

Healthy Aging: Managing Stress and Understanding Your Health Priorities

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Disclosures

- Behavioral Consultant for Fresenius Medical Care

The Evolution of the Healthy Aging Concept

Disease or
Disability

Pathologic

No Disease
or
Disability

Non-Pathologic



The Evolution of the Healthy Aging Concept: Rowe & Kahn 1987

Successful aging defined:



Low probability of
disease & disability



High Cognitive & Physical
Functional Capacity



Active Engagement in Life



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SCHOOL of NURSING

Rates of Successful Aging Using This Criteria

- **16%-24%**

- (British Longitudinal Survey of Ageing) Bowling and Iliffe 2006

- **11.9%**

- (Health and Retirement Study, US data) McLaughlin et.al. 2010

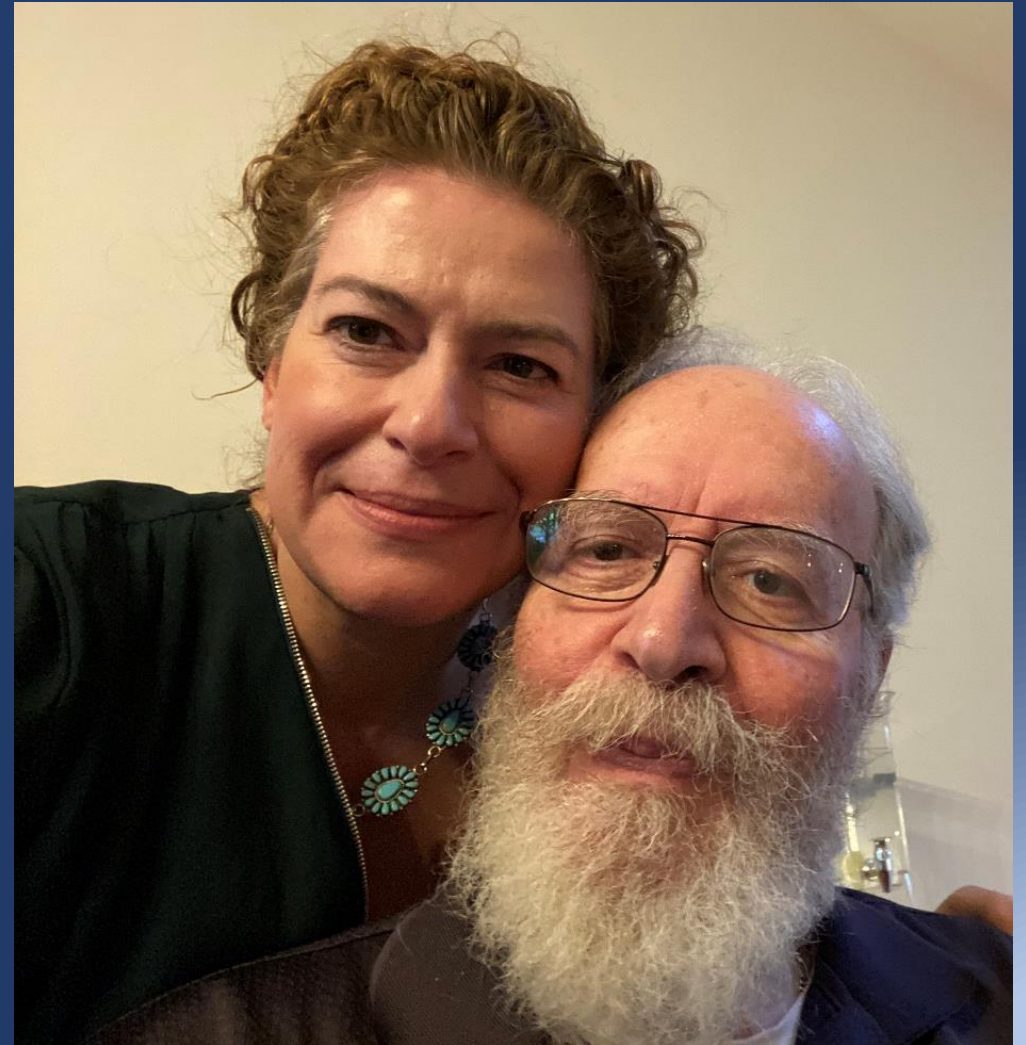
Physiological, Psychological and Social Dimensions

- Young et.al. defined successful aging:
 - “a state in which a person uses physical and social adaptive strategies to achieve a sense of well-being, high self-assessed quality of life, and a sense of personal fulfillment even in the context of illness and disability”(2009)
- Alternatives: Balanced Aging, Resilient Aging, Harmonius Aging, Healthy Aging

What does it mean to age successfully?

“... participating in outdoor activities like walking to the town center (not there yet) and having like-minded community. And in my case, able to play music, and play with hobbies and following scientific discoveries with discussion.”

-Pedro deCardi (aka Dad)



Stress & Chronic Disease



Lifetime cumulative stress burden

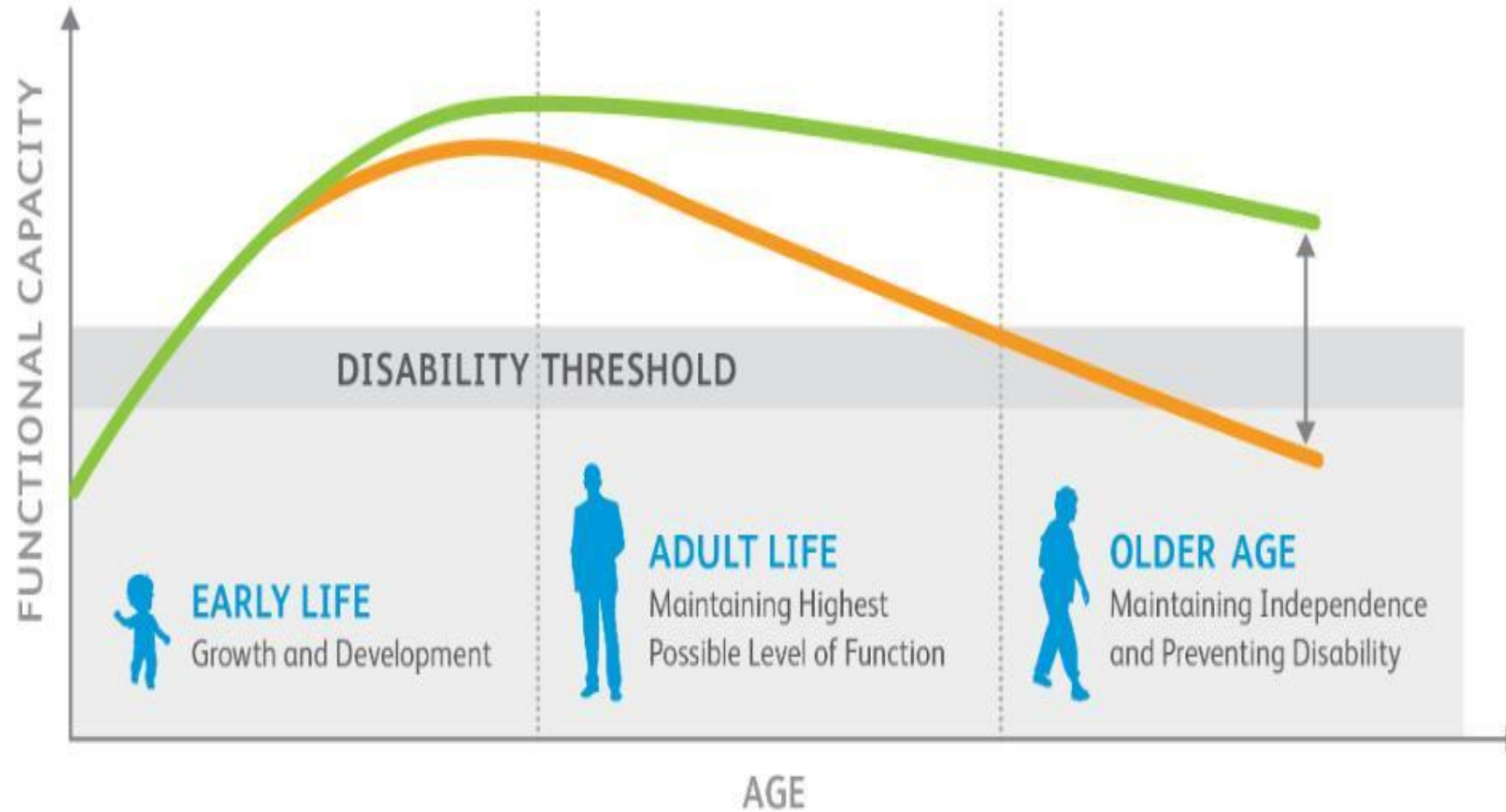


Continued disease burden & progression



Big Differences in how people age

Aging in better health across the life course can reduce disease and disability in older age.



Source: Adapted from Kalache, A., Kickbush, I. A Global Strategy for Healthy Ageing. World Health, 1997 50(4)-5.

What “Older” Adults Want to Maintain

- High energy levels
- Good health
- Live independently
- Clear thinking
- Enjoyable social contacts and meaningful activities



What “Older” Adults Want to Avoid

- Catastrophic outcomes after procedures or treatments
- Chronically poor health
- Functional dependence and dementia
- Isolation, lack of meaningful engagement



Titi Aida 1992

How Do We Get There?

The Oak and the Reed

An Oak that grew on the bank of a river was uprooted by a severe gale of wind, and thrown across the stream. It fell among some Reeds growing by the water, and said to them,

"How is it that you, who are so frail and slender, have managed to weather the storm, whereas I, with all my strength, have been torn up by the roots and hurled into the river?"

"**You were stubborn,**" came the reply, "and fought against the storm, which proved stronger than you: but we bow and yield to every breeze, and thus the gale passed harmlessly over our heads."

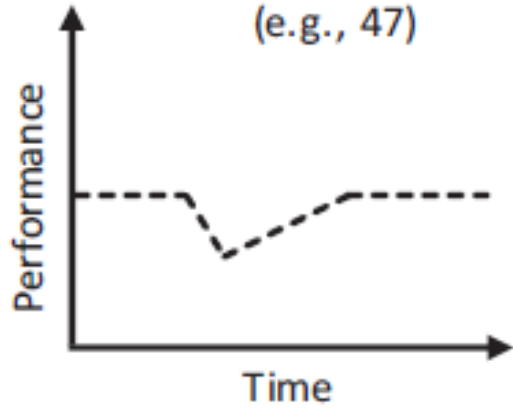
(Aesop's Fables: The Oak and the Reed)



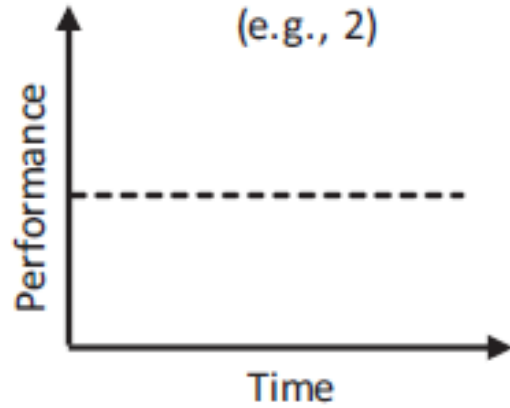
(Milo Winter 1919)

Resilience Trajectories

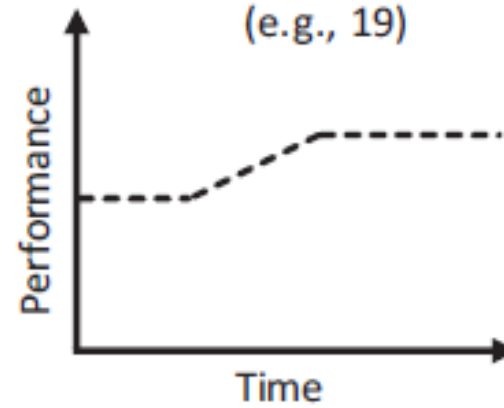
(A) Recovery
(e.g., 47)



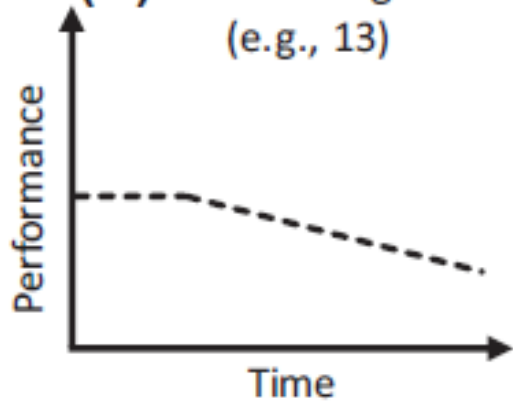
(B) Absorption
(e.g., 2)



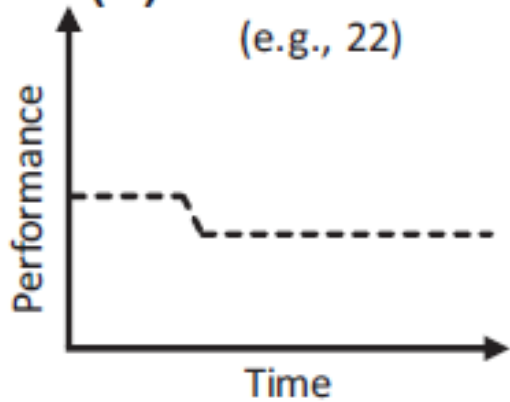
(C) Improvement
(e.g., 19)



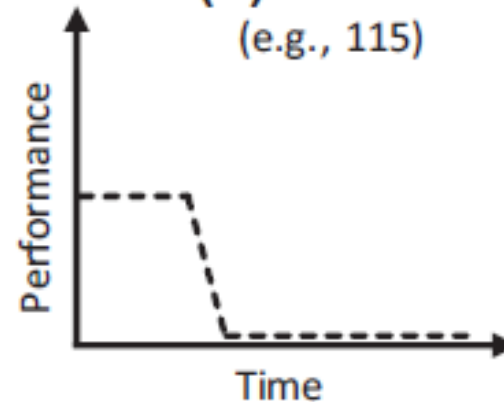
(D) Graceful degradation
(e.g., 13)



(E) Minimal deterioration
(e.g., 22)

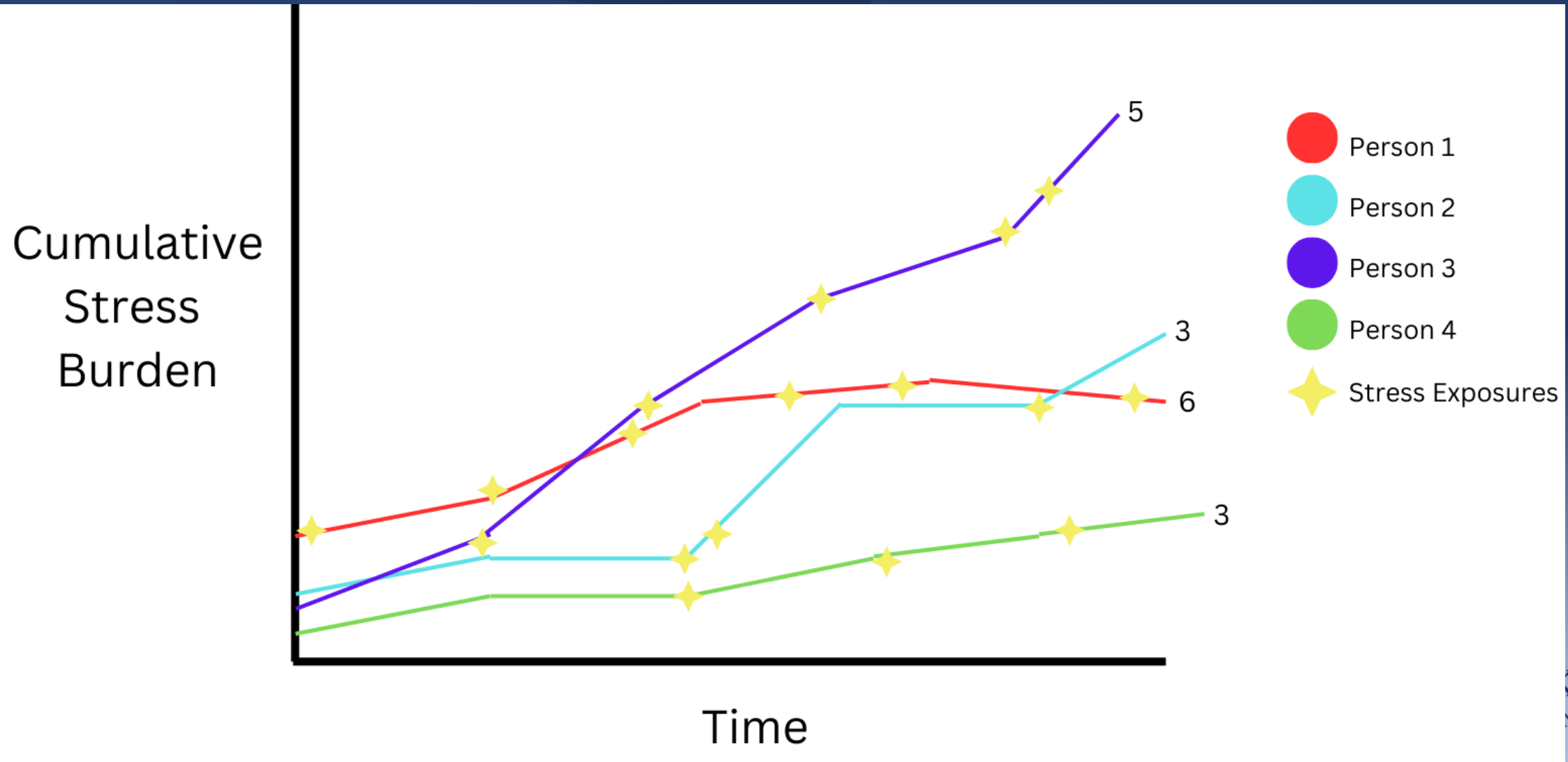


(F) Survival
(e.g., 115)

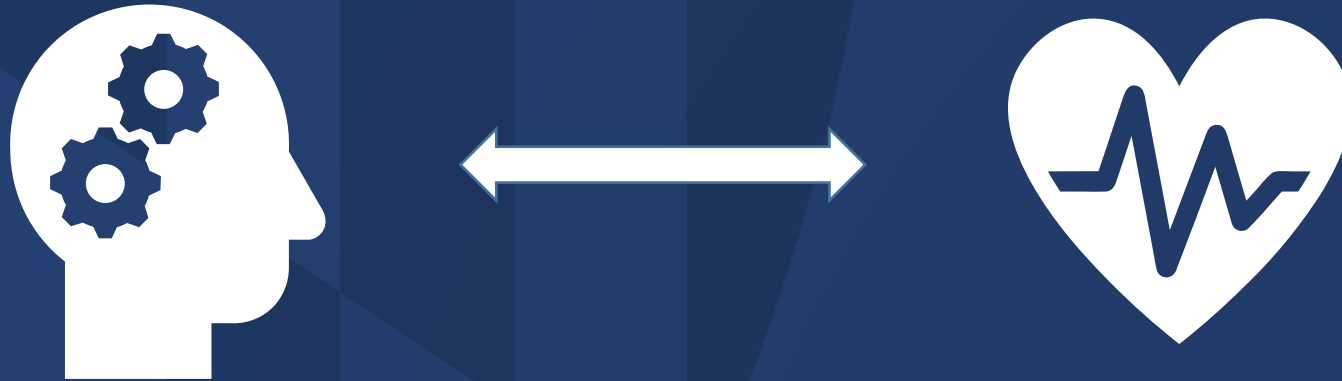


Wied et al. 2019

Stress Trajectories Differ Across Time

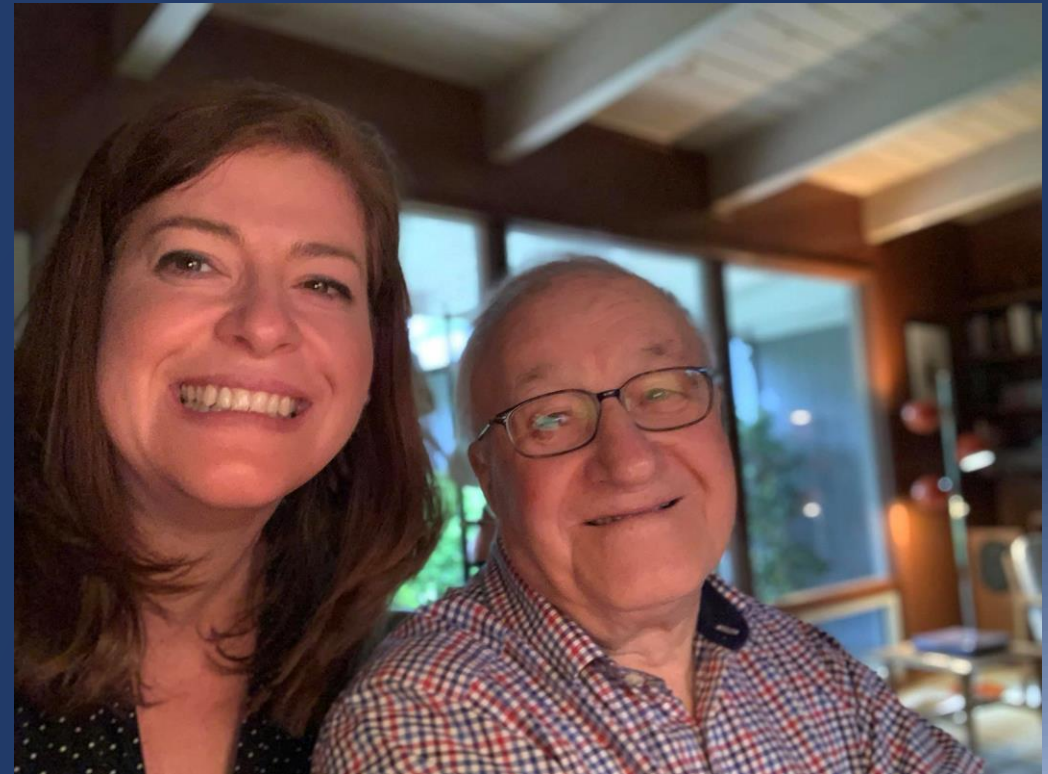


Physical vs. Psychological Resilience



Self-Efficacy

- Self-Efficacy
 - One's belief that they can accomplish a specific task or behavior
 - Even in the face of adversity
 - Take control where we can



Developing Self-Efficacy

I used to give my husband insulin shots so I think I can give myself shots



Development of Self-Efficacy



Adapted from Bandura 1997



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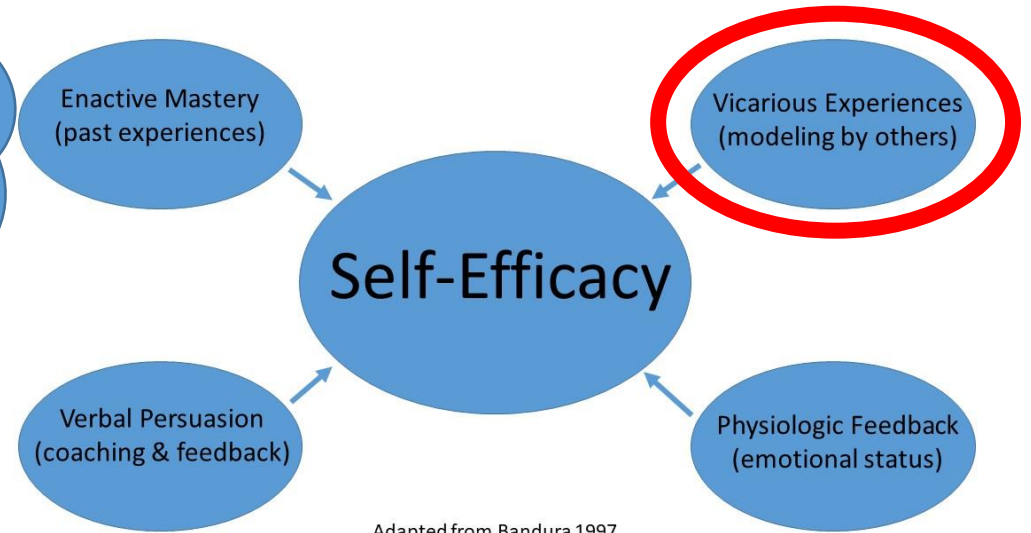
Developing Self-Efficacy

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My sister started exercising with her friends, maybe that would work for me too



Development of Self-Efficacy



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Developing Self-Efficacy

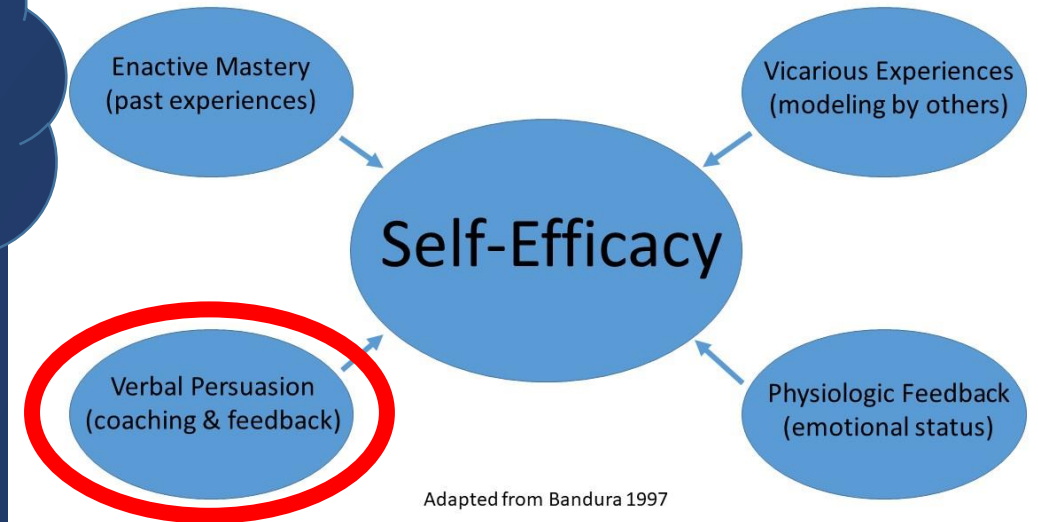
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My doctor keeps telling me I can quit smoking and he'll help, maybe I can?



Development of Self-Efficacy



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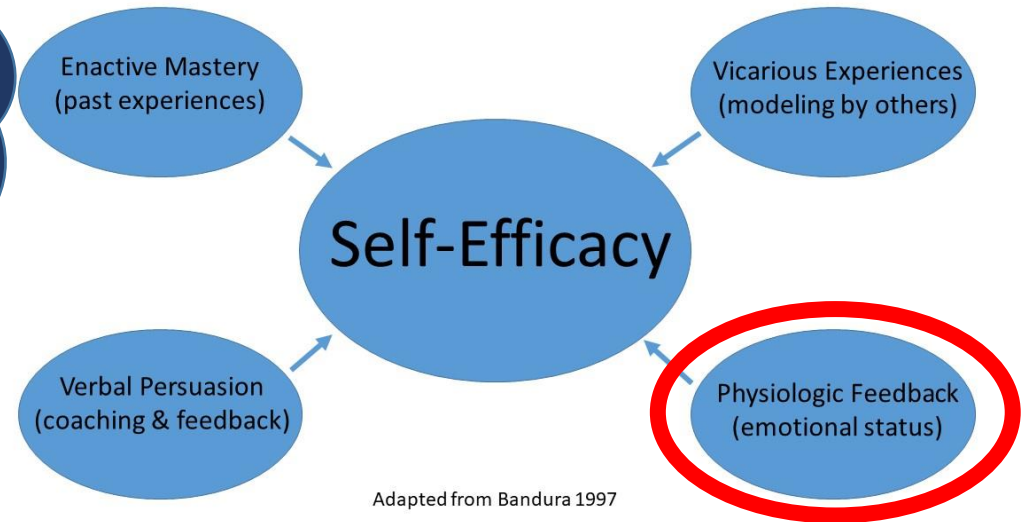
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My doctor keeps telling me I can quit smoking and he'll help, maybe I can?

My heart pounds when I go to the store, but I remind myself I'm wearing my mask & distancing

Development of Self-Efficacy



Developing Self-Efficacy

I used to give my husband insulin shots so I think I can give myself shots

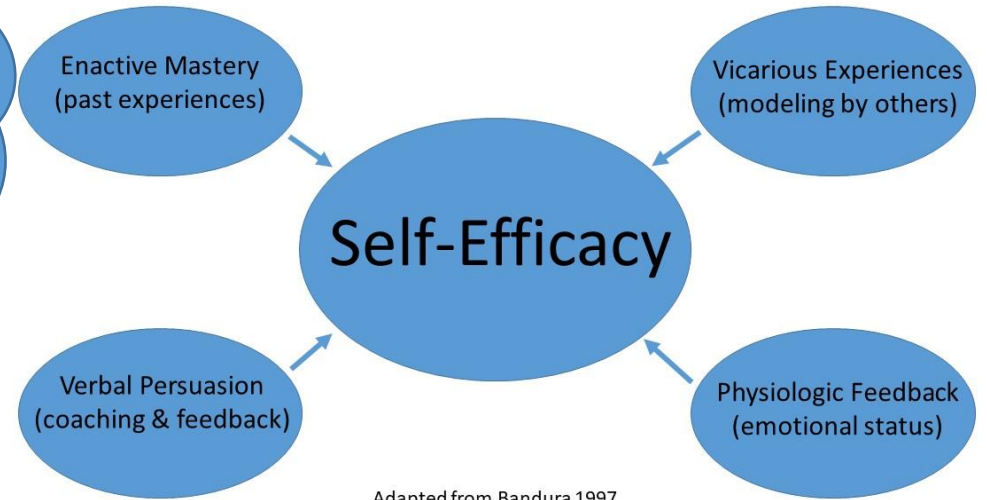
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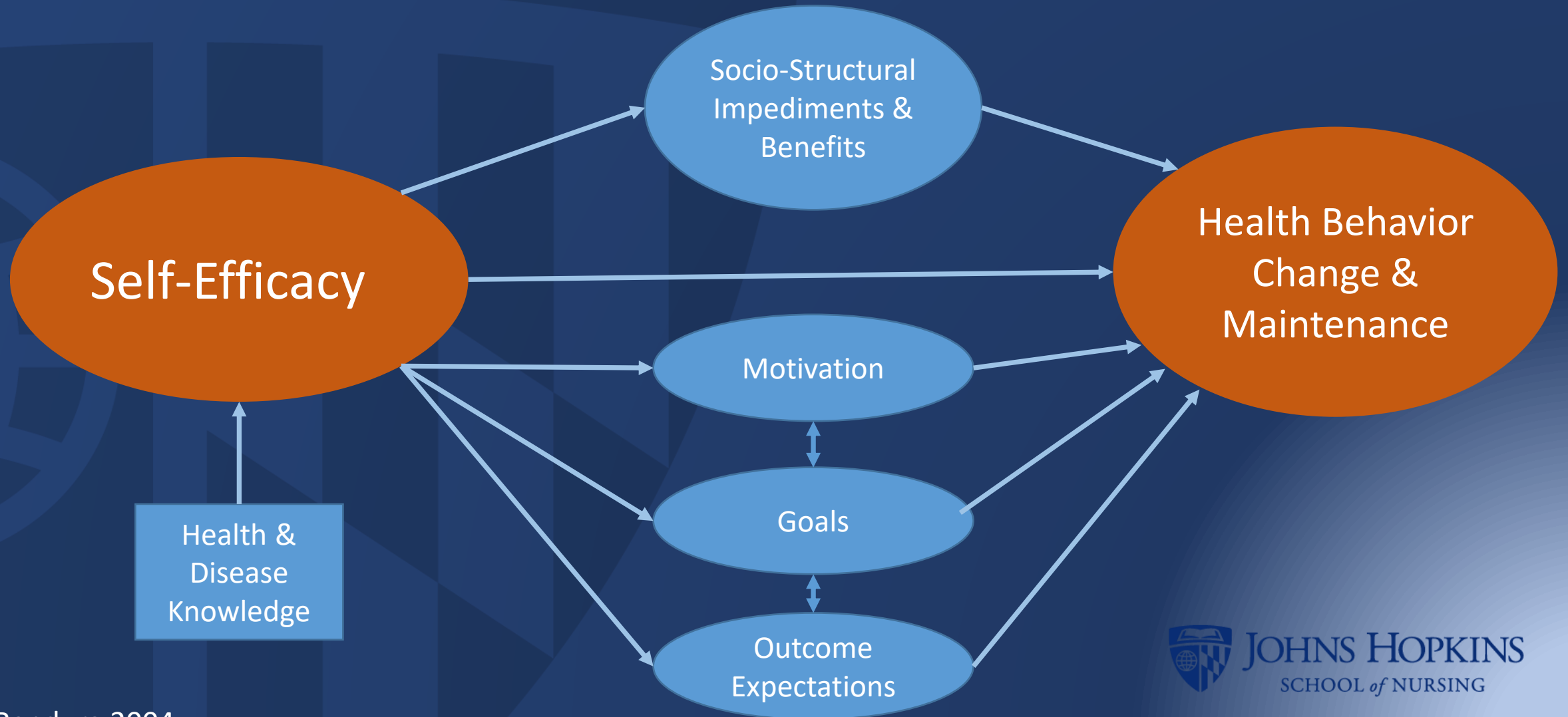
Malleable

Direct and
Indirect Effect

Whether you think
you can, or you
think you can't —
you're right.

Henry Ford

Indirect Effect: Behavior Change & Maintenance





- Patient-Directed
- Goal-Directed
- Self-Efficacy Based

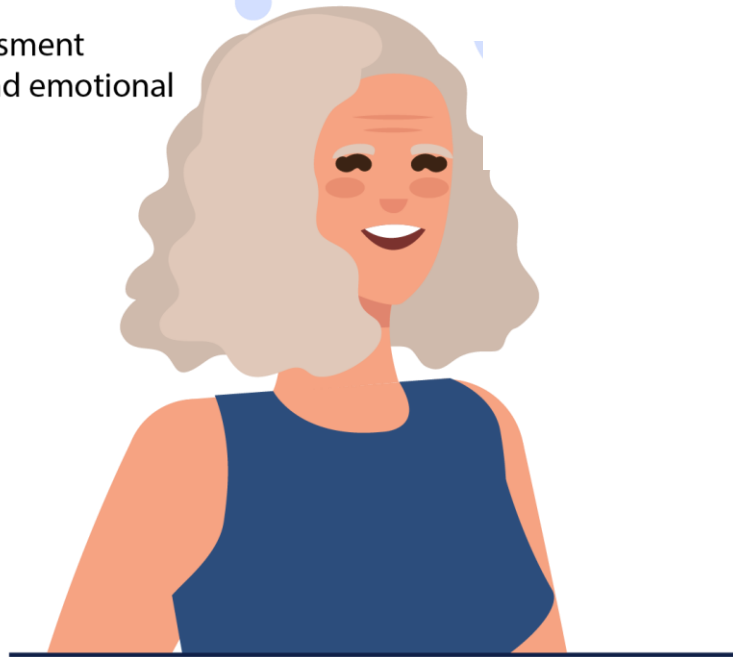


Self-Efficacy's Potential Direct Effect

Primary
Stress
Appraisal

This is
stressful!

Threat assessment
Cognitive and emotional
personality



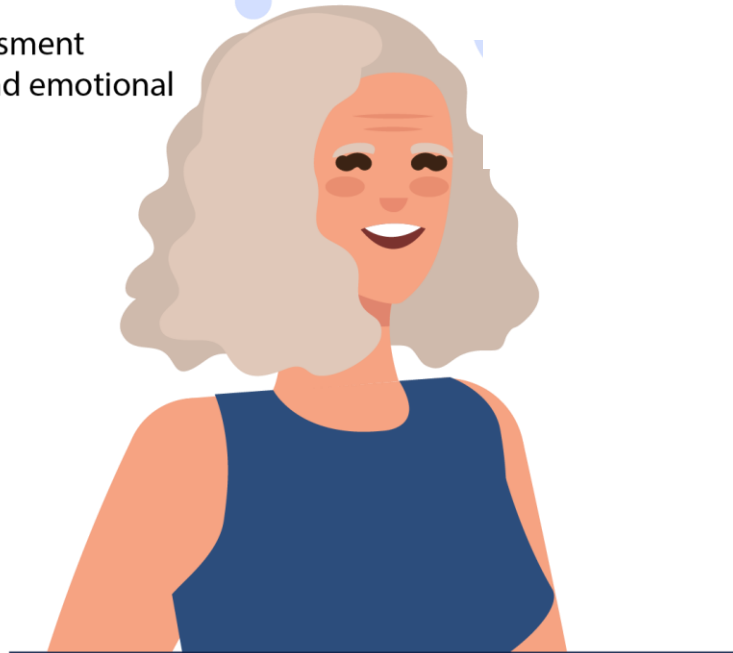
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Self-Efficacy's Potential Direct Effect

Primary
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**This
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stressful!**

Threat assessment
Cognitive and emotional
personality



Nature of Stressor/ Environment

- Acute vs Chronic
- Cumulative burden
- Habitual Process
- Cognitive and emotional attributes

Context: Socio - economic,
cultural, community,
discrimination



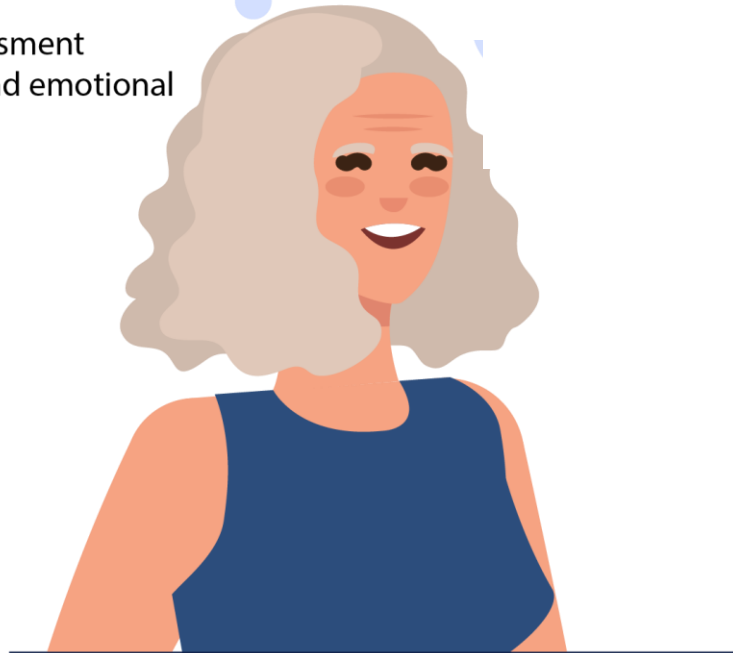
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Self-Efficacy's Potential Direct Effect

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Nature of Stressor/ Environment

- Acute vs Chronic
- Cumulative burden
- Habitual Process
- Cognitive and emotional attributes

Context: Socio - economic,
cultural, community,
discrimination *Family*



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Self-Efficacy's Potential Direct Effect

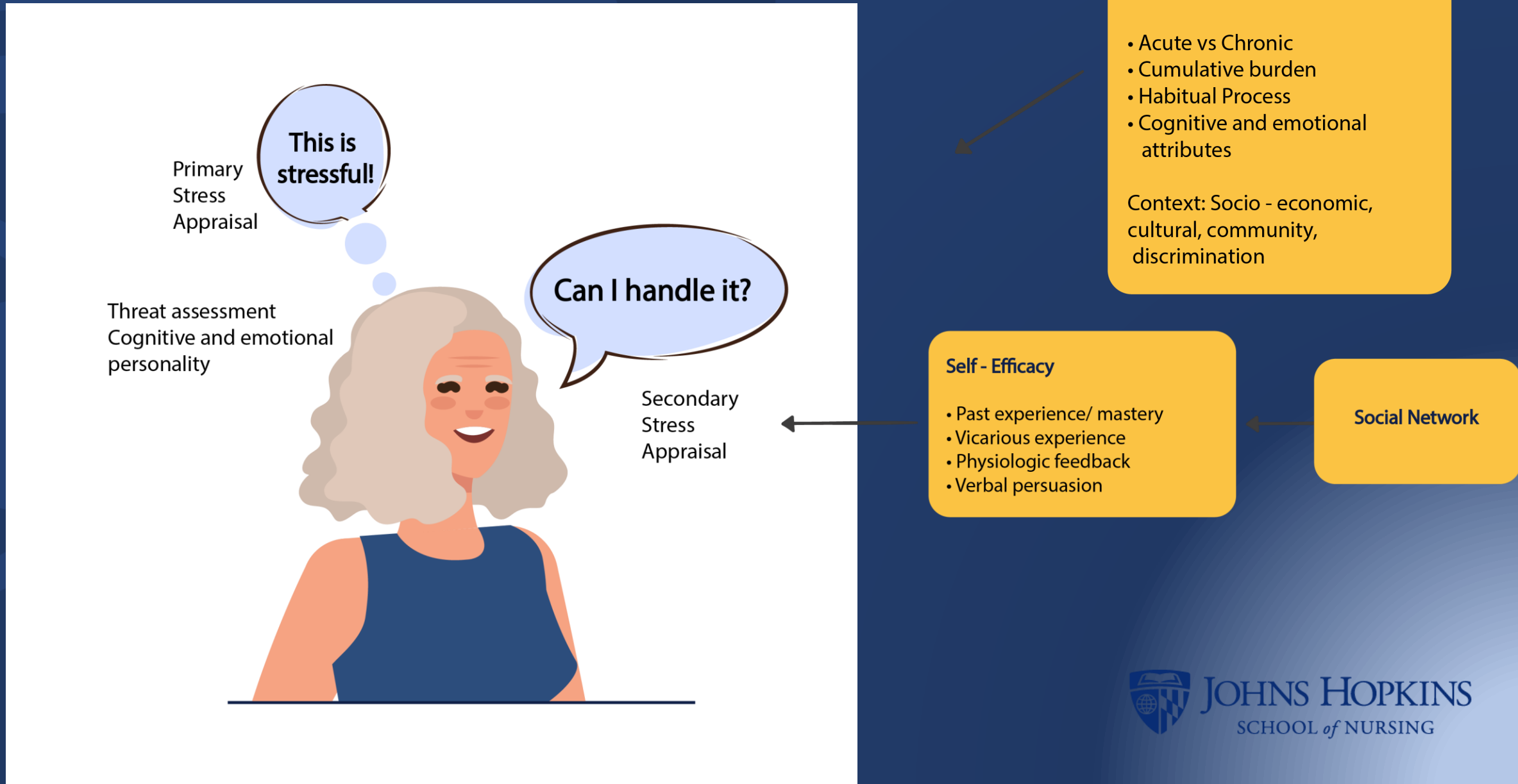


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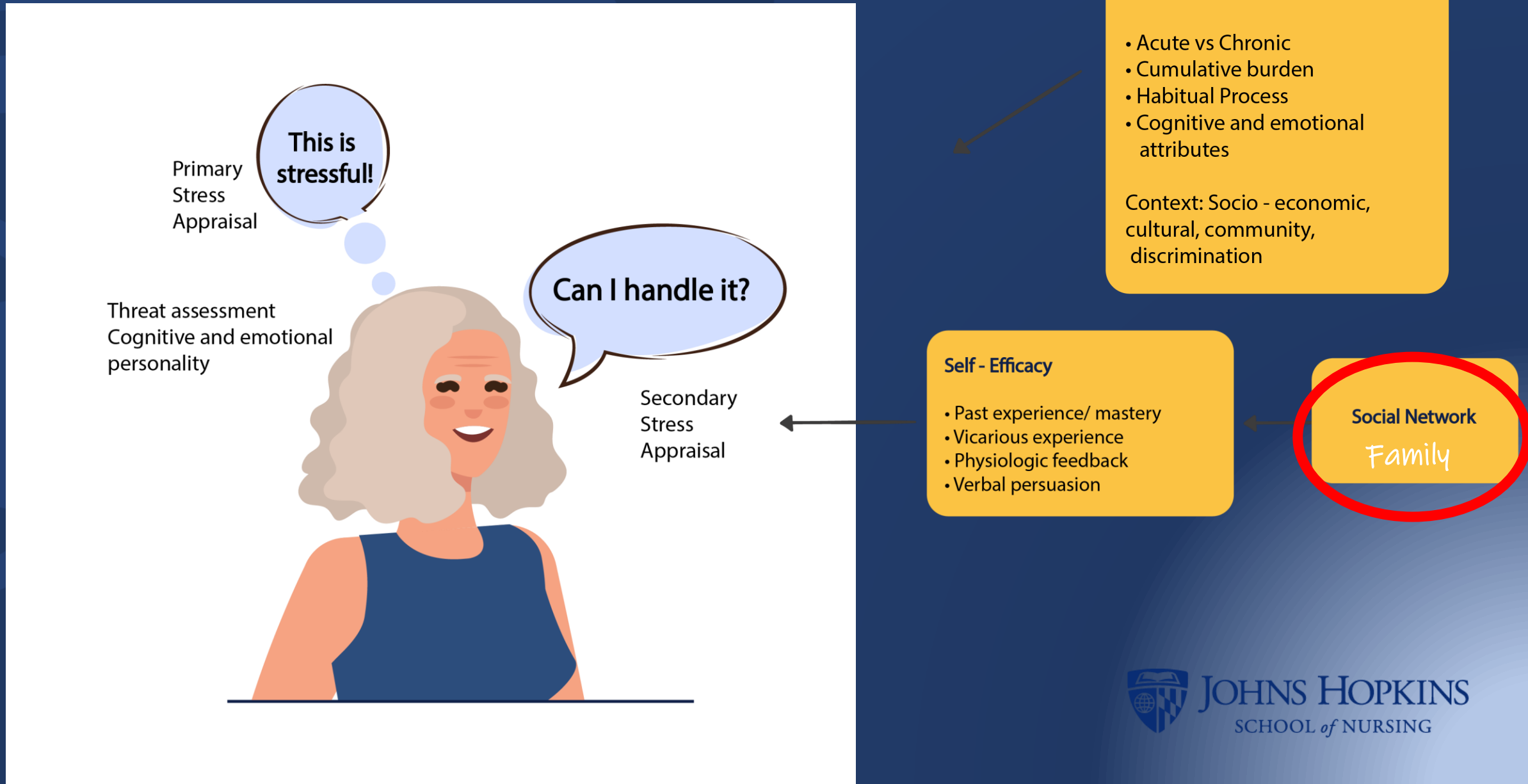
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- Cumulative burden
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Context: Socio - economic, cultural, community, discrimination

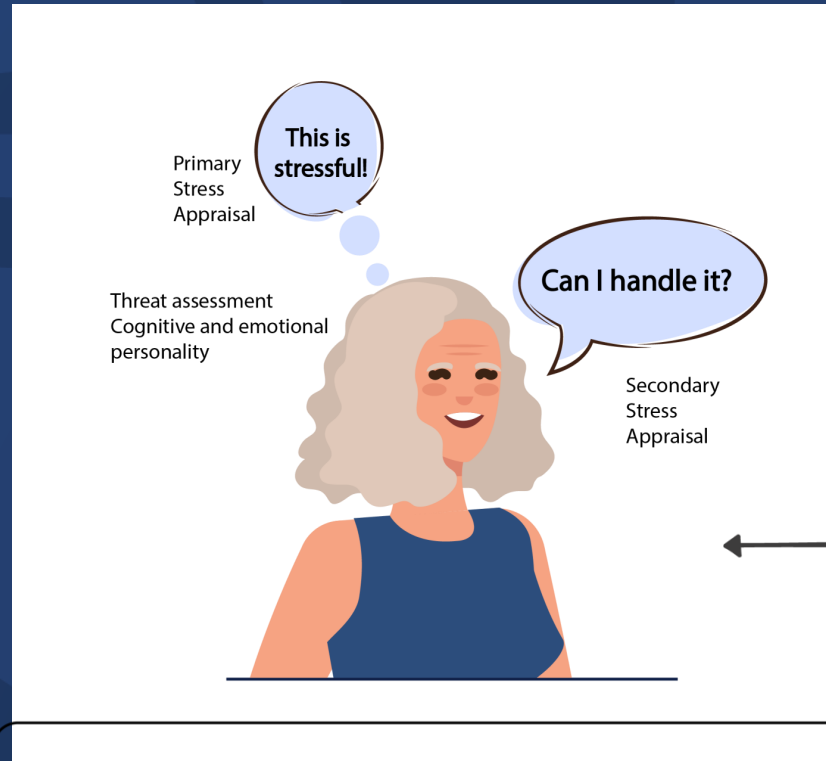
Self-Efficacy's Potential Direct Effect



Self-Efficacy's Potential Direct Effect



Self-Efficacy's Potential Direct Effect



Nature of Stressor/ Environment

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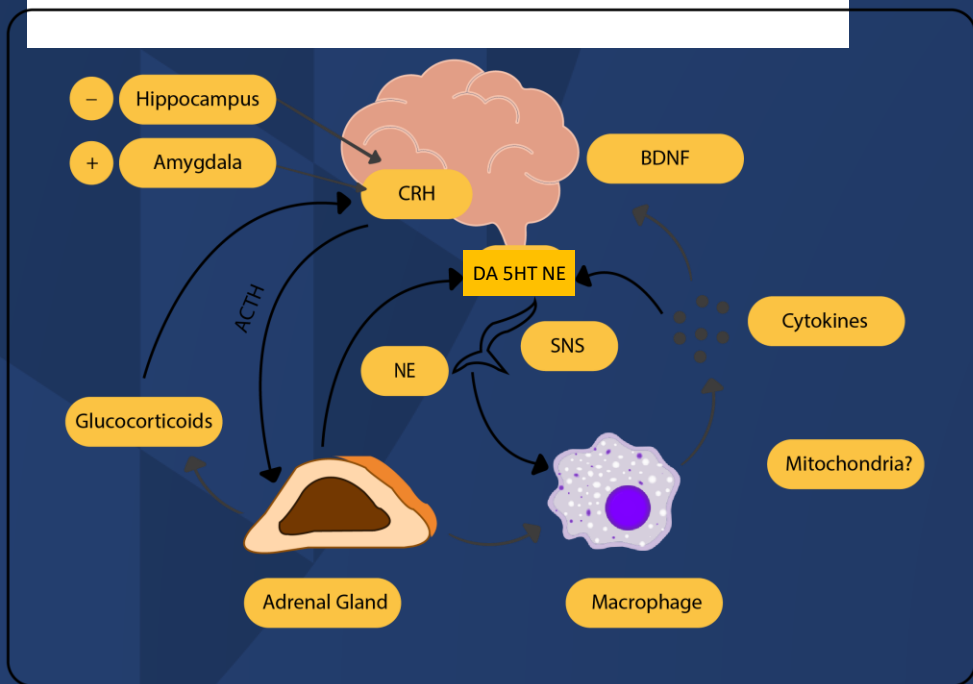
Context: Socio - economic, cultural, community, discrimination

Self - Efficacy

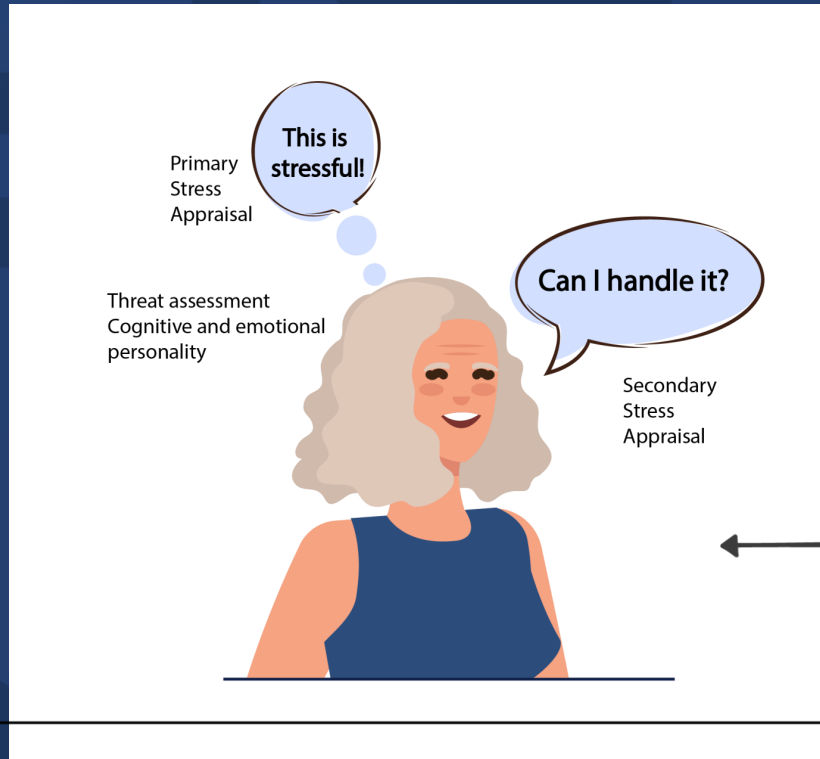
- Past experience/ mastery
- Vicarious experience
- Physiologic feedback
- Verbal persuasion

Social Network

Stress Response Network



Self-Efficacy's Potential Direct Effect



Nature of Stressor/ Environment

- Acute vs Chronic
- Cumulative burden
- Habitual Process
- Cognitive and emotional attributes

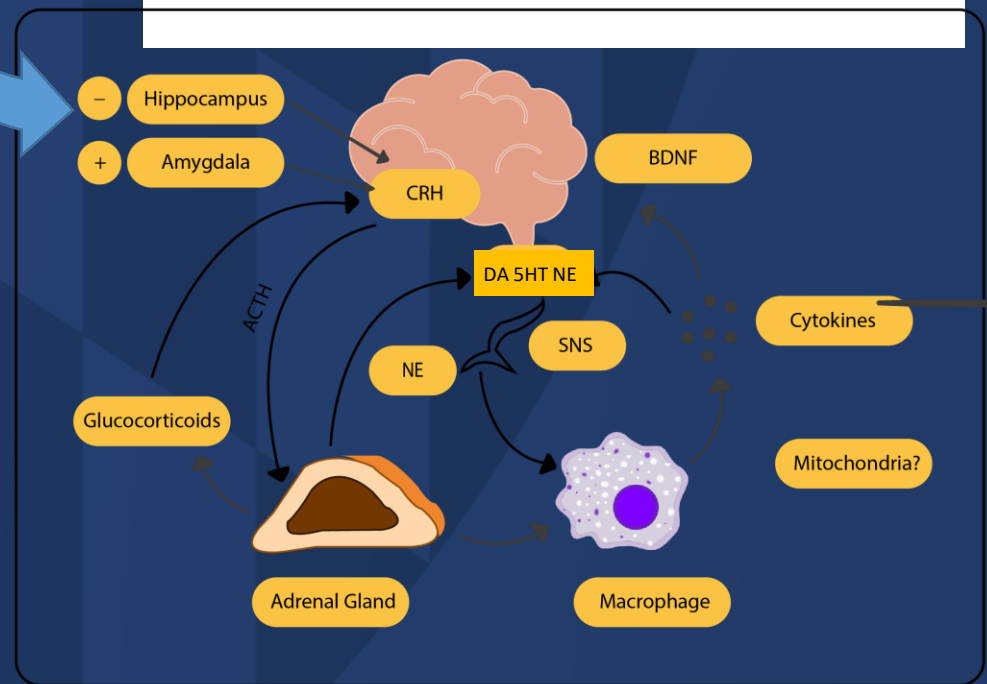
Context: Socio - economic, cultural, community, discrimination

Self - Efficacy

- Past experience/ mastery
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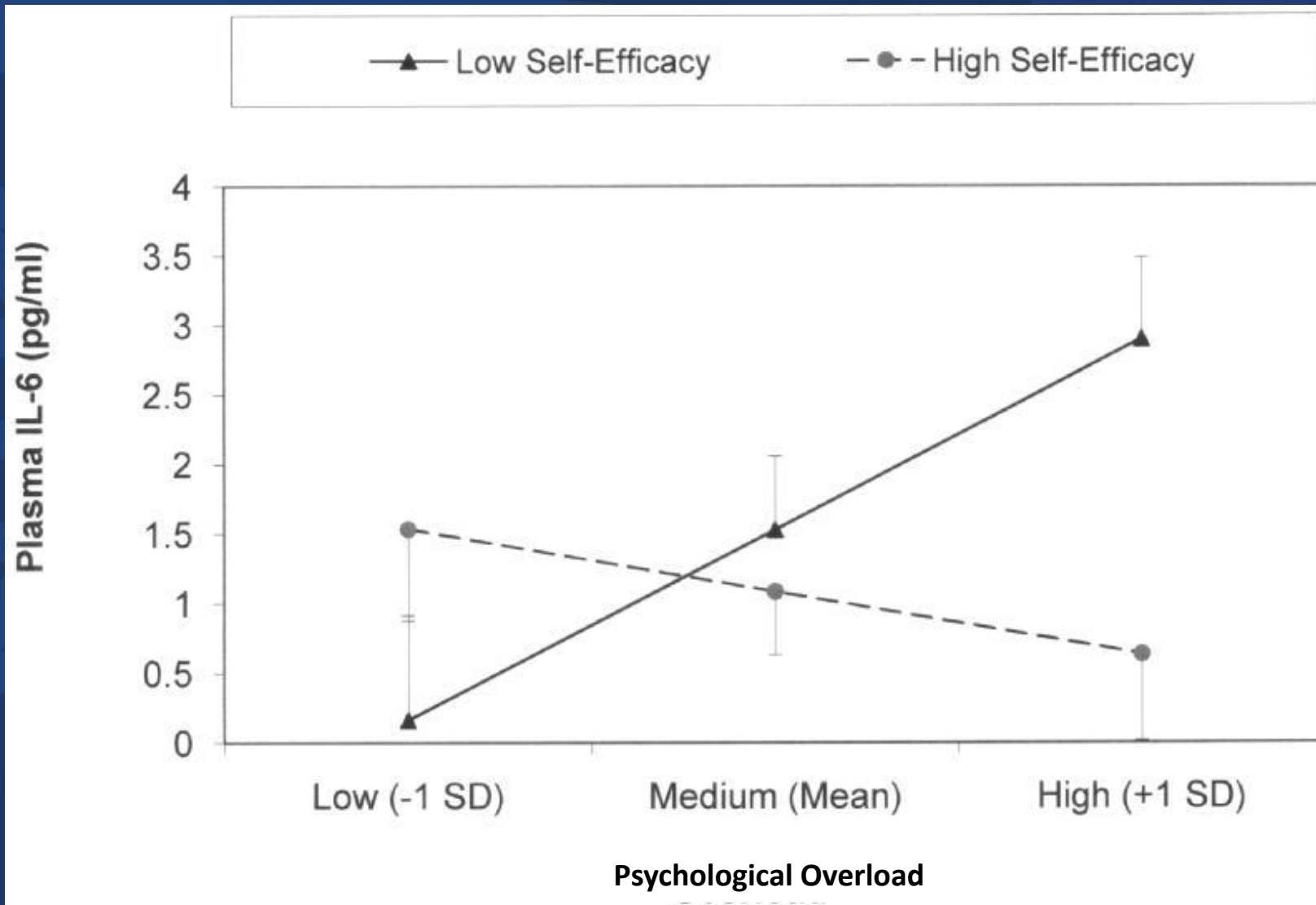
Social Network

Stress Response Network



- Chronic disease progression
- Aging
- Morbidity/ Mortality
- Frailty
- Behavior change
- Allostatic load
- Brain architecture

Self-Efficacy, Stress & Inflammation



Study Details

N: 62 Alzheimer's Caregivers

Mean Age: 74 years

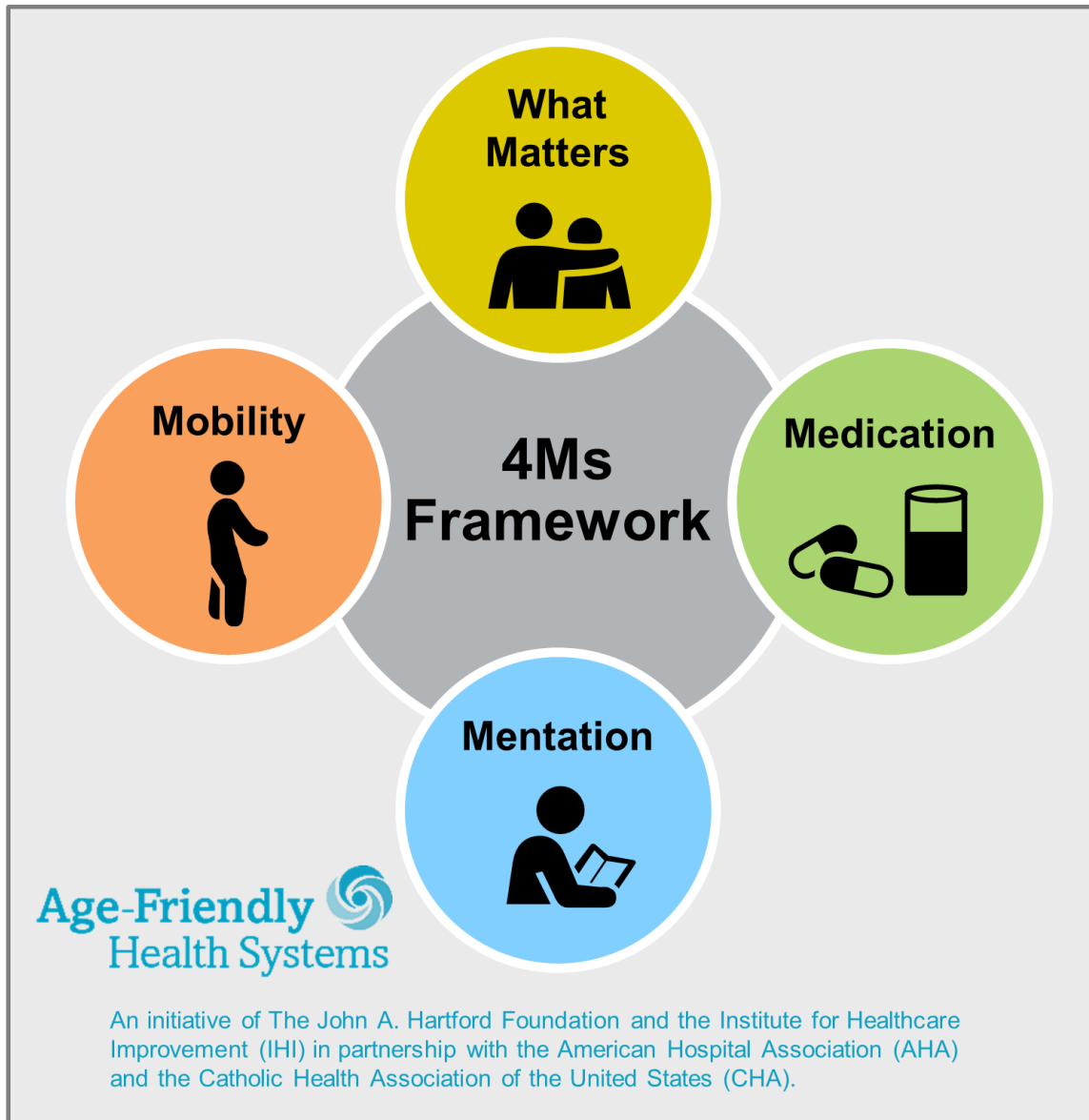
71% Female

Model included: age, gender, resting blood pressure & body mass index

How do we improve self-efficacy
and resilience to cope with
stress?

The 4 Ms

Age-Friendly Health Systems



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.

How to get what matters most from your healthcare



Slides Adapted from Dr. Mary Tinetti, MD,
Gladys Philips Professor; Chief of Geriatrics
Yale University School of Medicine

Meet Mr. Smith by his numbers

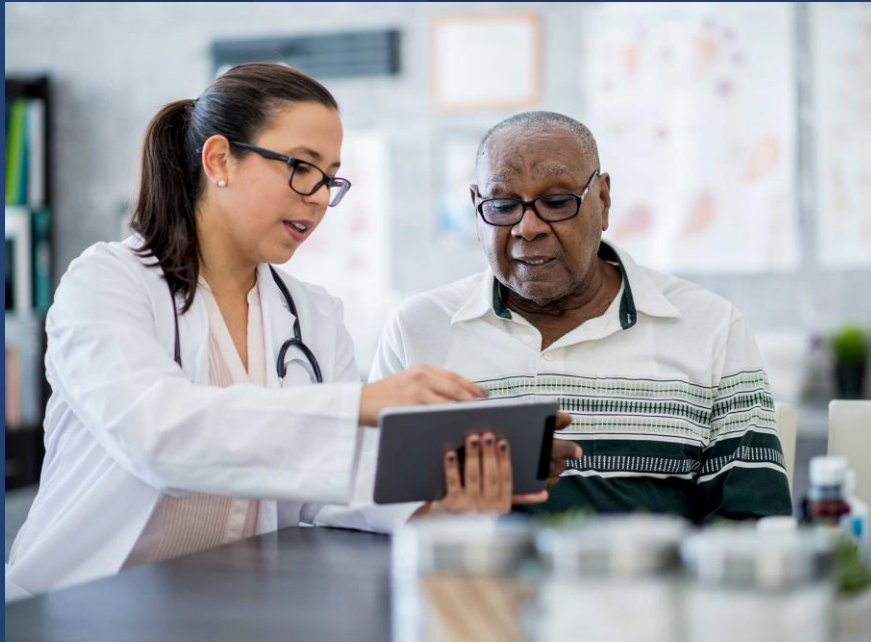
- 72 years old. 3 children, 5 grandkids, 1 wife
- 6 chronic diseases (post-kidney transplant X 8 years, hip arthritis, diabetes, hypertension, ...)
- 10 Medications
- 5 Clinicians (primary, nephrologist, cardiologist, orthopedist)
- 1 health visit (doctor, lab test, etc.) per week (each ½ day)

Mr. Smith from his clinicians

- Blood pressure & glucose slightly too high, eGFR good
 - Increase medications & check more often
- ? Hip replacement
 - Orthopedist & PCP differ



Mr. Smith by his health priorities

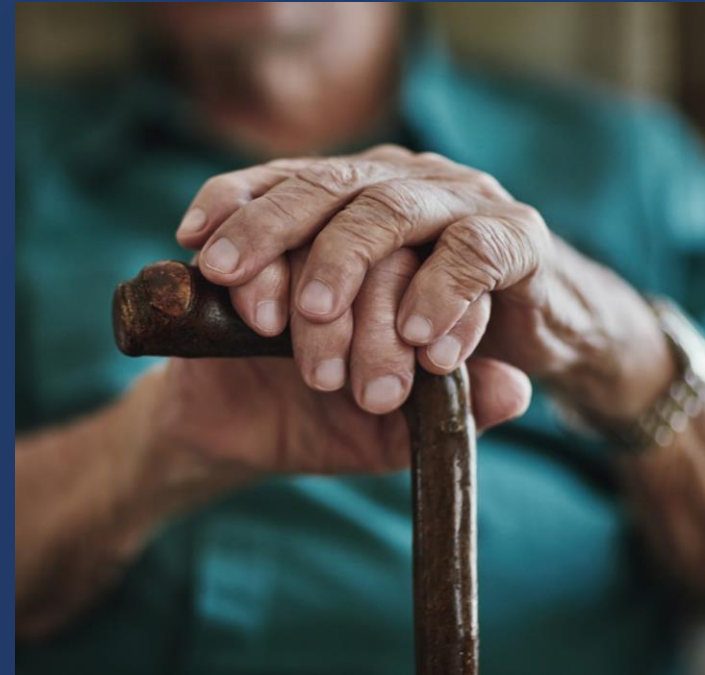


Not sure, but...

- Always tired
- Too much time on his healthcare
- Not sure about surgery

Healthcare for persons with multiple conditions

- Uncertain benefits
- Burdensome
- May not focus on what matters most to the person



So what's the answer?

Answer:

Know what matters most and tell your clinicians...

But...

Not quite that easy...



What health goals matter most & what are you willing to do?

Improve Function 42%

The
Impossible
Triangle
(Tradeoffs)

Live Longer
27%

Relieve
Symptoms 32%



Answer:

Know what health goals you most want, given what you are willing & able to do

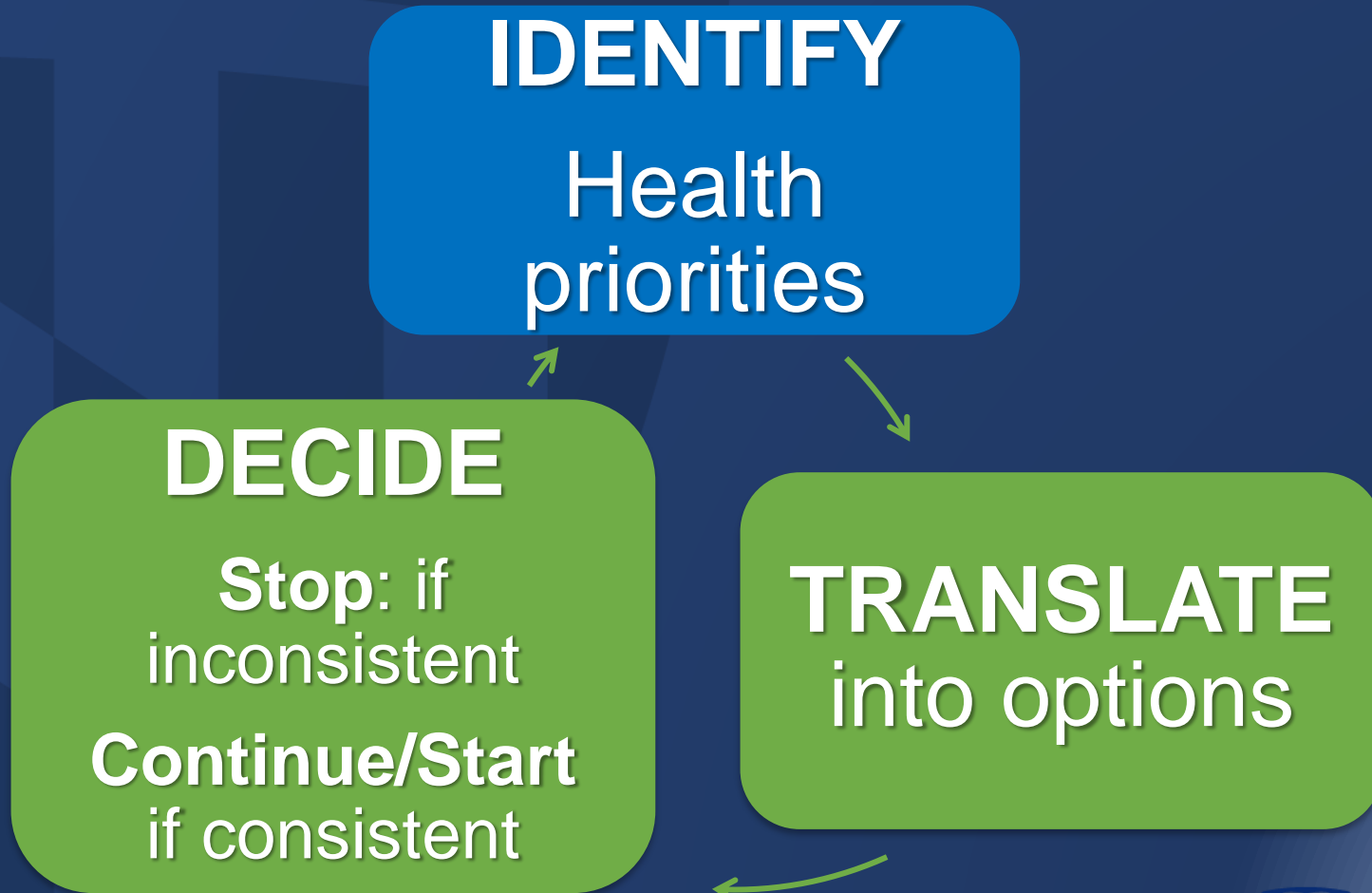


Answer: Patient Priorities Care

Moves decision-making...

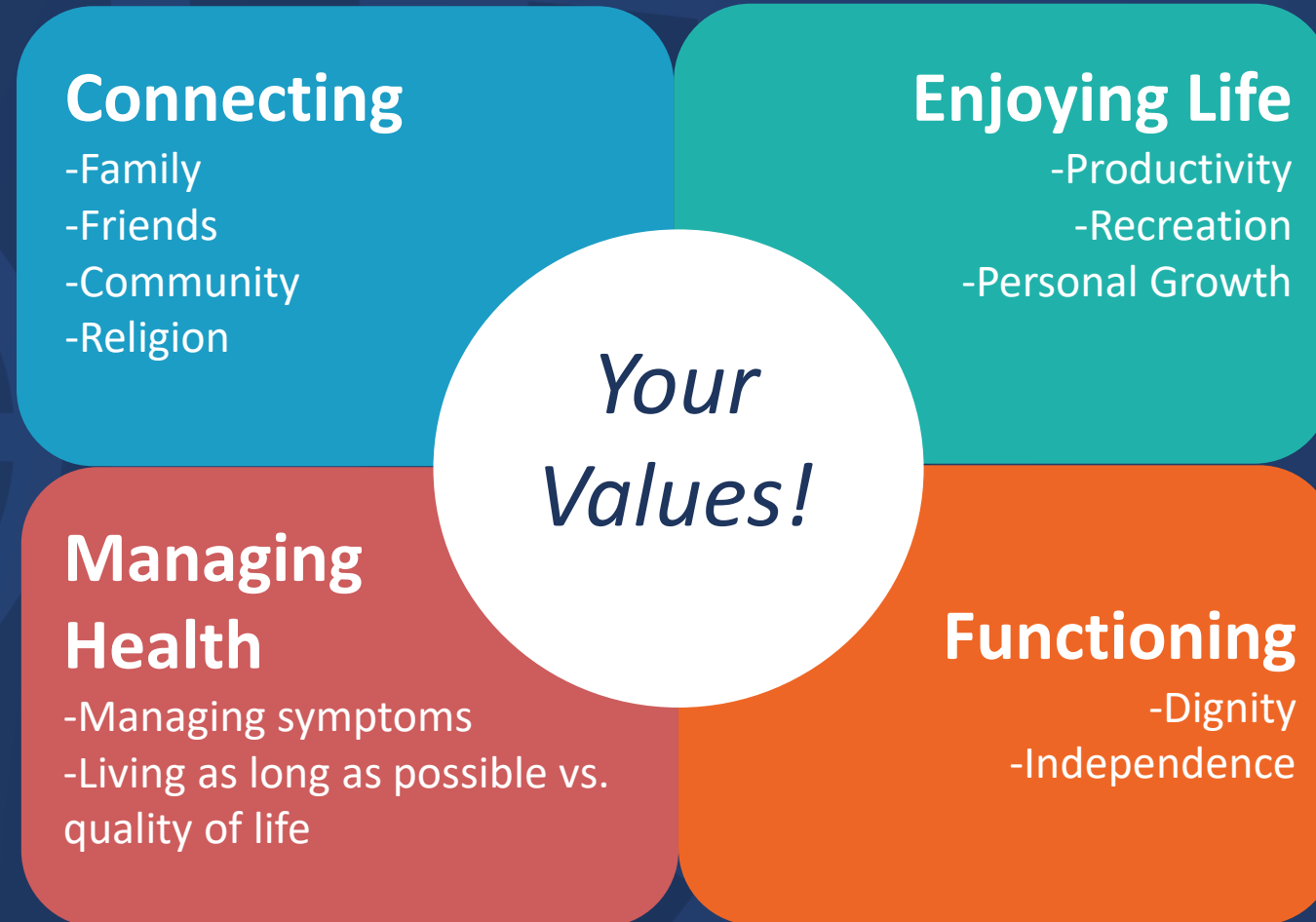
- **From:** “You need (*fill in blank*) for your (*fill in blank*).”
- **To:** “I suggest we try (*fill in blank*) knowing your conditions, your overall health, goals and preferences.”

Steps in Patient Priorities Care



Identify health priorities:

1. Explore what matters (Values)



What Matters to You?



Connection



Enjoying Life

Managing Health



Functioning



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What is the One Thing that is most important to you?

Identify health priorities:

2. Health outcome goals





- **Specific:** Specific activities that reflect your values
- **Actionable, Reliable, & Realistic:** To inform clinical decisions



Values vs. Goals vs. SMART Goals- Which One?

1. “I want to spend more time outside when the weather is nice.”
2. “I love spending time with my grandchildren.”
3. “I want to take care of my husband who has dementia.”
4. “Work ½ day at my office 3 times a week without interference from doctor visits.”
5. “It is really important to me to continue to grow and learn.”
6. “...do ceramics once a week and walk ½ mile with my husband each day (tiredness makes this difficult).”

Exercise: Specific or Realistic Health Goals?

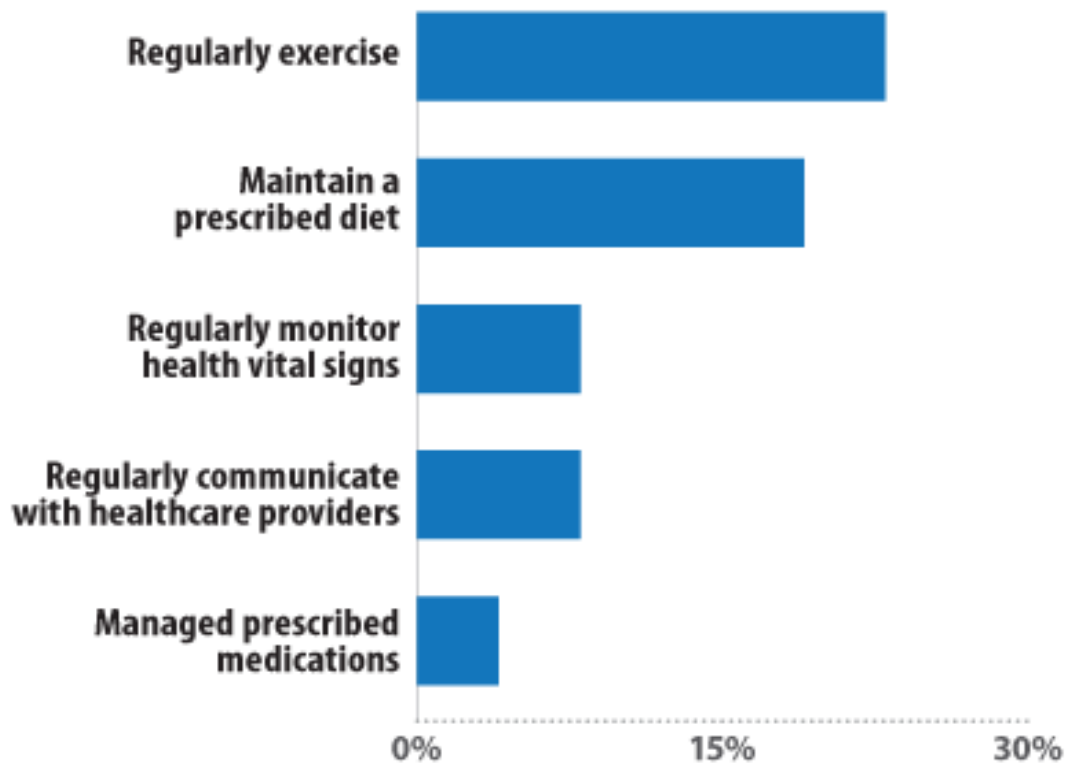
Goal	Specific?	Realistic?
I want to be healthier.		
Starting this week, I'll watch my grandchildren after school 2-3 times per week.		
I will start jogging a mile every day before breakfast.		

Identify health priorities:

3. Healthcare preferences

Extreme Difficulty Completing Health Tasks

U.S. Broadband Households with Chronic Conditions



© Parks Associates

Healthcare tasks willing & able to do (or not)

- Medications
- Healthcare visits
- Testing, procedures
- Self-management activities



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Examples of care preferences: Helpful and doable

I get blood work every month. It's not bad

CPAP helps

Pepcid helps my heartburn

I walk & do the exercises that PT taught me every day

What about Barriers to Goals?

- Medicine side effects
- Transportation
- Financial Cost
- Feeling Overwhelmed

Examples of care preferences: Not helping or unable

- My medications cause muscle pain; it's hard to be active
- I get hypoglycemic and shaky. I'm taking too much of something
- Insulin & glucose checks too often
- I don't want back surgery

My favorite Questions to Elicit Values

- “Let’s dream together a little...
What does a great day look like for you?”
- “What would you be doing?”
- “Who would you be doing it with?”

For Barriers:

- “What gets in the way of having that great day?”

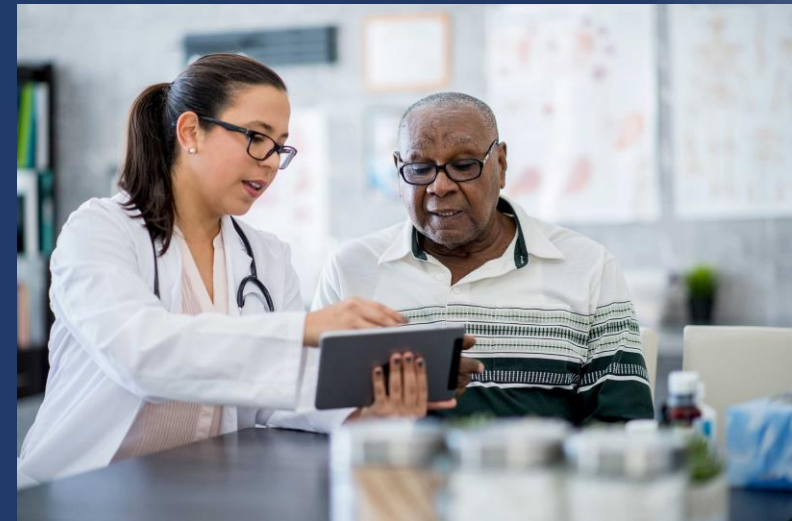


Back to Mr. Smith

“I want to be less tired so I can go to club a few days a week. My medications make me too tired.”

“I can live with the hip pain. I don’t want surgery.”

- **Health outcome goal:**
 - Go to club 3 times/week
- **Healthcare preferences:**
 - Decrease medications
 - Avoid surgery



Clinicians align care ...



Stop



Start



Continue



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Is Patient Priorities Care effective?

- **Patient Priorities Care site**
 - 10 PCPs
 - 5 cardiologists
 - 163 patients
- **Usual care site**
 - 7 PCPs
 - 203 patients (same characteristics as PPC)



Compared with usual care, PPC is associated with...



- More focus on patients' goals (54% vs. 2%)
- Less unwanted care
 - More medications stopped (42% vs. 24%)
 - More procedures avoided (10% vs. 5%)
 - Greater decrease in treatment burden

VISTA Research Study

1 in 4 adults over the age of 65 do not use the internet at all



Join VISTA! - a personalized technology learning intervention:

Based on your values & goals



In-home check ins and phone calls over 2-3 months

Free iPad & Internet Access

Personalized knowledge of technology



Up to \$100 for full participation

Join if you:

Contact Us

Email us at:

 vistaresearchstudy@jh.edu

Call or text us at:
410-705-5808

Principal Investigator:
Melissa Hladek, PhD, IRB0043792

Are 65+

Willingness to learn or improve technology skills

Live in Baltimore, MD or surrounding counties

CAPABLE Transplant

Kidney Transplant Research Study

High symptom burden (e.g., pain, fatigue, low function) increases the risk of dying on the waitlist by 67%



CAPABLE Transplant will help you meet your goals & address your symptoms! Intervention components include:

Based on your values & goals



In-home OT and RN visits over 4 months

Free internet, iPad and training*

Minor home modifications & repairs

Up to \$100 for full participation

Join if you:

Contact Us

Email us at:

 capabletransplant@jh.edu

Call or text us at:
(443) 699-1220

Principal Investigator:
Melissa Hladek, PhD, IRB00437750

Are 50+

Inactive on waitlist OR are active and have been inactive in past 18 months

Live within 40+ miles of the JH Transplant Center

*If technology is a goal chosen during intervention.

Our Team



Dr. Melissa deCardi Hladek
Principal Investigator



Deborah Wilson
Qualitative Coding Specialist



Grace LaCava
Research Honors Student



Kennedy McDaniel
Human-Centered Designer



Sam Curriero
Research Coordinator



Allyson Evelyn-Gustave
Occupational Therapist



Avrey Hughes
Lead Quality Improvement



Olivia Rubio
Digital Literacy Lead



Daelin Cook
Research Assistant



Samantha Horn
Research Honors Student

Mentor Acknowledgement



Sarah Szanton



Jeremy Walston



Karen Bandeen-Roche



Mary Tinetti



Kate Lorig



Qian-Li Xue



Mara McAdams DeMarco



Deidra Crews



Daniel Brennan

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JOHNS HOPKINS UNIVERSITY

 **OLDER AMERICANS** 
INDEPENDENCE CENTER

Research supported by



National Institute of
Diabetes and Digestive
and Kidney Diseases



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Thank You

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