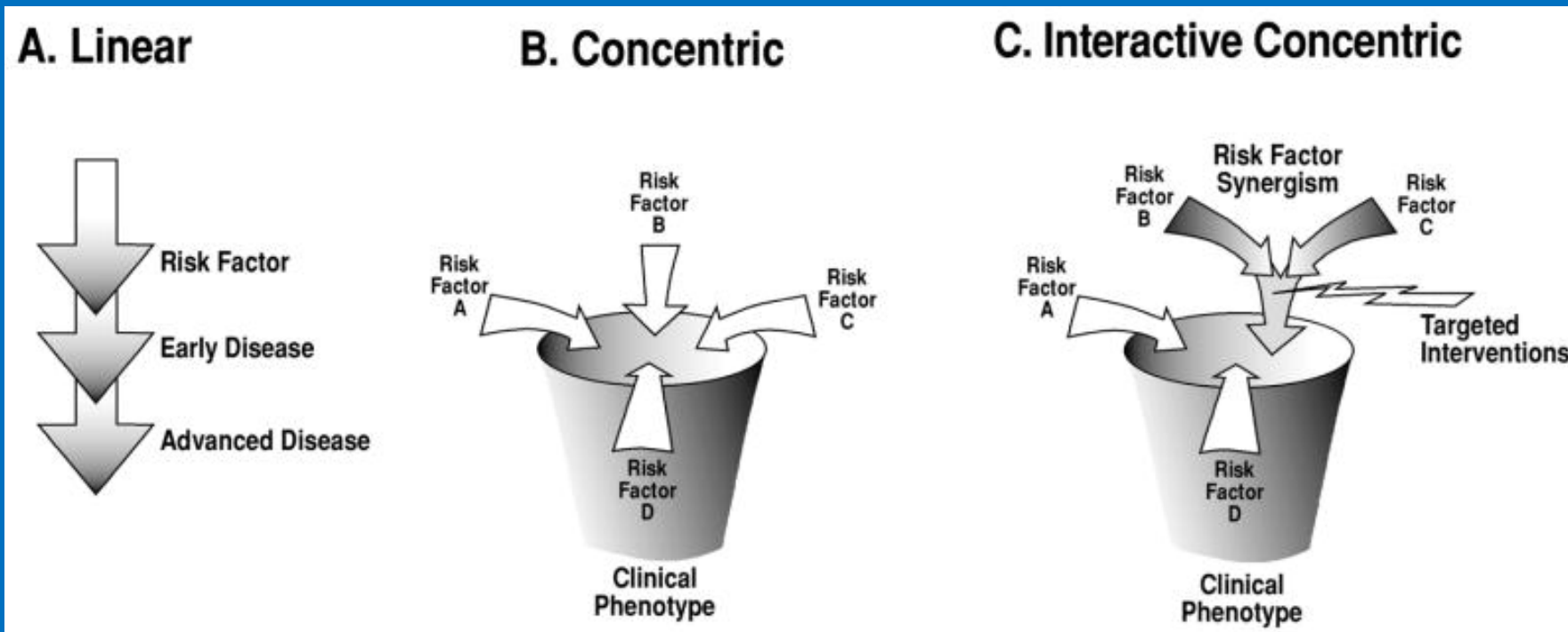
## Young Adults



## Older Persons



# Geriatric Syndromes





## Jeanne Louise Calment

- Born in Arles, France 2/21/1875
- Died at **122 1/2** in Arles in 1997
- She met Van Gogh in her father's shop
- Longevity in her parents: her mother died at 86, father at 94
- She rode a bicycle until age 100
- She dictated her autobiography at 115
- She had hip fracture repair at 115
- She was blind and deaf near the end
- “A kind God forgot me.”

# Risk Factors for Geriatric Syndromes

## NON-MODIFIABLE

- History of fall
- Cognitive impairment
- Age >80
- Multiple morbidities

## MODIFIABLE

- Visual impairment
- Medications
- L/E weakness
- Balance/gait abnormality
- ADL impairment
- Depression
- Use of assistive device
- Social isolation

# What does frailty look like?



# Failure to Thrive (FTT) Definitions

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- A syndrome of global decline that occurs in elders as an aggregate of physical frailty, cognitive impairment, and functional disability (Source UpToDate)
- State of decline in an older person that is multifactorial, manifested by weight loss, dec appetite, poor nutrition and inactivity. Often accompanied by depressive symptoms, impaired immune system, low albumin and cholesterol (Source: Geriatric Clinical Advisor)
- Term is going out of favor due to negativity



# Frailty Definitions

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- Decreased physiological reserve affecting multiple systems, when aging and disease lead to a critical mass of deficits, resulting in impaired function, malnutrition, and weight loss  
(Source: UpToDate)
- Physiologic state of increased vulnerability to stressors, resulting from decreased physiological reserves or dysregulation of multiple physiologic systems, clinically characterized by weight loss, weakness, fatigue, and gait abnormalities (Source: Geriatric Clinical Advisor)
- All nursing home residents could be considered frail but not all have failure to thrive

# Sarcopenia Definition

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- Extreme muscle loss is often a result of both diminishing anabolic signals, (i.e., a decrease in growth hormone and testosterone) and promotion of catabolic signals, (i.e., pro-inflammatory cytokines)
- A common component of both failure to thrive and frailty
- Replacement of muscle fibers with fat and fibrosis
- 0.5-1% loss per year after the age of 25

# Healthy vs Sarcopenic Thigh

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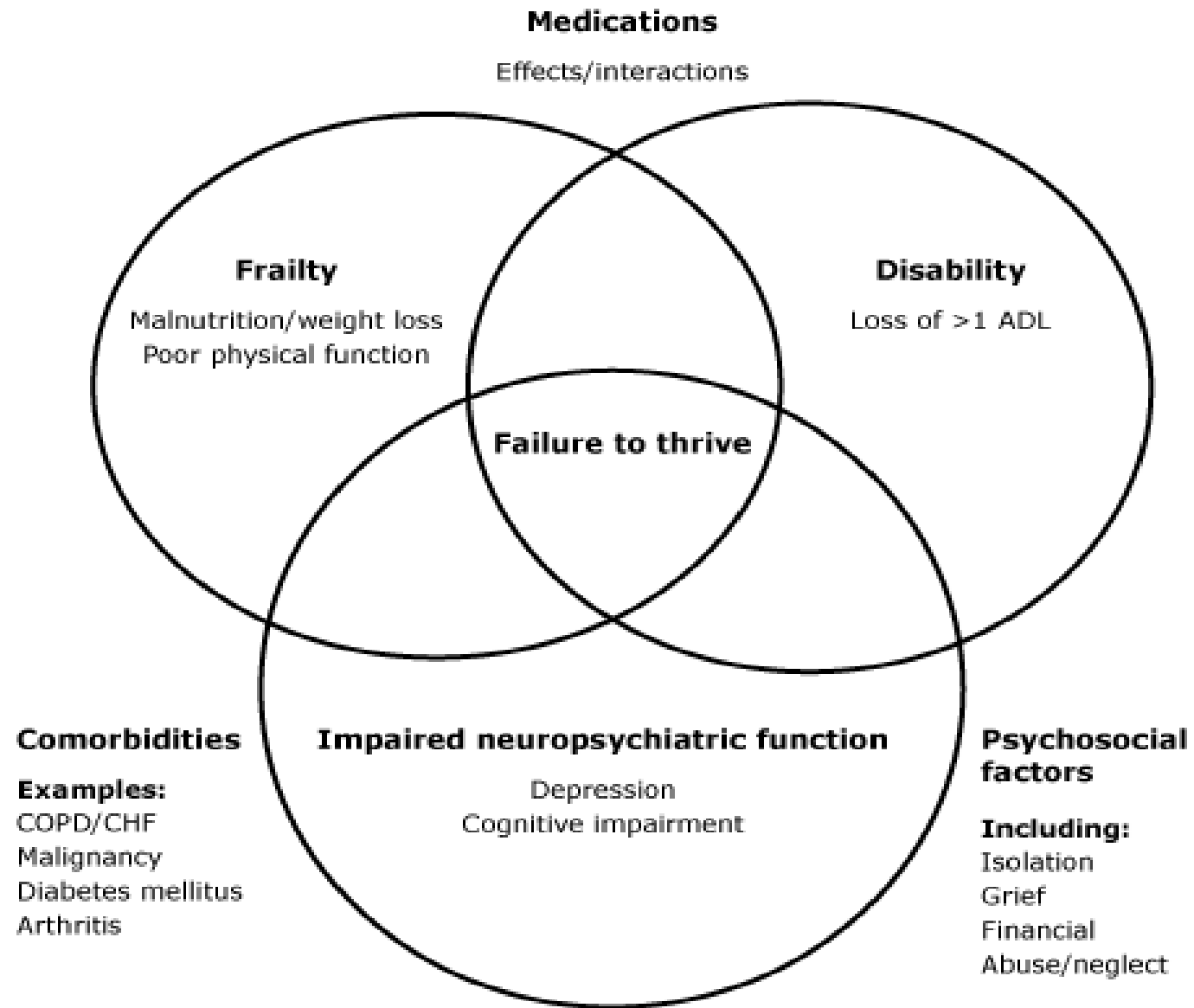
# Sarcopenic Obesity

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- A person with an increase in fat mass and a reduction in lean muscle mass
- BMI may be appropriate or high, but person is essentially undernourished with respect to protein intake
- Usually as a result of increased weight, decreased activity, with continued caloric intake above and beyond the daily nutritional requirements

## FTT components

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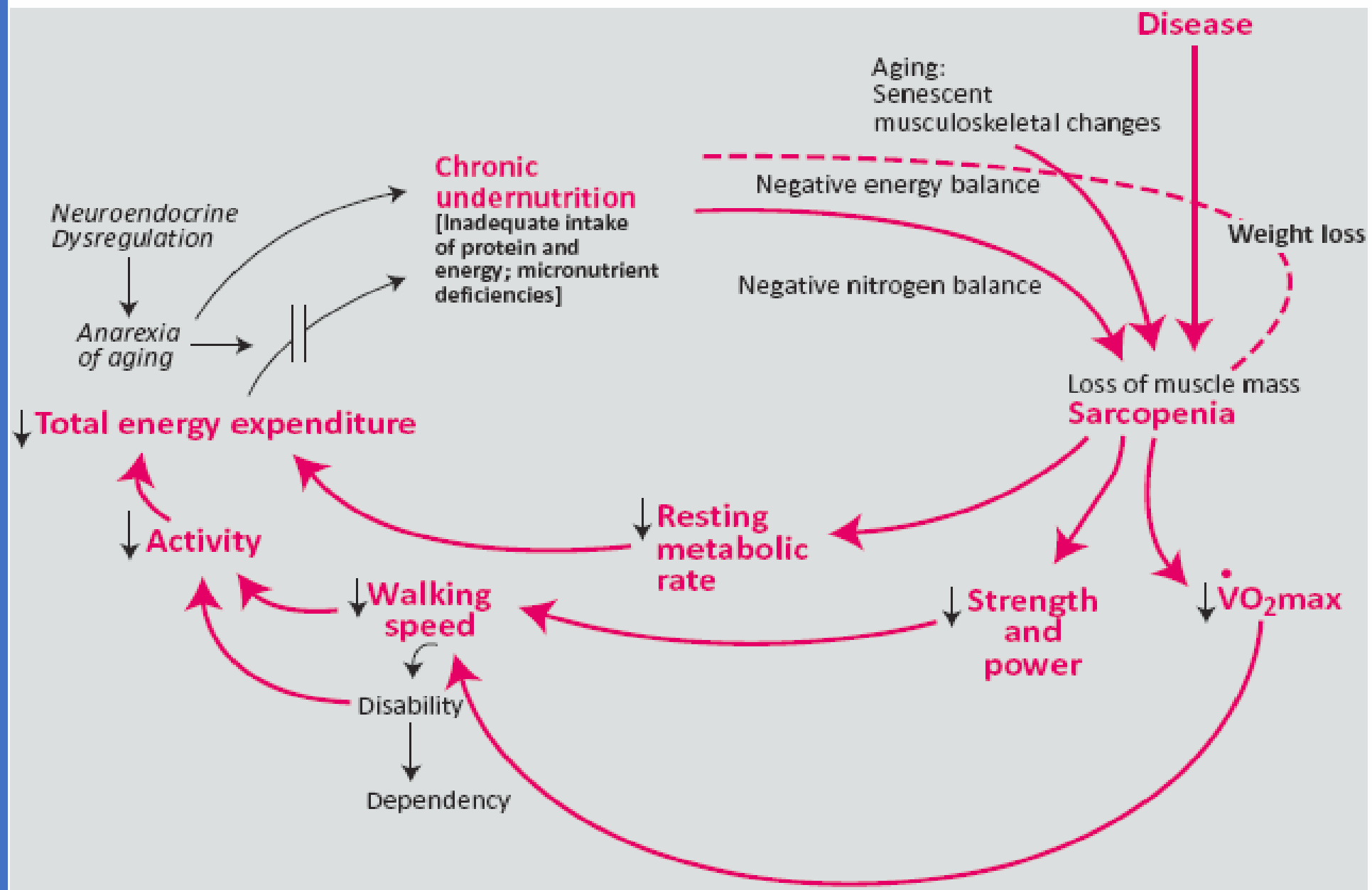


Fig 2. The frailty cycle  $VO_2$  = volume of oxygen utilisation. Reproduced with permission from The McGraw-Hill Companies.<sup>2</sup>

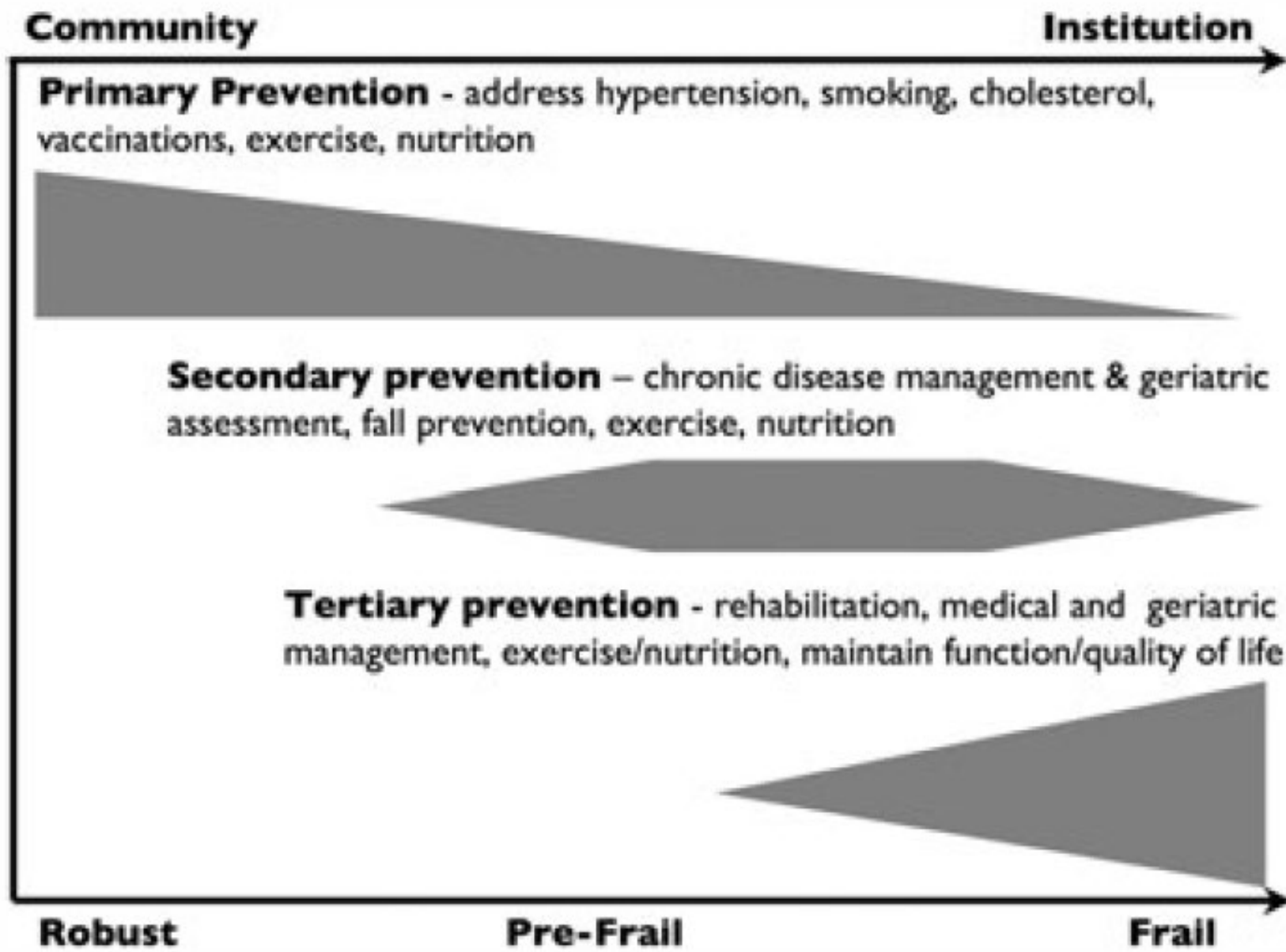


Figure 4. Opportunities for prevention of frailty.

# Where the Medical Literature Fails the Nursing Home Resident

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- Scientific research almost always excludes the nursing home resident
- If included, often involves retrospective studies that are the least robust among studies (not placebo controlled randomized trials)
- Only include the best of the best among NH residents
- How do we interpret the literature with our typical NH resident?



# Preventive Care Strategies in LTC

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- Many preventive care strategies do not apply to our patient population due to age, life expectancy, and frailty considerations
- Age cutoffs for cancer screening
  - Breast - 75
  - Cervical - 65
  - Colon - 75
  - Prostate – not clear
  - Lung – 80 in smokers
- Eprognosis can be used to estimate life expectancy if younger individual

# Preventive Care Strategies in LTC

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- Bone density – time to benefit for osteoporosis treatment is 1 year, so worth checking if not already diagnosed or treated if life expectancy is  $> 1$  year
- Diabetics – check for neuropathy, renal proteinuria, eye exams
- Vaccinations beneficial

# Readmission Reduction Strategies

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- Empowering staffing
  - Training and retention strategies
- IHI age-friendly initiatives
  - 4 Ms (What Matters, Medications, Mobility, and Mentation) or 5 Ms including Multimorbidity

<b>Rank</b>	<b>CCS Category</b>	<b>CCS Description</b>	<b># of Readmissions (Jan-Dec 2022)</b>
1	INF002	Septicemia	6,197
2	CIR019	Heart failure	2,921
3	GEN002	Acute and unspecified renal failure	1,760
4	INJ034	Complication of genitourinary device, implant or graft	1,712
5	INJ037	Complication of other surgical or medical care, injury	1,633
6	GEN004	Urinary tract infections	1,582
7	DIG021	Gastrointestinal hemorrhage	1,220
8	END003	Diabetes mellitus with complication	1,156
9	RSP002	Pneumonia (except that caused by tuberculosis)	1,110
10	RSP012	Respiratory failure; insufficiency; arrest	1,023

# Conclusion

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- Great geriatric care involves seeing the resident holistically
- It involves anticipating and preventing complications
- The literature offers limited information and requires extrapolation on our part

