

## THE ELDERLY A GLIMPSE INTO THE AGING EYE



Technical Level 2  
Jackie O'Keefe, LDO

## Welcome To The Generations

### Generational Overview

- ▶ Generation Z: 1996 - Present
- ▶ Millennials: 1977 - 1995
- ▶ Generation X: 1965 - 1976
- ▶ Baby Boomers: 1946 - 1964
- ▶ Traditionalists: Pre-1946



## TRADITIONALIST SPENDING

- Mature Empty Nester – Gifting Themselves  
Mid 1940's - 11%
- Silent Generation - Children of GG  
1930's - 9%
- Greatest Generation – WWII GI GEN  
Late 1920's – 3 %



## ELDERLY DEMOGRAPHICS

- Biggest Growth in Optical
- 60 Million 65+
- 12 Million VA ≤20/60
- Doubled by 2030.



## FEARS & MISUNDERSTANDINGS



- Advocates
- The Question List
- Easy On The Jargon

## MILESTONES

- Significant Points in Developments.
- At what age did the child crawl?
- At what age did the child learn to walk?
- At what age did the child learn to talk?
- At what age did the child learn to read?



## TRIP STONES

- When did they retire from work?
- When did they stop driving on high-speed highways?
- When did they stop playing sports like tennis or golf?
- Have they moved to an assist living home?
- When did they start using magnifiers?
- What about bumps/falls?



## VISUAL CONCERNS

- Snail Mail
- Bills
- Food Packaging
- Medicine Bottle Labels
- Bank Statements
- Signing Contracts/Paper Documents  
Signature Guides.



## SOCIAL CONCERNS

- Shut-In Concerns
- Loneliness Issues
- Body/Mind Aging
- Visual System Aging.



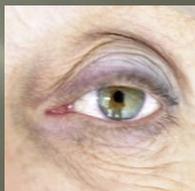
## REAL CONCERNS

- Decreased *Functional* Hearing
  - Slow & Low Tone
- Decreased *Functional* Vision
  - You Can't Replace Eyes
- Losing Independence
  - Kicking & Screaming



## AGE RELATED CHANGES

- Lacrimal System
  - Transmits Tears
  - Less Productive
  - Dry Eye
  - Clogged Ducts
- Vitreous Humor
  - Provides Nutrients
  - Helps Keep The Shape
  - Thins
  - Increased Eye Floaters
  - More Of A Nuisance



## AGE RELATED CHANGES

- Pupil
  - Smaller
  - More Fixed
- Retina
  - Slows Down
  - Slower Visual Reaction
- Crystalline Lens
  - More Dense
  - Looses Flexibility
  - Cloudier
  - Yellowing
  - Most Common Eye Disorder is Cataracts



## CAUSE & AFFECT



- Decreased Night Vision
- Decreased Near Vision
- Decreased Clear Vision
- Increased Contrast Sensitivity (CS)

## WE SEE WHAT THEY SEE

- Yellow Lens/Hairspray
  - 2 Passes
- Vision Simulator Card
- Vision Simulator Eyewear
- Claude Monet
  - Early 20<sup>th</sup> Century
  - Cataract Development



## CATARACTS



- Pre-Op
  - Less Contrast
  - Blurred Vision
  - Reflections
  - When Should I?
- Post-Op
  - Better Clarity
  - Increased Color
  - Reduced Reflections
  - Anisometropia
  - Lens Removal Please

## Laughing Matter?



•Red Dress & Purple Walls

## WHAT ABOUT SUNWEAR?

- Rhodopsin Depletion
  - Light Receptor in Rods
  - Temporary Bleaching
- No Sunwear Outdoors
  - 3 Hours = 10 Minutes
  - 4 Hours = 20 Minutes
  - 5 Hours = 40 Minutes
  - 10 Days = 50%.
- Pirates
  - Day & Night Patch
  - Above Below Deck Patch
- Military Pilots
  - No Day & Night



## FUNCTIONAL VISION



Maintaining Vision Crucial For Driving

Nighttime Driving Acuity - 20/20 vs 20/32 vs 20/38

Nighttime Light Exposure Reactive Recovery- A-R 5 Sec. vs 10 Sec.

## AOA® RECOMMENDATIONS



- Caution at Intersections
- Reduce Speed
- Daytime Only
- Cruise Control Concerns
- Avoid Tapered Temples
- Senior Driving Course
- Annual Eye Exam
- Bring an Advocate.

## WHAT ELSE SHOULD WE ASK?



- Medications
  - Prescribed
    - 25% Don't Disclose
    - 33% Unaware of Side Effects
    - Opioids & Night Vision
  - OTC
    - Nutraceuticals
    - Eye Drops

## SMART RX BOTTLE

- Bottle Cap Sensors
- Medication Removed
- Time Reminders
- Missed Dose Reminders
- Text To Pt/Caregiver
- Must Be On The Rx



## EDUCATE THEM

- ▣ 3 Ways We Learn
  - Visually
  - Audibly
  - Applying
- ▣ How Would You Feel?
  - KISS



## HOW CAN WE HELP?

- Enlarge The Image
- Recommend Brighter Bulbs
- Talk Slower versus Louder
- Talk Lower versus Higher.



## MOTOR BEHAVIOR TO OBSERVE



- Body Movement
  - Involuntary
  - Intentional
- Walking Gait
- Lowering Into a Chair
- Touching Chair Before Sitting
- Stair Walking

## SAFETY FIRST As You Adapt to Low Vision

- ✔ Keep all interior doors and cabinet drawers fully opened or closed.
- ✔ Remove tripping hazards such as throw rugs, clutter and electrical cords, and push chairs completely under tables.
- ✔ Keep exterior doors locked. Do not unlock and open until you verify who is at the door.
- ✔ Improve use of stairs by placing something touchable at each end of the railing; putting contrasting tape/paint on the edges of steps; or keeping a cane or walking stick by the stairs to measure the distance between steps.
- ✔ Improve lighting by placing LED flashlights in every room. In addition, use night lights, counter top task lights and adjustable lamps.
- ✔ Increase the use of small appliances including slow cookers, microwaves and toaster ovens to reduce the risk of burns.
- ✔ Lessen the use of kitchen knives by utilizing pre-cut vegetables, food choppers, peelers and pizza cutters for slicing.
- ✔ Put large-print, expiration-date labels on food packaging and test freshness by smelling food before using.
- ✔ Maintain a landline telephone with large-print buttons and a memory feature for accessibility during power outages or emergencies.
- ✔ Use large-print or tactile labels to identify toxic products and store them separately from other household items.

## LOW VISION AIDS



## FRAME CONSIDERATIONS



- Skin Elasticity Loss
  - Skin Ability To Stretch & Return
- Skin Thinning
- Skin Sagging
- Lightweight
- Comfortable

## FRAME CONSIDERATIONS

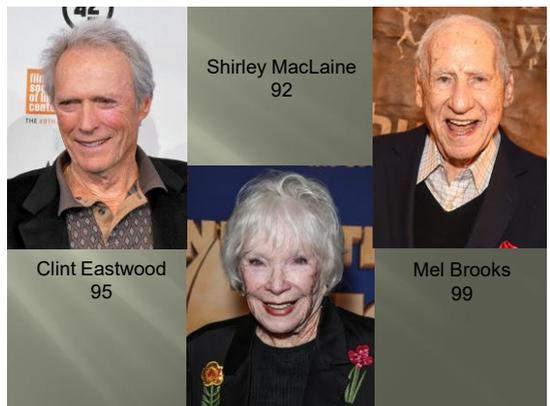
- What would you recommend?
- Button Nose Pads
  - Position near the Canthus
  - Corners of the eye where eye lids meet.
- Longer Nose Pads
  - Position below Canthus
- Post-op Cancer
  - Windsor Bridge
    - Metal Frames Without Nose Pads
  - Strap Bridge
    - Single Snap-on & Screw-on Nose Pad



## HOW CAN WE REALLY MAKE A DIFFERENCE?



- Walk A Mile
- Be Compassionate
- Situational Dementia
- Be Patient
- Don't Patronize
- Marketing For Them



## PUT YOURSELF IN THEIR SHOES



## ALLOW THEM TO ASK QUESTIONS



## DON'T EMBARRASS THEM

