**Powerboost Lenses:
Does Your Practice Need Them?**

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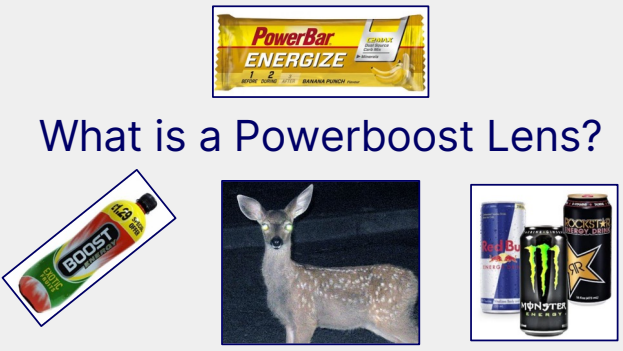mhoff@sightlineoc.com

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Disclosures

- The content of this course was developed independently without commercial bias or influence
- Consulting
  - Visionix
  - Essilor Instruments, USA

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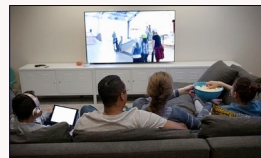# What is a Powerboost Lens?

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Course Objectives:

- History of development
- Marketing Message/Fitting
- Characteristics and Performance
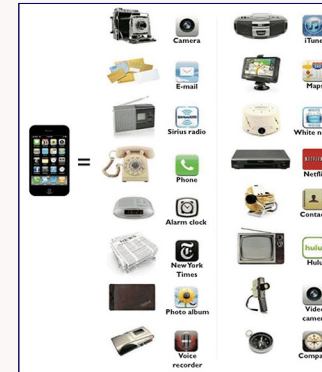- Product Portfolio Summary
- Prescribing/Cases

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Technology Timeline

1920's - 1930's - Radio
1940's - 1950's - B&W TV
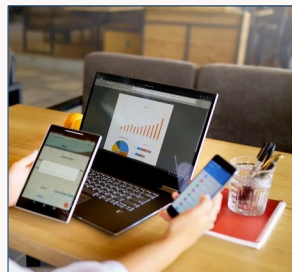1950's - 1990's - Color TV
1990 - present- HD TV

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The Digital Revolution

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The Physical and Visual Response

Breakdown of DES Symptoms

- 35% Neck/shoulder pain
- 27% Dry eyes
- 28% Headaches
- 32% Eye strain
- 28% Blurred vision

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Have a Conversation

90% of patients do not talk with their eye care provider about digital device usage.

73%

#1 reason for not wearing computer eyewear:
"My eye care provider never recommended them"

of Americans said they did not know about the benefits of computer eyewear.

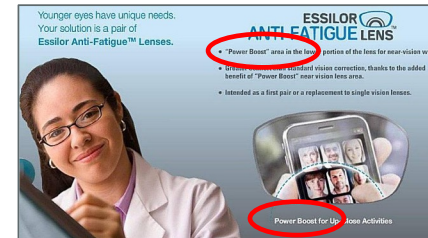The Vision Council 2016 Digital Eye Strain Report, EYES OVEREXPOSED: THE DIGITAL DEVICE DILEMMA

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Industry Response

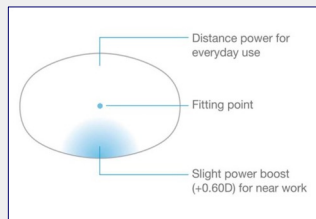Digital Eye Strain ➡ Anti Fatigue Lens

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Historical Background

From Essilor Press Release, US Launch 2009:

"… Essilor Anti-Fatigue lenses feature a special "Power Boost" area in the lower portion of the lens, to give the wearer's eyes greater clarity and comfort when focusing up-close for extended periods…

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Historical Background

Design:
- 0.60D "power boost" in the lower lens
- Minimal peripheral aberration
- Performs like a Single Vision lens; minimal swim and magnification
- Reduces Digital Eye Strain symptoms

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Marketing Messages

✓ **Benefits to your patients**
- Stress/strain-free digital viewing
- Comfortable all-day vision
- Relief from Digital Eye Strain

Marketing Messages:	Alternate Names:
• Digital Eye Strain • Excessive Digital Device Usage • 33 cm working distance • Pre-presbyope, Early Presbyope	• Anti-Fatigue Lens • Single Vision, with a power boost • Starter Progressive

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Powerboost Lenses – Fitting Guides

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Deconstructing a Powerboost Lens

● Optical Properties

● Lens Performance
  ○ Single Vision
  ○ Bifocal
  ○ Computer Lens
  ○ PAL

● Boost = ADD?

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What Can We Measure?
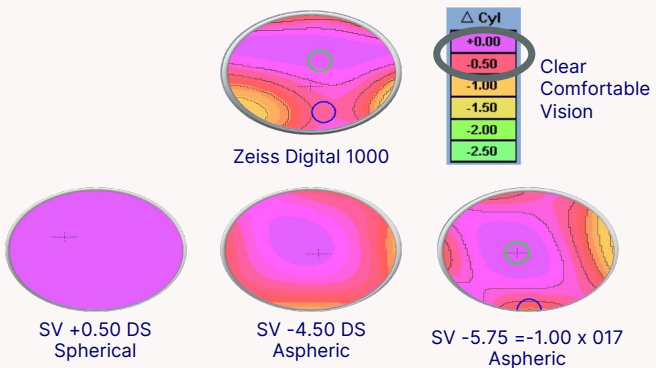
Area of perceived clear vision

Cylinder Aberration Contour Plot
- Perceived clear vision
- Isometric contour lines (unwanted cylinder)

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Is a Powerboost = Single Vision?

Clear Comfortable Vision

Zeiss Digital 1000

SV +0.50 DS Spherical

SV -4.50 DS Aspheric

SV -5.75 =-1.00 x 017 Aspheric

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Is a Powerboost = Bifocal?
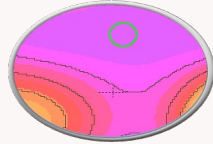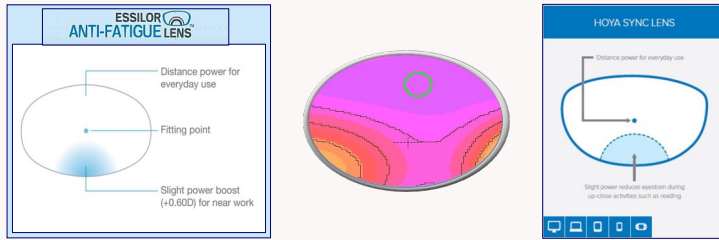
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Is a Powerboost Lens = Computer Lens?

Digital Lens 1000

Sola Access 125   Essilor Computer   Hoya NMO Zoom
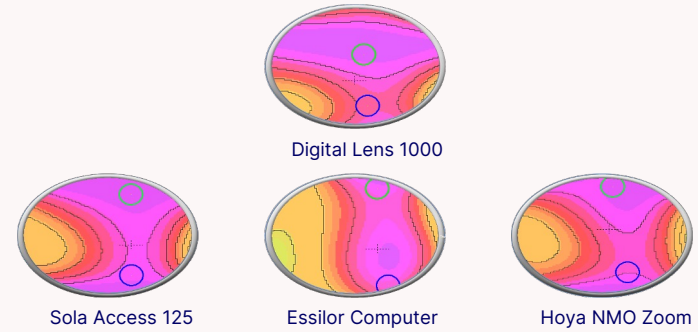
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Is a Powerboost = Progressive lens?

Digital Lens 1000

Zeiss Individual 2   Unity Via Elite   Varilux X
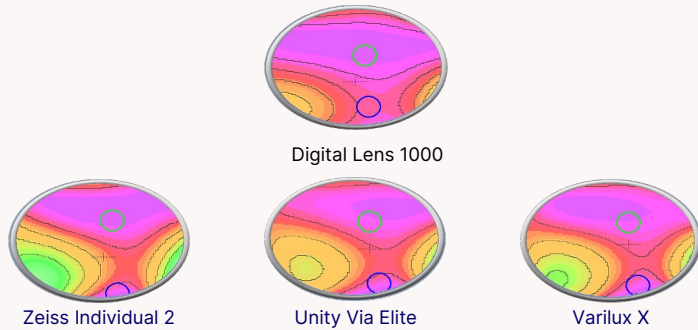
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Powerboost Lens Design Characteristics

Powerboost

Progressive   Hybrid   Near Variable Focus

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A Powerboost Lens

Progressive like design   Dual Centric design
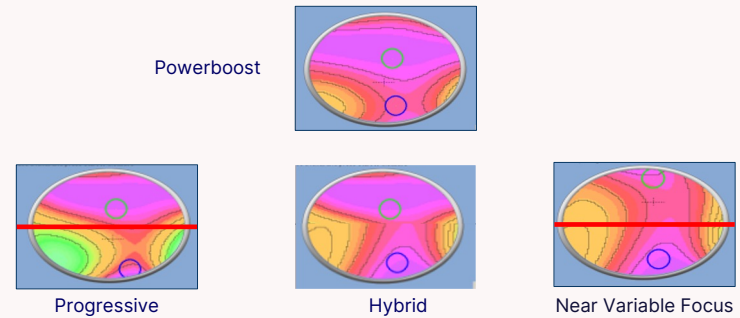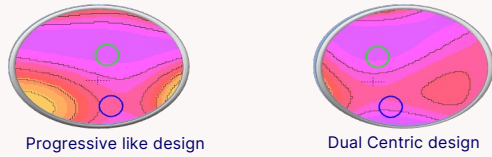
Specialized progressive-like or dual centric lens
- reduces digital eye strain signs and symptoms
- compensates for a closer working distance

Prescribing and Fitting
- severity of the symptoms
- patient's age
- exam data

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Powerboost Marketing Material

- Wide clear distance
- Wide short corridor
- Fast access to near power
- Large wide near area
- Low Add Power +0.40 to +1.32
- Very low aberration

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Powerboost Fitting Guidelines
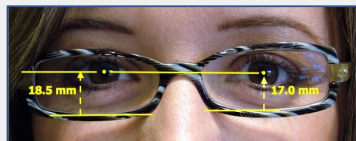
18.5 mm   17.0 mm

Distance power for everyday use

Fitting point

Slight power boost (+0.60D) for near work

Dr. Isabel Kazemi
123 Sunshine St.
Amazing, CA 98765

NAME Annie
ADDRESS _____ DATE _____

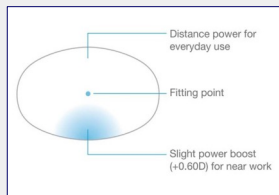| Rx	SPHERICAL	CYLINDRICAL	AXIS	PRISM	BASE
D.V. O.D.	+1.00	DS			
O.S.	+1.00	DS			
N.V. O.D.					
O.S.					

Remarks Zeiss Digital 1000
DR. _____

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Product Portfolio Summary - Powerboost Lenses

Power Boost Lenses		Boost at the Bottom
ZEISS DIGITAL LENS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
HOYA SYNC III	Hoya Sync 5	+0.57
	Hoya Sync 9	+0.95
	Hoya Sync 13	+1.32
UNITY RELIEVE LENSES	Relieve 50	+0.50
	Relieve 70	+0.70

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Digital Eye Strain

Digital Eye Strain – Symptoms

- Red, Dry, Irritated, Sore Eyes
- Blurred Vision at Distance and/or Near
- Eye Fatigue
- Neck and Back Pain
- Headaches

Digital Eye Strain – Areas of Concern

- Refractive Errors
- Accommodative Disorders
- Binocular Vision Dysfunctions
- Dry, Sore Eyes
- Presbyopia

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Prescribing Powerboost Lenses
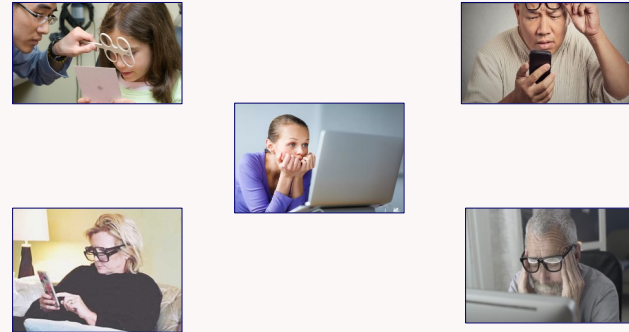
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Fit by Symptom and Age

Symptom Severity: Mild
Rx: Hoya Sync 9   (+0.95D)

Age: 32
Rx: Eyezen +1 (+0.40D)
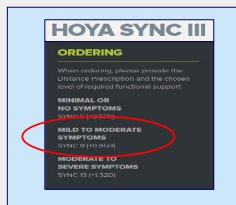
Convergence Insufficiency
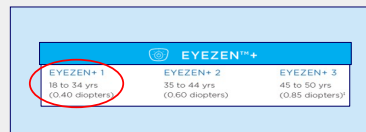
Caution

Effective Add = +4.00
without glasses

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Powerboost for the Emerging Presbyope

Power Boost Lenses		Boost at the Bottom
ZEISS DIGITAL LENS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
UNITY RELIEVE LENSES	Relieve 50	+0.50
	Relieve 70	+0.70

Lisa 43 yo
Rx: +0.25 -0.75 x 180
     +0.25 -0.50 x 005   Add +0.75

BV, OH, GH = WNL, unremarkable

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9/8/23

Accommodative Disorders

Condition	NPA	Flippers	Treatment
Insufficiency	Reduced		(+) Lenses @ Near
Infacility		Reduced	VT (+) Lenses @ Near
Spasm		(+) difficult	VT (+) Lenses @ Near
Ill-Sustained	Reduced on Repeat	(-) difficult	(+) Lenses @ Near

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Binocular Vision Conditions

Condition	Treatment
Exophoria	Prism, VT
Esophoria	(+) Lenses, Prism
Gross Convergence Insufficiency	VT
Convergence Excess	(+) Lenses, Prism
Vertical Phoria	Prism

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Lens Designs for Rxing Near Plus

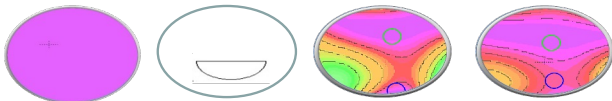| Lenses	Benefits	Limitations
Single Vision Near	Wide Field of View	Distance Blur
Bifocal	Wide Field of View	Cosmesis Image Jump
PAL	Cosmesis	Small Reading Area Narrow Corridor Cost
SV Distance with Near Power Boost	Wide Field of View Cosmesis Lower Cost	(Practically None)

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Powerboost for Accommodative Esophoria

Power Boost Lenses		Boost at the Bottom
ZEISS DIGITAL LENS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
HOYA SYNC III	Hoya Sync 5	+0.57
	Hoya Sync 9	+0.95
	Hoya Sync 13	+1.32

Annie: 11yo

Dry/Wet Ret. and Refraction:
Dist. Rx: +1.00 DS ADD +1.00

Dist CT : ortho Near CT: 5 Esophoria
AC/A = 8/1

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Slide 33:

Dr. Isabel Kazemi
123 Sunshine St.
Amazing, CA 98765

NAME: Annie
ADDRESS: _____ DATE _____

Rx

		SPHERICAL	CYLINDRICAL	AXIS	PRISM	BASE
D.V.	O.D.	+1.00	DS			
	O.S.	+1.00	DS			
N.V	O.D.					
	O.S.					

Remarks: Zeiss Digital 1000

DR. _____

FM-107S

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Slide 34:

Powerboost for Students

Power Boost Lenses		Boost at the Bottom
DIGITAL LENS ZEISS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
UNITY RELIEVE LENSES	Relieve 50	+0.50
	Relieve 70	+0.70

Sophie: 20 yo College student
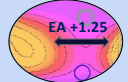
CC: Eye strain and blurry vision in class

Rx: -0.75 DS
**   -1.00 DS add +0.75**

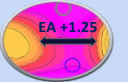**BV, OH, GH = WNL, unremarkable**

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Slide 35:

Powerboost for Intermediate/Near Use

EA +1.25   EA +1.25   EA +1.25

EA +2.00   **EA +2.50**   **EA +2.50**
Access 1.25   NVF- Int/Near   Powerboost

Power Boost Lenses		Boost at the Bottom
ZEISS DIGITAL LENS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
HOYA SYNC III	Hoya Sync 5	+0.57
	Hoya Sync 9	+0.95
	Hoya Sync 13	+1.32

Fred: 61yo w/multiple screens

CC: Trouble seeing at near w/ Access 75

Rx: Plano OU, Int. +1.25, Near +2.50

BV, OH, GH = WNL, unremarkable

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Slide 36:

Dr. Michelle J. Hoff
123 Sunshine St.
Amazing, CA 98765

NAME: Fred
ADDRESS: _____ DATE _____

Rx

		SPHERICAL	CYLINDRICAL	AXIS	PRISM	BASE
D.V.	O.D.	+1.25	DS			
	O.S.	+1.25	DS			
N.V	O.D.					
	O.S.					
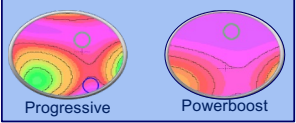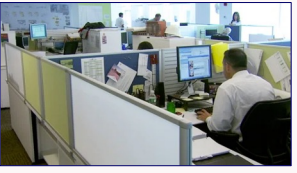
Remarks: Hoya Sync 13 for Intermediate/Near

DR. _____

FM-107S

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Slide 37

Powerboost for Progressing Presbyope

Progressive   Powerboost

Power Boost Lenses		Boost at the Bottom
ZEISS DIGITAL LENS	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
HOYA SYNC III	Hoya Sync 5	+0.57
	Hoya Sync 9	+0.95
	Hoya Sync 13	+1.32

Walter: 57yo   IT Support

CC: Trouble seeing at near current PAL

Current PAL: +1.00 DS OU add +1.50

RX: +1.00 DS OU Int: +1.25 Near +2.25
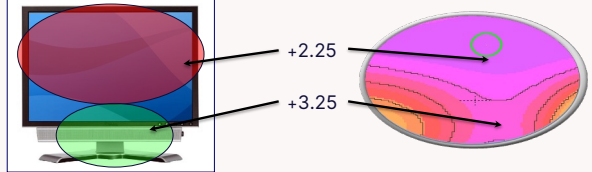
BV, OH, GH = WNL, unremarkable

Slide 38

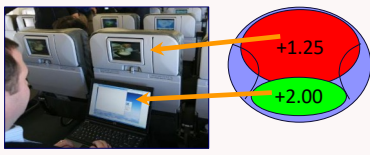# Example: Powerboost as Intermediate/Near

Zeiss Digital 1000 (+1.00 boost)
Rx +1.00D, add +1.25 intermediate, add +2.25 near

Powerboost Lens	Power at FRP	Distance (above FRP)	Near (below FRP)	Power at near
Zeiss Digital 1000	Intermediate add	No distance	14mm	Boost power

+2.25

+3.25

Slide 39

Powerboost for the Traveling Presbyope

Power Boost Lenses		Boost at the Bottom
ZEISS CARL ZEISS VISION	Digital 500	+0.50
	Digital 750	+0.75
	Digital 1000	+1.00
	Digital 1250	+1.25
Eyezen	Eyezen +1	+0.40
	Eyezen +2	+0.60
	Eyezen +3	+0.85
	Eyezen +4	+1.10
UNITY RELIEVE LENSES	Relieve 50	+0.50
	Relieve 70	+0.70

+1.25

+2.00

Evan: 56 YO retired traveler

CC: PAL not ideal for viewing seat-back screens in flight

Rx: -5.00 DS OU Add +2.00 Seatback screen EA +1.25

BV, OH, GH = WNL, unremarkable

Slide 40

Clinical Pearls

● Specialty progressive-like lens
● Visual Assessment Exam Data Prescribing
● Not just for Pre-presbyopes/Digital Eye Strain
  ○ Accommodative Disorders
  ○ Binocular Dysfunction
  ○ 1st time PAL
  ○ Task Specific/Advanced Presbyope

Contraindications

- Convergence insufficiency
- Moderate exophoria at near
- Pseudo Non-adapts

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At the End of the Day

- Did I address the chief concern with appropriate recommendations?
- Is what I am prescribing an improvement over what the patient has or is used to?

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Thank You

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