



# Reelin' In The Years

Aging with a Brain Injury

*Victor Towle, MS, C-MMT, CBIS*

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NEUROREHABILITATION  
& RESEARCH HOSPITAL

# Victor Towle, MS, C-MMT, CBIS

- BA in Psychology, MS in Rehabilitation Counseling
- In field of Brain Injury since 1986
- Work at the Center for Comprehensive Services in Carbondale IL
- Worked as a Medicaid CM
- Assisted with the creation of the HCBS BI waiver and ILST services
- Did Private Practice Counseling and facilitated group therapy
- Was on the Board of BIAC
- President of The Hangout Resource Network
- Craig Hospital for 28 yrs. Clinical Care Manager/Counselor/Social Worker
- And ...

• Emotional support • Team liaison • Provides educational counseling •  
• Emotional support and guidance • Attendant care • Works with physicians •  
• Provides educational counseling • Deals with insurance companies • Patient advocacy •  
• Provides sexual/fertility education • Provides individual support and guidance • Provides spouse educational counseling •  
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# Disclosures:

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- Nothing to disclose.
- Tough stuff will be discussed. May be emotional to hear.
- Important information. Knowledge is Power! “With Great Power Comes Great Responsibility!”
- Compassionately forward with presentation of information.
- Not everyone ages the same! General bell curve information.
- Just some observations over my career and a look at some research.

# Learning Objectives

This talk is designed to help you:

- Identify and describe aging issues.
- Summarize basic Brain Injury(BI) issues.
- Observe demonstrations of aging with a BI.
- Recognize issues and prioritize them.
- Plan Road Map in preparation for aging issues.
- Apply case management strategies to aging with a BI.
- Identify resources to help.

# Typical aging issues Body

Hair - Greying, thinning, and loss.

Skin - Drying, wrinkles, thinning, discoloration, bruising. Increases risk for skin sores, infections and longer healing times.

Oral health - Tooth and gum issues.

Bones - decrease in density and size.



Muscle - loss of mass, strength, endurance, flexibility, and stamina. Decrease in dexterity, coordination, and balance.

Metabolism - slows; appetite decreases.

Organs - lose efficiency, changes in tolerance for caffeine, alcohol and medications. A little may go a longer way!

Bowel - slows down, and bladder is less elastic, urgency may increase while ability to hold it decreases - incontinence.

If that is not  
enough there  
is more...  
Senses

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Vision – decrease focus & acuity.

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Hearing – loss of higher frequencies,  
difficult to focus with other sounds.

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Taste – general loss, many people  
want more salt.

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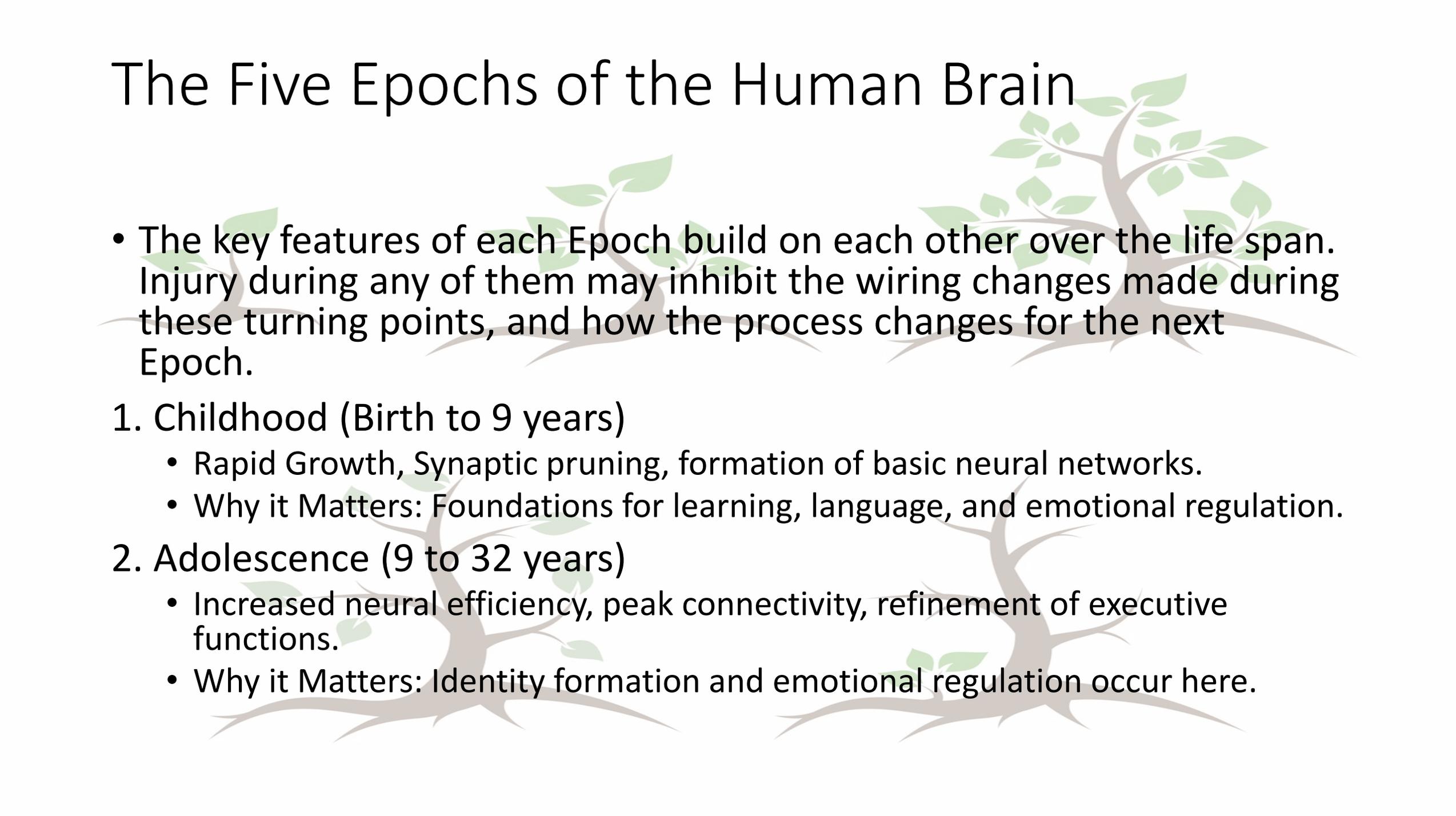
Smell – gets less acute.

# Mind/Brain

- Brain starts shrinking, loss of elasticity.
- Decline in speed of processing, memory, recall, and divided attention.
- Mental health – Increase in depression, anxiety and dementia. Decrease in overall mental well being.
- Sleep – disturbances, difficulty falling asleep, decreases in total sleep time, sleep efficiency, and slow wave sleep, while waking more often.



# The Five Epochs of the Human Brain



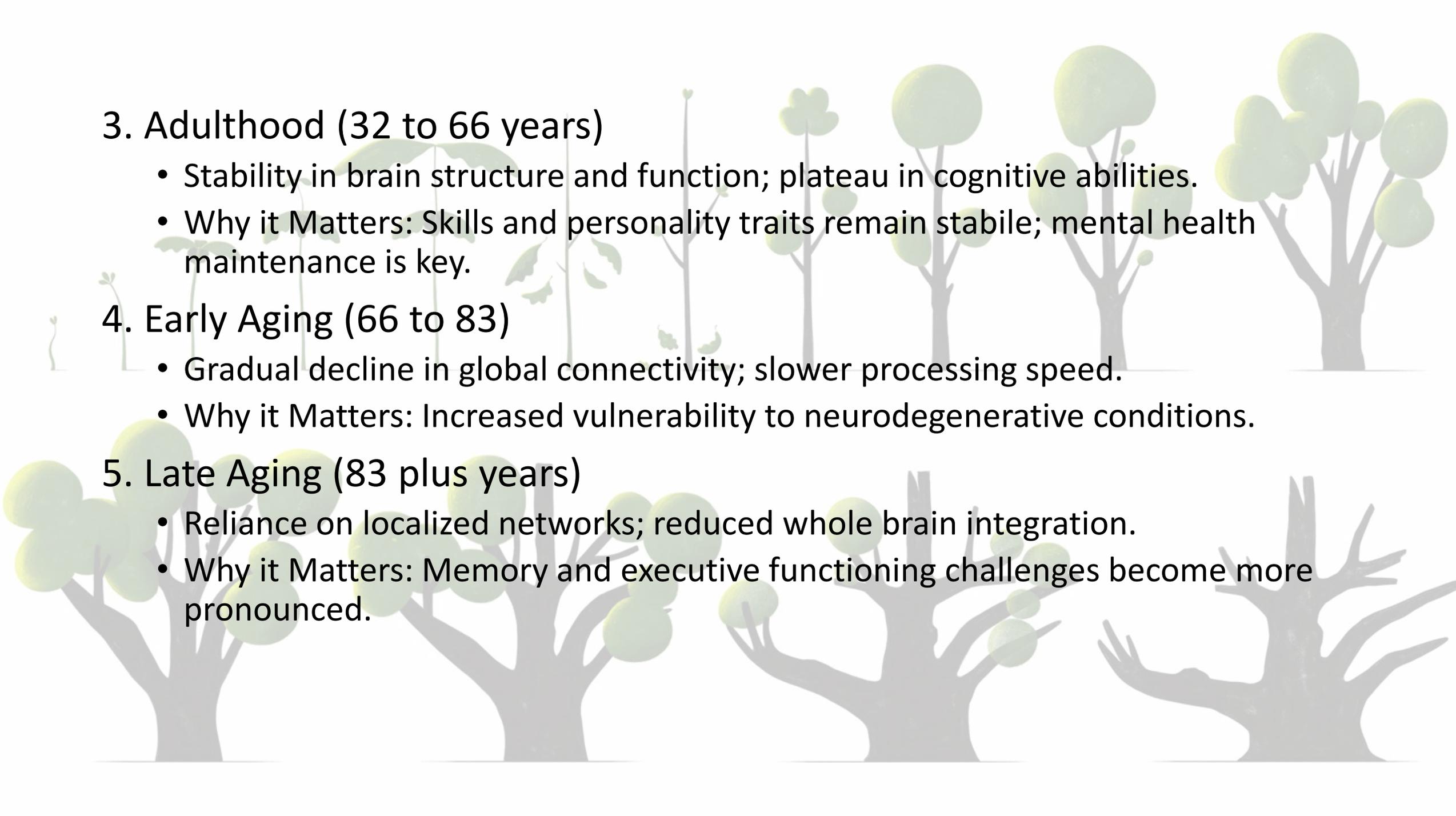
- The key features of each Epoch build on each other over the life span. Injury during any of them may inhibit the wiring changes made during these turning points, and how the process changes for the next Epoch.

## 1. Childhood (Birth to 9 years)

- Rapid Growth, Synaptic pruning, formation of basic neural networks.
- Why it Matters: Foundations for learning, language, and emotional regulation.

## 2. Adolescence (9 to 32 years)

- Increased neural efficiency, peak connectivity, refinement of executive functions.
- Why it Matters: Identity formation and emotional regulation occur here.



### 3. Adulthood (32 to 66 years)

- Stability in brain structure and function; plateau in cognitive abilities.
- Why it Matters: Skills and personality traits remain stable; mental health maintenance is key.

### 4. Early Aging (66 to 83)

- Gradual decline in global connectivity; slower processing speed.
- Why it Matters: Increased vulnerability to neurodegenerative conditions.

### 5. Late Aging (83 plus years)

- Reliance on localized networks; reduced whole brain integration.
- Why it Matters: Memory and executive functioning challenges become more pronounced.

# Tips for Brain Health as we age:

1. Childhood (Birth to 9 years)	Provide stimulating supportive environments for healthy development.
2. Adolescence (9 to 32 years)	Encourage healthy coping strategies and social support.
3. Adulthood (32 to 66 years)	Lifelong learning and physical activity preserve cognitive health.
4. Early Aging (66 to 83)	Promote social engagement and cognitive exercises.
5. Late Aging (83 plus years)	Support independence while planning safety care needs.

# Balancing the changes

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- Due to injury and not having all the components of the milestones firmly in place to balance the changes associated with aging, activities to maintain brain, mental, and physical health are added complications tied to ageing issues. Earlier onset, greater variability or faster decline.
- Disability may make application of these tips for brain health very difficult and sometimes impossible to achieve.



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•  
○ Aging  
with a  
Brain  
Injury

- Will experience typical aging issues. Body, Senses, and Mind.
- May have earlier onset, greater intensity, faster decline, and multiple issues at the same time, which complicates things further.
- Aging issues in conjunction with BI issues may be worse. BI issues may be exacerbated.
- Medical issues may be exacerbated. Diabetes, arthritis, autoimmune diseases, mental illnesses.
- Complications from other lifestyle choices, drugs and alcohol.

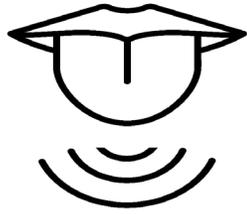
# Body

- Skin - Bruising, Scrapes, and cuts: May have not noticed before, was easier to hide a fall, or near fall or bumps and scraps, now more bruising or open sores appear. Perhaps even breaks. May think that the falls have increased significantly, which they may have, but are now easier to see after the fact, if unreported. Many worry that something else is causing this to happen.
  - Solutions for less mobility and more supervision and assistance may create frustration/anger/depression and a loss of independence.
  - Gradual changes before getting there can clear the way for better safety.
    - Order groceries to be delivered, go to the gym with a buddy, use a specialized gym. Re-set up home, slight adjustments may help. Throw rugs, rocking chairs, protective corners, re-think the placement of, or adding grab bars and rails, better traction for shoes/slippers/boots. Observation of more iffy activities, and changing or replacing with alternative ones. OTs will have many recommendations for safety in the kitchen, bathroom, ADLs etc. May need to do more frequent skin checks.

- **Skin & Spasticity:** Tight extremities or contractures may start causing pain, inhibiting movement or skin break down. Skin may break down faster, as skin becomes thinner, taking longer to heal.
  - Weight shifts, may need to be longer and more frequent. Padding and skin checked more frequently. More care, reminders, prompts, specialized bracing/splinting.
  - Cushions and padding may need more frequent attention, adjustment or replacement. Schedule this, instead of assuming they are good at their routine.
  - Skin breakdown may take longer to heal than before or need specialized medical attention.
  - Proactive during aging process. Normalization of aging process.

- Muscles: Due to a brain injury, may have varying degrees of paralysis, muscle tone, spasticity, contracture, and pain. Add on aging issues of loss of mass, strength, endurance, flexibility, and stamina. Decrease in dexterity, coordination, and balance. May have problems with shoulders, back, or hyperextending knees or hips after loss of muscle to keep stable with transfers or ambulation. Decreased endurance, and range of motion. Increased pain, may even pull muscles, more sprains or strains, and ultimately, **High risk for falls!**
  - Modifications for transfers, ambulation, exercise routine, splinting and bracing. Physical therapy can help.
  - Closer supervision, may have to use gate belt, walker or wheelchair.
  - Lower expectations and allow for more time.
  - Continue or restart exercise program with a simpler more relaxed twist of maintaining instead of fixing.

# Senses



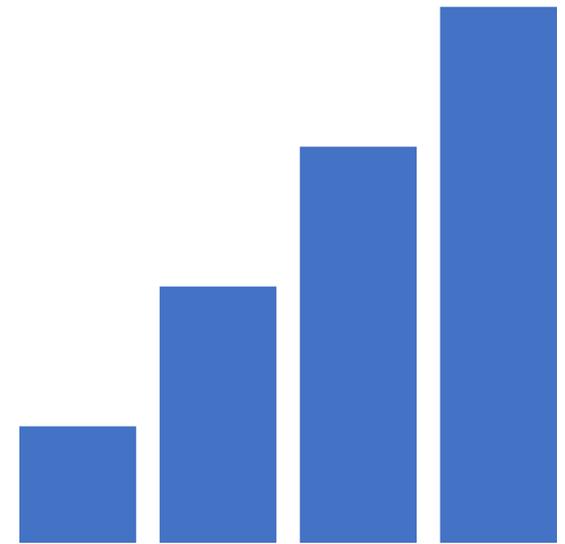
- Vision: double vision, field cuts, inattention are a few typical BI related vision issues. With the addition of decreased focus or acuity, reading medication labels, cooking instruction, computer, phone, schedule, may look like attention or memory issues. Visual strain may also create pain, headaches and fatigue, which may compound communication issues.
  - Have yearly eye exams. Increase font size, establish routines that don't weigh so heavy on vision. Eg: color code, raised texture different size of bottles. Multi modal solutions voice activated and voice reminders, etc. Occupational Therapists are great with types of compensatory strategies.
  - Don't just treat the symptom, such as the headache itself. Stay holistic!

# Mind

- Memory: Often, with BI we see challenges in short and long-term memory. Problems with storage of information, or retrieval or both. Typical changes in memory may look and feel worse.
- May have been independent with cooking, but now the borderline activities due to memory slips, lead to larger failures.
  - Forgetting ingredients, leaving stove or oven on, misplacing utensils
  - Needing revisions of supervision, check ins, structure, routine, or prepping simpler meals, getting help, or meals made or delivered. Sunday meal prep night and better labeling and instructions. Use of check lists and timers.
  - OT and SLP visit to help modify these types of processes.

# Challenges of aging with an injury

- Difficulty understanding/differentiating BI from aging issues.
- Declines in many areas at same time.
- May need more help and other specialized providers.
- Change of lifestyle, and routines.
- May be more sedentary, decrease in mobility, flexibility, strength, and stamina.
- Changes may create new problems, i.e., finding social supports and purpose, depression, frustration, anxiety due to problems and losses.
- The way they've done it in the past may not work now. Change is hard.



# Examples; hints of decline

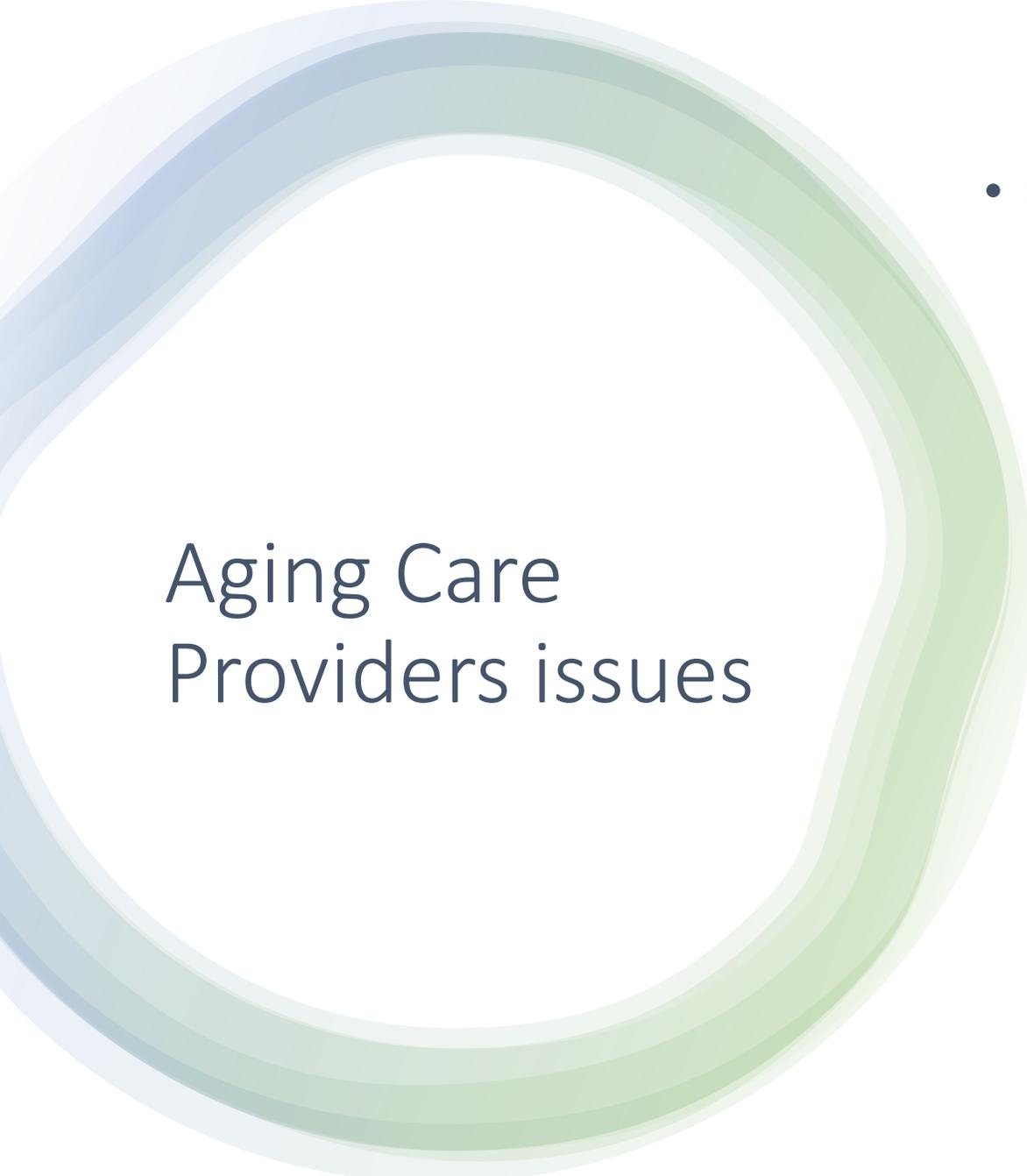
- Driving; get lost, accidents, fear, danger to self and others
- Stairs, uneven terrain, transfers, showering, equate to Fall Risk!
- Memory Forgetful- cooking, burning food, leaving stove on, taking meds twice or not at all, getting lost, losing things, missing appts.
- Downplaying or denying medical issues or forgetting to address them.
- Difficulty with personal hygiene, could lead to skin break down, infection i.e., dental problems etc. colds, flu, pneumonia, even sepsis.
- Mood: anger, frustration, depression, anxiety, may be off putting for others.

# Care providers in general

- Higher levels of stress and burnout!  
Mental Health issues
- Increased use of alcohol and drugs.
- Focus on rehabilitation and healing to return to level of ability, functioning and health. Fix it model of care.
- View lack of progress, illness, declines, or medical, physical, or emotional changes, as if they have done a poor job. Failure.
- Quality of life and greatest amount of independence of here and now.

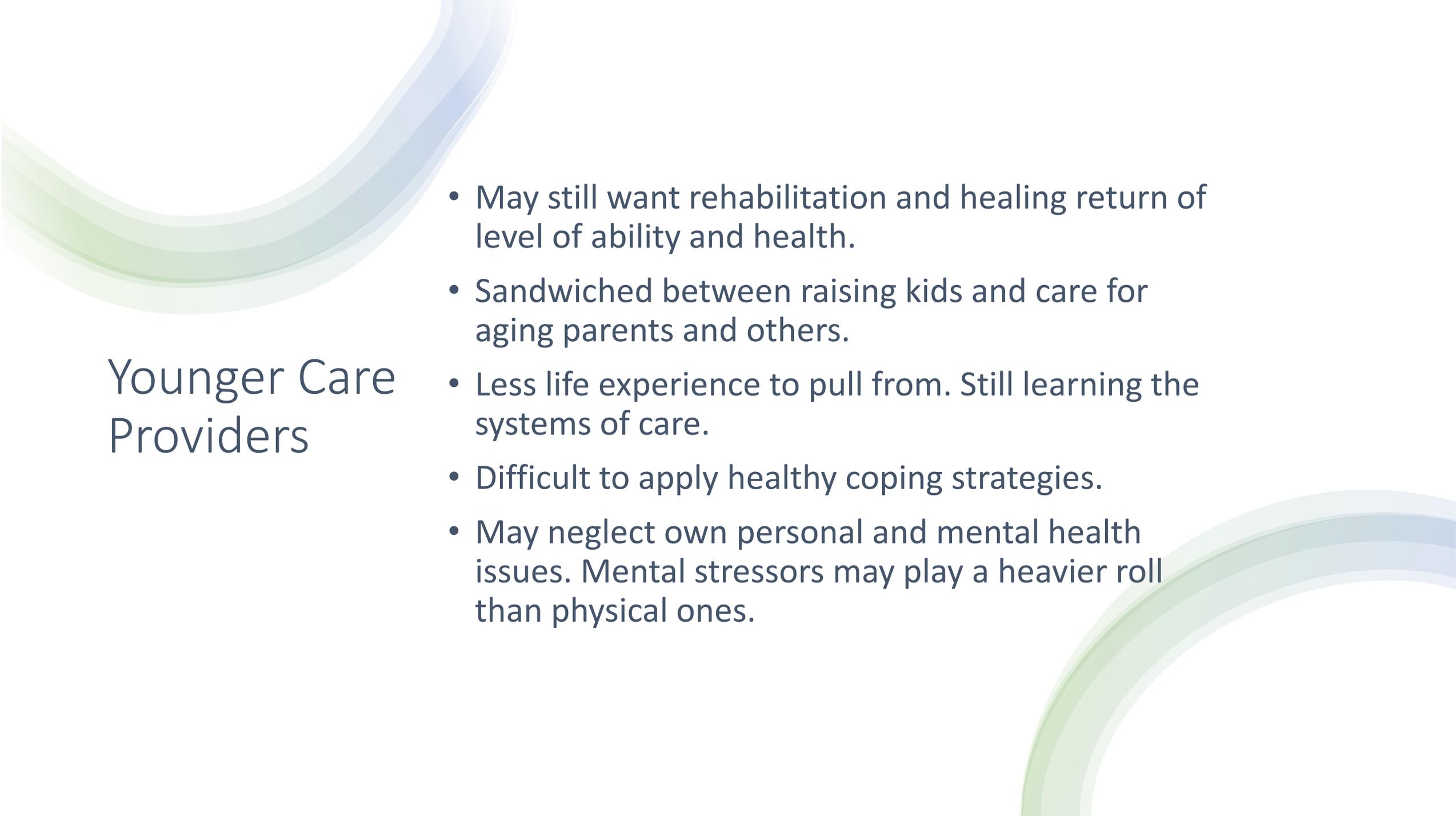
# Aging with a Brain Injury

- Worries, fears and feelings of abandonment
- Change in resources
- Challenges understanding the new process. Different from rehabilitation.
- The old way of doing things may not work or need an overhaul.
- More aches and pain
- Loss of functioning: physical, mental, emotional and decreased capacity
- Need more help and less receptive to others helping
- Loss of identity, purpose, and independence
- Decrease in mental well-being



## Aging Care Providers issues

- Care providers aging and needing help caring for loved one.
  - Physical and mental health issues of their own.
  - Compounded by the toll of care providing Physical, mental, and emotional.
  - Retirement; La Dolce Vita! The Golden Years! Change of mind set.
  - Lose of purpose, dreams aspirations.
  - Worries and regret of not doing enough, and what is going to happen w/o them, burdening other family members and friends.
  - Change in resources, decrease, fixed income.
  - Change of lifestyle, routines, more sedentary.
  - Care needed for themselves increases.



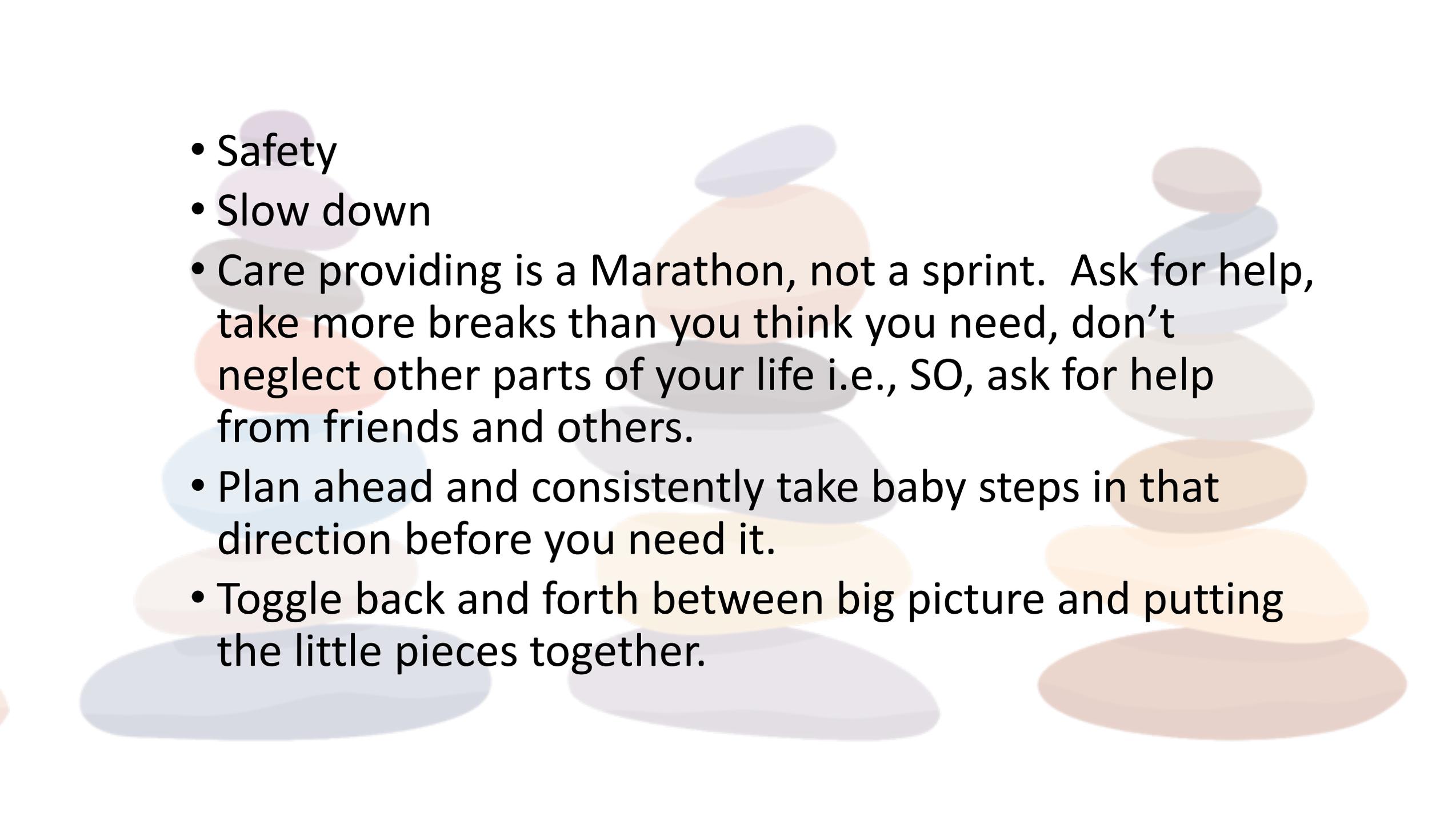
## Younger Care Providers

- May still want rehabilitation and healing return of level of ability and health.
- Sandwiched between raising kids and care for aging parents and others.
- Less life experience to pull from. Still learning the systems of care.
- Difficult to apply healthy coping strategies.
- May neglect own personal and mental health issues. Mental stressors may play a heavier roll than physical ones.



# Accessing Care and Services

- Re-think about care services
- Patchwork quilt vs. full coverage blanket
  - May need more care. More players on the team, i.e., Gerontologist or elder care experts
  - Changes may not be fixable, is this the new normal, new meds, routines, compensation strategies, etc.
  - Focus on quality of life, not outcome oriented or 1<sup>st</sup> place winner
  - Person Centered not system centered.
  - More time allotted for services and healing.

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- Safety
  - Slow down
  - Care providing is a Marathon, not a sprint. Ask for help, take more breaks than you think you need, don't neglect other parts of your life i.e., SO, ask for help from friends and others.
  - Plan ahead and consistently take baby steps in that direction before you need it.
  - Toggle back and forth between big picture and putting the little pieces together.

Learning curve  
Things you  
might need to  
learn about

- Specialty service providers elder care not trad. BI providers
- Complementary and Integrative Health Services
- Day Programs and Enriched environments, inclusive, social and recreational.
- Mental health system of care
- Insurance, Medicaid, Medicare, Finances
- Elder Law Attorneys
- Advance Directives
- Longterm living facilities
- Respite care options
- Case management services
- Adult protection services

# Safety First & Change your Mindset

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Dignity of risk versus safe and healthy; Error on safety first



Help normalize so they can say yes to help



Options to find joy and happiness; social, recreational acts, not always to achieve a goal. Play, sing, color, listen to music, have dinner night or book club, go to a day program, gardening, do chair yoga. For fun!

# Proactivity Road Map To Do list

- **In Case of an Emergency(ICE) book.**
- **Establish a strong medical team and yearly appts.**
- **Build a home team! Delegate work; be a family member instead of care provider, accept care and let them do what they can. Don't always focus on the negative.**
- **Schedule Regular Team meetings! Use positive reinforcement, food and Kudos!**
- **Daily schedule, care routine, supportive structure book with descriptions, pictures, and video. Have fun!**
- **Take time to understand private insurance, Medicare, Medicaid, etc. details**
- **Test out Respite Care, emergency placement, and long-term placement options before the emergency happens.**
- **Case management services, community resource navigators**
- **Advance Directives, Will, special needs trusts, Elder Law Attorney**

# Identify Lifestyle Adjustments

- Eat well- healthy diet & drink water
- Exercise
- Plenty of sleep
- Regular doctor, dentist, hearing, vision and specialist visits. Add specialist in eldercare and mental health for changes occurring during aging.
- Counseling, support groups, fun groups.
- Organization, structure, and routine.  
Lead home health aid.
- Therapy and day to day operations manual.
- Regular team meetings 2-4x a year.
- ICE book: get all info in one place and accessible.



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**Thank You!**

**Victor Towle, MS, C-MMT, CBIS**

**303-789-8305**

**[VTowle@CraigHospital.org](mailto:VTowle@CraigHospital.org)**



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