

Syntonics

Practice Management

Syntonics 101
May 2021

John Pulaski, OD, FCSO

Syntonics Practice Management

Disclosure

Patient Management Treatment

Follow the protocol – Do not look for
“Quick Fix” or the “Magic Bullet”

It is one of the most effective treatments
you will use in your office.

Patient Management

Initial Evaluation

Treatment

Home or Office therapy
When to give eyeglasses
When to initiate VT

Patient Management

Treatment Options

Office Therapy

Traditional – Syntonizer, “The College Unit”

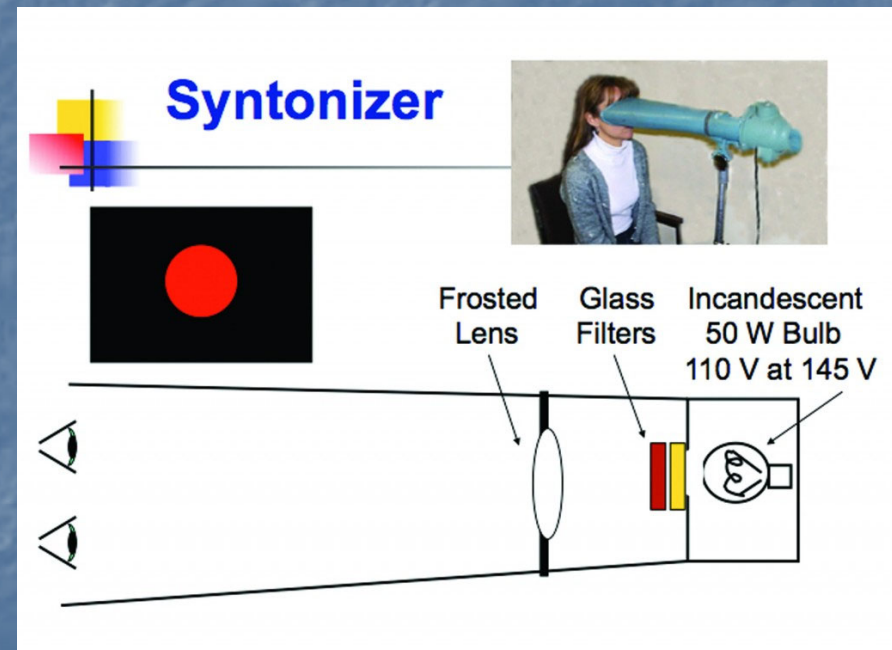
Home unit in Office

Advantages/Disadvantages

Patient Management Treatment

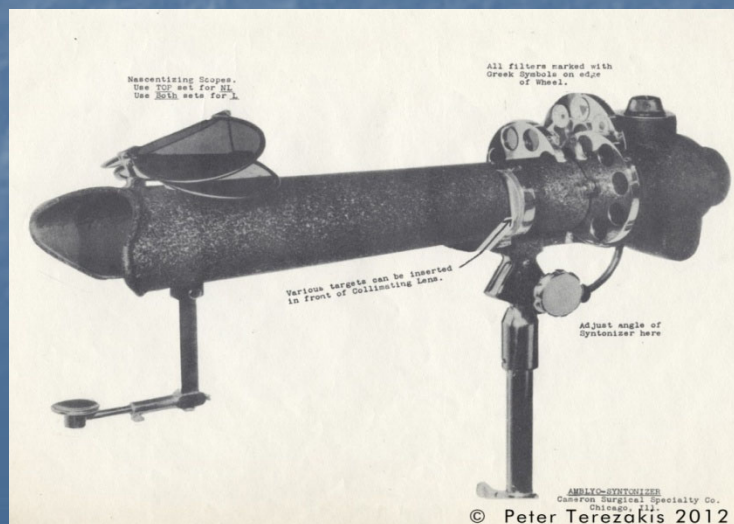
The design of the Syntonizer

- Light Source – low wattage
- Filters in specific order and position
- Frosted clear lens/Collimating lens
- Aperture
- Done in dark – dark surround with central colored target.
- Target located approximately at “Harmon Distance” from the eyes.



Patient Management Treatment Options Office Therapy

Traditional
Syntonizer
“The College
Unit”



Patient Management Treatment Options Office Therapy

Traditional
Syntonizer
“The College
Unit”



Patient Management Treatment

Importance of placement of filters and lenses.

Does it make a difference?

Patient Management Treatment

Office Therapy
Home Therapy

Patient Management Treatment Options Office Therapy

Traditional
Syntonizer
“The College
Unit”
Group Therapy



Patient Management

Treatment Options

Office Therapy

Staff Responsibilities/Forms

Booking at initial exam

3x/week at patient's convenience

Fields after 7 and 21 sessions.

Insurance and Financial

Office Forms

DATE ____ / ____ / ____ Patient Name _____ Rec # _____ DOB _____
Last First State ID # _____
Insurance Medi State BCHMO BC Ctcare Aetna UHC Oxford Cigna Other _____
Medi Medi Medi Medi
Payment Ins Package \$ _____

Syntonics Treatment Summary and Record

[illegible]

Field Expansion Therapy – In Office

DATE / / NAME Tx Filter AO/MD MU UO/MU
 Copay Day Total Days Tx Time (min)

HX Compliance + - _____ Changes in Health/Medication None
 Complaints ☐ Headaches ☐ Eye Pain R L ☐ Light Sensitivity ☐ Sound/ Motion Sensitivity ☐ Blurred Vision ☐ Double Vision
☐ Focusing Problems D N ☐ Other _____

Subjective Responses in therapy ☐ None ☐ Eye / Head Pain ☐ Tearing ☐ Inattention ☐ Fidgety ☐ Fatigue

V A s c c	OD 20	Pupils	Size SS/Lt	PLR	$\alpha\Omega$	APD	NPC	____/____
	OS 20	OD	____/____ mm	1 2 3 4+	0 1 2 3 4+	- +		
		OS	____/____ mm	1 2 3 4+	0 1 2 3 4+	- +		

EOM's	Pursuits	Saccades	Hypo/Hypermetric	Other
0	0	0	0	0
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
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19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
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24	24	24	24	24
25	25	25	25	25
26	26	26	26	26
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52	52	52	52	52
53	53	53	53	53
54	54	54	54	54
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56	56	56	56	56
57	57	57	57	57
58	58	58	58	58
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67	67	67	67	67
68	68	68	68	68
69	69	69	69	69
70	70	70	70	70
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72	72	72	72	72
73	73	73	73	73
74	74	74	74	74
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78	78	78	78	78
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82	82	82	82	82
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86	86	86	86	86
87	87	87	87	87
88	88	88	88	88
89	89	89	89	89
90	90	90	90	90
91	91	91	91	91
92	92	92	92	92
93	93	93	93	93
94	94	94	94	94
95	95	95	95	95
96	96	96	96	96
97	97	97	97	97
98	98	98	98	98
99	99	99	99</	

OD SAFE	1	2	3	4+	____%	To R	1	2	3	4+	____	____
OS SAFE	1	2	3	4+	____%	To L	1	2	3	4+		

OS	SALE	1	2	3	4	_____	%
Jerky	+	Fixation Loss	1	2	3	4	

Impression: ☐ Visual Field Contraction **Plan** ☐ Continue Current Filters ☐ Change Tx _____
☐ _____ ☐ FUp _____ Days _____
 Signed _____

Field Expansion Therapy – In Office

DATE / / NAME Tx Filter AO/MD MU UO/MU
 Copay Day Total Days Tx Time (min)

HX Compliance + - _____ Changes in Health/Medication__None_____
Complaints ☐ Headaches ☐ Eye Pain R L ☐ Light Sensitivity ☐ Sound/ Motion Sensitivity ☐ Blurred Vision ☐ Double Vision
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VA sc cc	OD 20	Pupils	Size SS/Lt	PLR	$\alpha\Omega$	APD	NPC	____/____
	OS 20	OD	____/____ mm	1 2 3 4+	0 1 2 3 4+ - +			
		OS	____/____ mm	1 2 3 4+	0 1 2 3 4+ - +			

EOM's	Pursuits	Saccades	Hypo/Hypermetric	Other

OD	SAFE	1	2	3	4+	_____	%	To R	1	2	3	4+	_____	_____
OS	SAFE	1	2	3	4+	_____	%	To L	1	2	3	4+	_____	_____

Jerky + Fixation Loss 1 2 3 4

Impression: ☐ Visual Field Contraction **Plan** ☐ Continue Current Filters ☐ Change Tx _____
☐ _____ ☐ FU ☐ _____ Days _____
Signed _____

Patient Management

Treatment Option

Home Therapy

The Levine Unit

Hummingbird Unit

The “Fox” Unit

The “Simon Grbevski” Unit

The Eyselux Unit

The Optomatters Home Unit

Patient Management Treatment Option Home Therapy

The Levine
Unit
Glass Filters



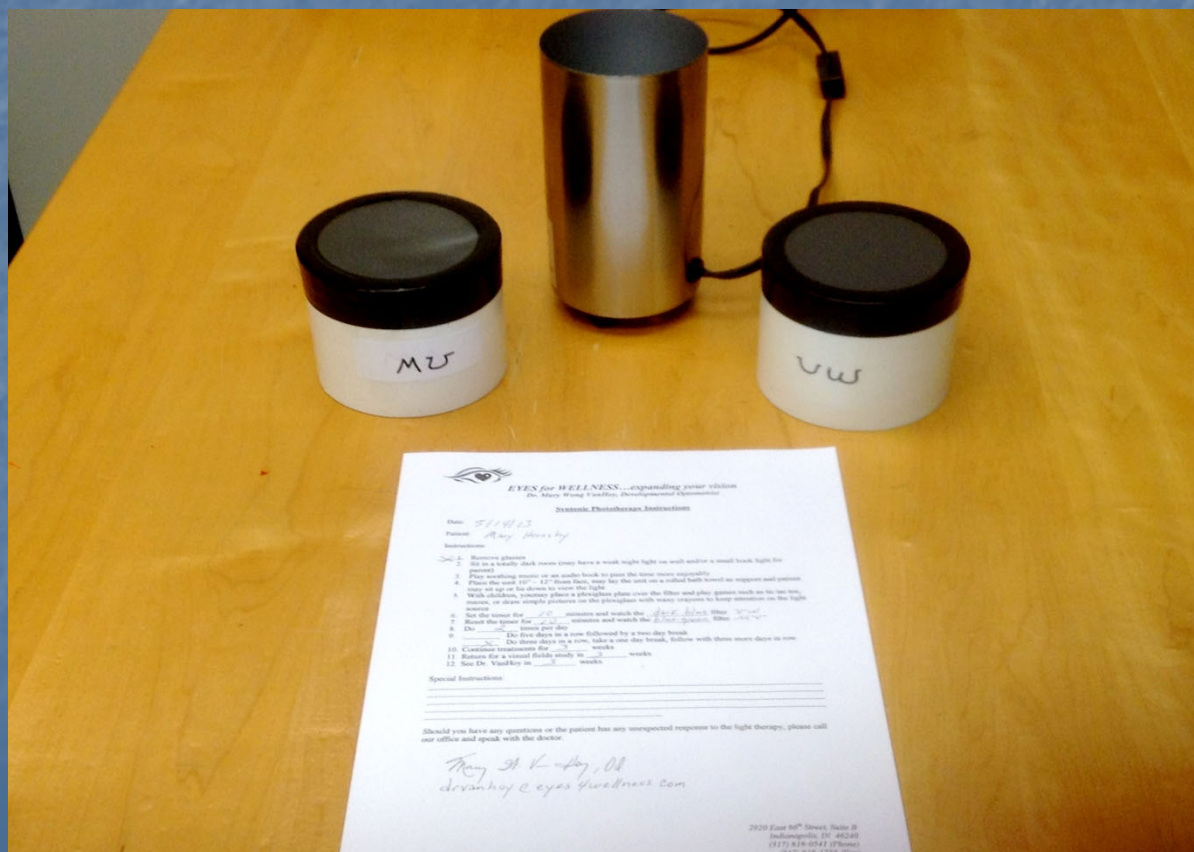
Patient Management Treatment Option Home Therapy

Hummingbird
Unit
Glass Filters



Patient Management Treatment Option Home Therapy

The “Fox” Unit



Fox/Pulaski 101 2017

Patient Management

Treatment Option

Home Therapy

The “Fox” Unit
15 Watt bulb
Roscolux Filter
Gels



Patient Management

Treatment Option

Home Therapy

The “Fox” Unit

Roscolux Filter
Gels

Fox/Pulaski 101 2017

ROSCOLUX FILTER STOCK NUMBERS FOR SYNTONIC UNITS

1. Alpha #27	Medium Red
2. Omega #59	Indigo
3. Mu #90	Dark Yellow Green
4. Delta #15	Deep Straw
5. Upsilon #74	Night Blue
6. Pi #69	Brilliant Blue
7. Lambda #80	Primary Blue
8. Theta #12	Straw
9. N #4990	Lavendar
10. D #364	Blue Bell
11. S #312	Canary
12. #100 Frost	Diffuser

Resource: www.indystage.com

(800) 637-8243—phone

(317) 635-9433--fax

Patient Management Treatment Option Home Therapy

The Simon
Grbevski Unit
The “Spectrum”
Glass Lenses



Patient Management Treatment Option Home Therapy Eyelux

Home and Office –Glass lenses



Patient Management Treatment Option Home Therapy

Optomatters Home Unit The “Color Boy”



Patient Management Treatment Issues



Fox/Pulaski 101 2017



Patient Management

Treatment Option

Home Therapy

The use of “Goggles”

- Are Filters based on Syntonic filter combinations.
- Should not be cleaned with cleaners.
- Originally used with a Home unit
- Using them is not Syntonics and should not be referred as such.

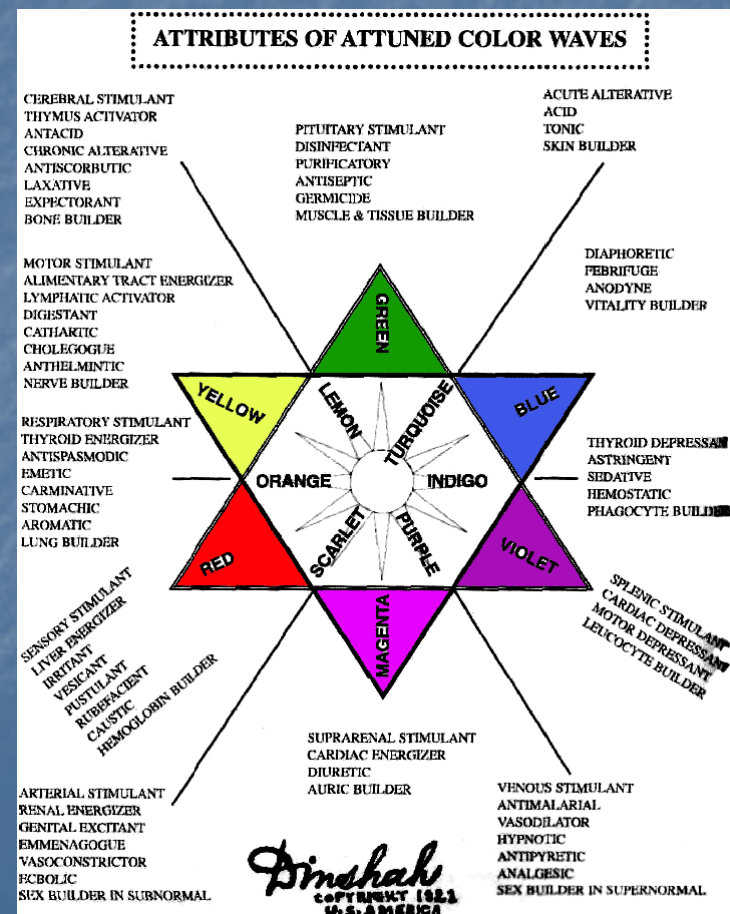


Patient Management Treatment Option Home Therapy

The use of “Goggles”

- Fields open significantly slower
- They are a type of Color therapy
 - Tints
 - Spectra Chrome
 - Comra Delta Laser
 - Color Acupuncture
 - Colored crystals, etc
- Can be very effective

Fox/Pulaski 101 2017



Patient Management

Treatment Options

Home Therapy - Administration

- Should be used Daily if possible
- Field to monitor Tx – 7-10 days/21 Days
- Then follow every 2-3 weeks
- Financial Options – Global fee/Insurance
- Rental
- Administrative Forms

Patient Management


Home Therapy - Administration

SYNTONICS RECORD

Patient _____ Age _____ Date _____

Phone Number _____

DATE	Days/Weeks	Filters
4-20-17	1	210 10 G-10 10 57
	2	
	3	
	4	
	5	
	6 VF	
	7	
	8	
	9	
	10	
	11	
	12 VF	
	13	
	14	
	15	
	16	
	17	
	18	
	19	
	20	

 **EyeCare Center of Waterbury L.L.C.**
Family Doctors of Optometry
John J. Pulaski, OD FCSO

Instructions – Home Training Color Therapy

Name _____ Unit # _____
Date _____

1. You will use the following color combinations:

Color Filters	1 st /2 nd	Numbers	Time to be used
1			
2			
3			
4			

Color filters - 1st / 2nd
First color facing you
First color facing you
**Lens with sticker should be closest to the bulb. No glasses

2. The unit should be used in a completely dark room with the color screen 14-16 inches in front of the eyes. The ideal distance is the Harmon distance, which is the distance from the middle finger's knuckle to the end of the elbow. It is helpful to have a flashlight or dim light to use when changing filters.

3. You should gaze directly at the light at all times. You may listen to music or talk as long as you continue to look at the light. With children it has been helpful to ask spelling words or math problems or simply read a story.

4. The filters should be used in the order above. The last color listed is the one closest to the back of the instrument (closest to the bulb). Please use care when handling the filters as they are glass and very expensive. They can be cleaned with any glass cleaner.


5. When changing to a second filter make sure to turn the instrument **off** first, since staring into the white light will have a negative effect on the therapy. At the end of the session wait one to two minutes before exposing yourself to brighter lights or sunlight.

6. The color unit should be used once a day.

7. Your visual fields will be re-evaluated after 7 sessions and after 21 sessions to determine the effectiveness of the therapy. Most people do not need to go more than 21 sessions to obtain the desired results.

8. You are responsible for any damage that may occur to the unit or filters. If you have any questions please feel free to call. The cost of replacing the filters is \$28.00 each.
(for more information go to www.syntonicsphototherapy.com)

625 Wolcott Street
Waterbury, Ct 06705
Phone 203-754-8339
Fax 203-753-9030

 **EyeCare Center of Waterbury L.L.C.**
Family Doctors of Optometry
John Pulaski OD, FCSO

Loan/Rental Agreement for the Syntonizer (Home Phototherapy Device)

Patient _____ Parent/ _____
Date _____ Responsible Party _____

I understand that the above visual training equipment is being rented to me for the fee of \$. The rental fee is non-refundable.

Should there be any damage, loss or breakage, I will be responsible for the cost of that equipment.

While using this equipment, if a filter should break, the replacement cost of \$28.00 per lens is your responsibility.

If I do not return the color unit at the conclusion of therapy or if the unit is damaged beyond repair, I consent to allow the Eyecare Center of Waterbury to charge my credit card a fee of \$425.00 for the equipment.

If for some reason my credit card is declined and the unit is not returned or damaged I agree to reimburse The Eyecare Center of Waterbury by certified check or cash.

If the terms of payment for non return or damaged are not satisfied, I understand that I will be responsible for the cost of the equipment plus all court and collection fees.

I have read and understand the above agreement.

I, as the signed party, accept responsibility for this bill, if the unit is not returned or returned damaged.

Signed, _____ Rental Fee \$ _____

Credit card on file: _____ Exp. Date: _____

625 Wolcott Street
Waterbury, Ct 06705
(203) 754-8339

Patient Management Administration Coding

- Initial Visit
 - 92004, 99204, 92060, 92083, 92015
- Progress Evaluation of Field
 - 99213 or 99212
 - Field is a 4 isopter field – 92083 or 92082
- Re-evaluation
 - 99214, 92060
- Office Therapy
 - VT Visit 92065 or 92012

Patient Management

Administration Coding

- Diagnosis Codes
 - H53.48 _ Generalized Visual Field Contraction
 - H53.42 _ Scotoma Blind Spot
 - H55.81 Saccadic Dysfunction
 - H55.89 Pursuit Dys/Irregular eye movements
 - H51.11 Convergence Insufficiency
 - H53.71 Glare Sensitivity

Patient Management

Clinical Consideration/Pearls

- How to explain field in relation and findings to patient/parent at end of exam?
 - Have a full field and a chart of showing Tx results.
 - Explanation of field. Kinetic vs Static vs CF
 - How does it relate to other examination findings?
 - How does it relate to their behavior and effect on ADL's, sports, school work, etc.?
 - How does it relate to symptoms?
- How do you explain that you are going to open this field by “staring at a light for 20 minutes.”?

Patient Management

Clinical Consideration/Pearls

- Choosing filters

 - Determine the state of ANS

 - Chronic vs Acute

 - Where is Stress

 - Exo/Eso only in regards to above

- Preparing patient for initial Home treatment

 - Explain protocol and directions of use carefully

 - Must look at colored portion of light

 - Don't look at "white" light

 - First 3 days

Patient Management

Clinical Consideration/Pearls

- When to prescribe Lenses/VT?
Many options
- Do I use lenses with testing and treatment?
Normally do not. Contacts.
- How often do I treat?
Daily or minimum 3x/week.
- Do I ever have to change the filters?
Yes when field is not responding or worsening.
- What about very sensitive patients?
Need to start slow for shorter periods and gentle filters.

Patient Management

Clinical Consideration/Pearls

- What if Field not opening in beginning?
 - Check Unit and Patient procedure
 - Is child with parent – are they doing it alone?
 - Change of filters needed?
 - Illness
- How long do I treat?
 - Treat as long as field continues to open. There may come a plateau where the changes need to be integrated/assimilated.

Patient Management

Clinical Consideration/Pearls

When do I stop?

- When field is full
- When field reaches a plateau
- When becomes too much to handle.
- What if patient is sick?

Will the field regress?

- Field should be full
- Blind spot is key

Mentors – Facebook. Don't be afraid to call.

Mentors

Fellowship

Measurements and Tests Influenced by Field Changes

- Refraction
- Phoria
- NPC
- Far/Near Focus
- Pursuits - Tracking
- Saccades
- DEM
- VO Star
- Streff Cap Test (Localization)
- Visual Scanning
- Incomplete Man Copy Forms
- Pupillary Reactions

Measurements Influenced by Field Changes

Refraction Changes Pre/Post

Pre	Post
+100	+150
+075	+150
+200-250 x 170 +200-250 x 10	No Change
-.25	Plano
Plano	Plano
Plano	+0.50
-.25-50 x 180	+0.75
Pl -025 x 135	+50 -50 x 100
Pl -050 x 75	+50 -25 x 75

Pre	Post
-025-025 x 180	+050
-025	+050-25 x 180
-075	-075
-075	-075
-025	-025
-025	-025
+025	+050
+025	+050

Measurements Influenced by Field Changes

Book Retinoscopy Pre/Post

Pre	Post
+075	+125
+050	+125
+300-250 x 170	+275-250 x 170
+300-250 x 10	+275-250 x 10
+062	+062
+075	+062
+.50	+0.75
+.75-50 x 180	+0.75
+1.50	+1.25
+1.50	+1.25

Pre	Post
+50-025 x 180	+075
+50	+075-25 x 180
+1.25	+1.00
+1.25	+1.00
+050	+075
+050	+075
+100	+050
+100	+050

Measurements Influenced by Field Change

Phoria

NPC

Pre	Post
Ortho/3eso	1exo/4exo
1exo/3exo	Ortho/6exo
Ortho/5eso	1exo/5exo
3exo/9exo 6exo/12exo	2exo/8exo 1exo/10exo
3eso/9eso	1eso/6eso

Pre	Post
2/4	1/3
3/9	2/6
2/12	2/6
1/4	1/3
3/6 3/7	2/6 2/5

Measurements Influenced by Field Changes

- Far/Near Focus

Improvement in all cases – all some degree of difficulty

- Pursuits – Tracking

Pre - Excessive head move, misfixations, jerky

Post – Every case showed significant improvement. Most were smooth with no head.

- Saccades

Pre - 90% were inaccurate

Undershoots, Head move, Fatigue prevalent

Post – Significant improvement in all cases

Measurements Influenced by Field Changes

Visual Scanning

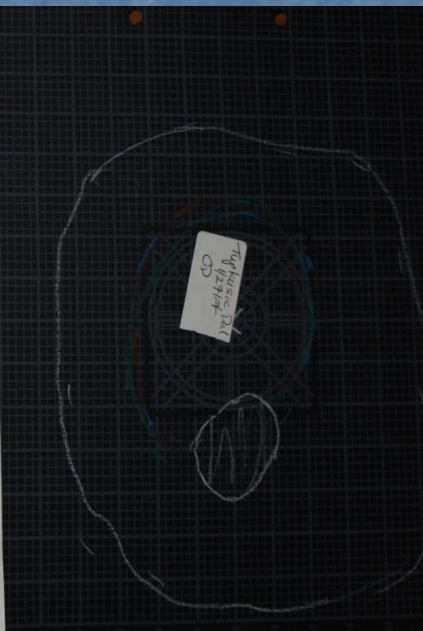
Visual Scan – Davis Dot Test

Pre	Post	Age Equivalent Change
38 Dots	43 Dots 2 years	
32	46	5
33	35	1
40	55	5
38	50	4
18	35	6
34	42	2
25	28	1
30	34	2
33	33	no change
36	43	3

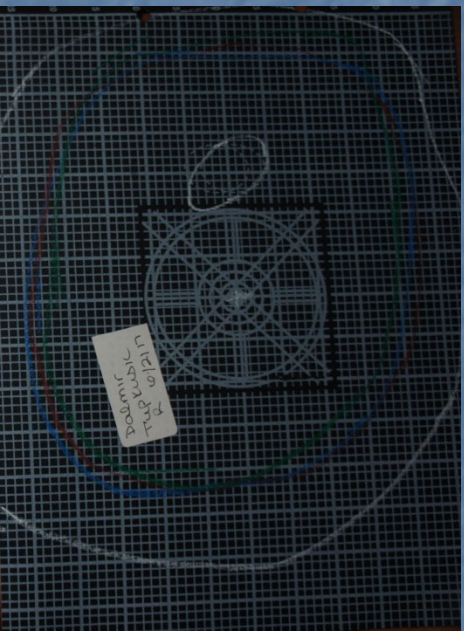
Measurements Influenced by Field Changes

Other Testing DEM

DEM SCORESHEET									
# Knowledge Pretest Y N									
Articulation Pretest Y N									
TEST A	TEST B	TEST C							
3 4	6 7	3 7	5 9	8					
7 5	3 9	2 5	7 4	6					
5 2	2 3	1 4	7 6	3					
9 1	9 9	7 9	3 9	2					
8 7	1 2	4 5	2 1	7					
2 5	7 1	5 3	7 4	8					
5 3	4 4	7 4	6 5	2					
7 7	6 7	9 2	3 6	4					
4 4	5 6	6 3	2 9	1					
6 8	2 3	7 4	6 5	2					
1 7	5 2	5 3	7 4	8					
4 4	3 5	4 5	2 1	7					
7 6	7 7	7 9	3 9	2					
6 5	4 4	1 4	7 6	3					
3 2	8 6	2 5	7 4	6					
7 9	4 3	3 7	5 9	8					
9 2	5 7	TIME 40 sec ADJ Time			Ver/Hor 39, 40				
3 3	2 5	Errors			Equi 10.5/15 R				
9 6	1 9	Rx used			Total Errors				
2 4	7 8	Name			Date 1/27/12				
19 Sec		20 Sec		DOB 10/16/03		AGE 13		Grade	
Other Visual processing issue									

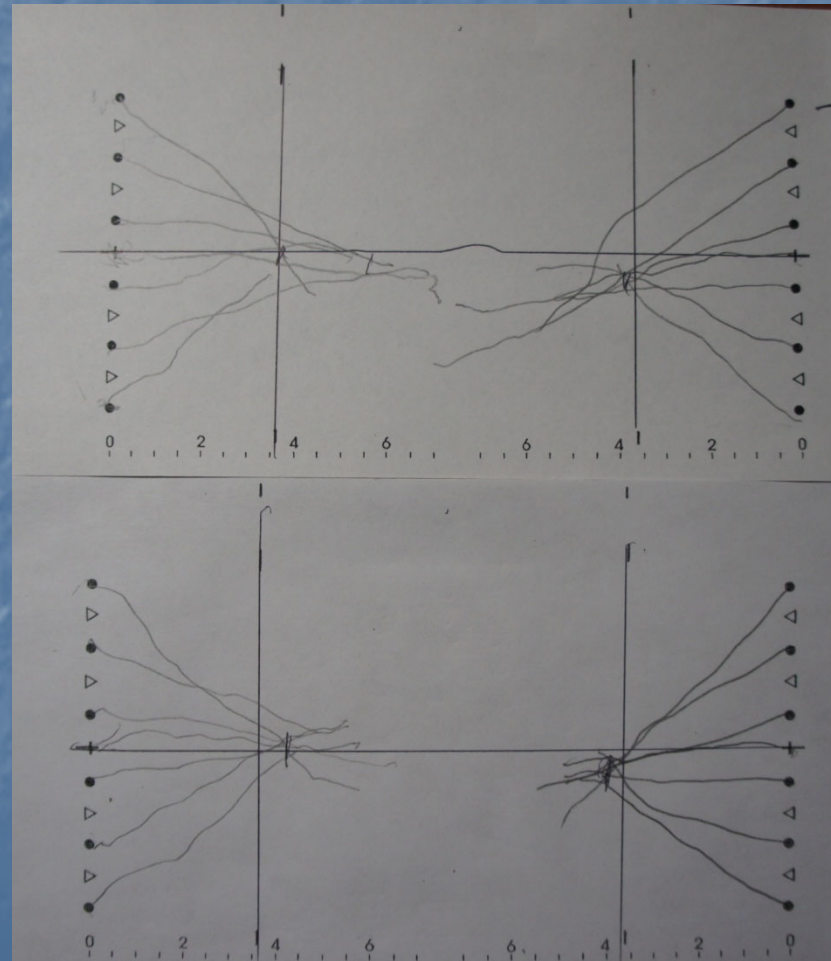


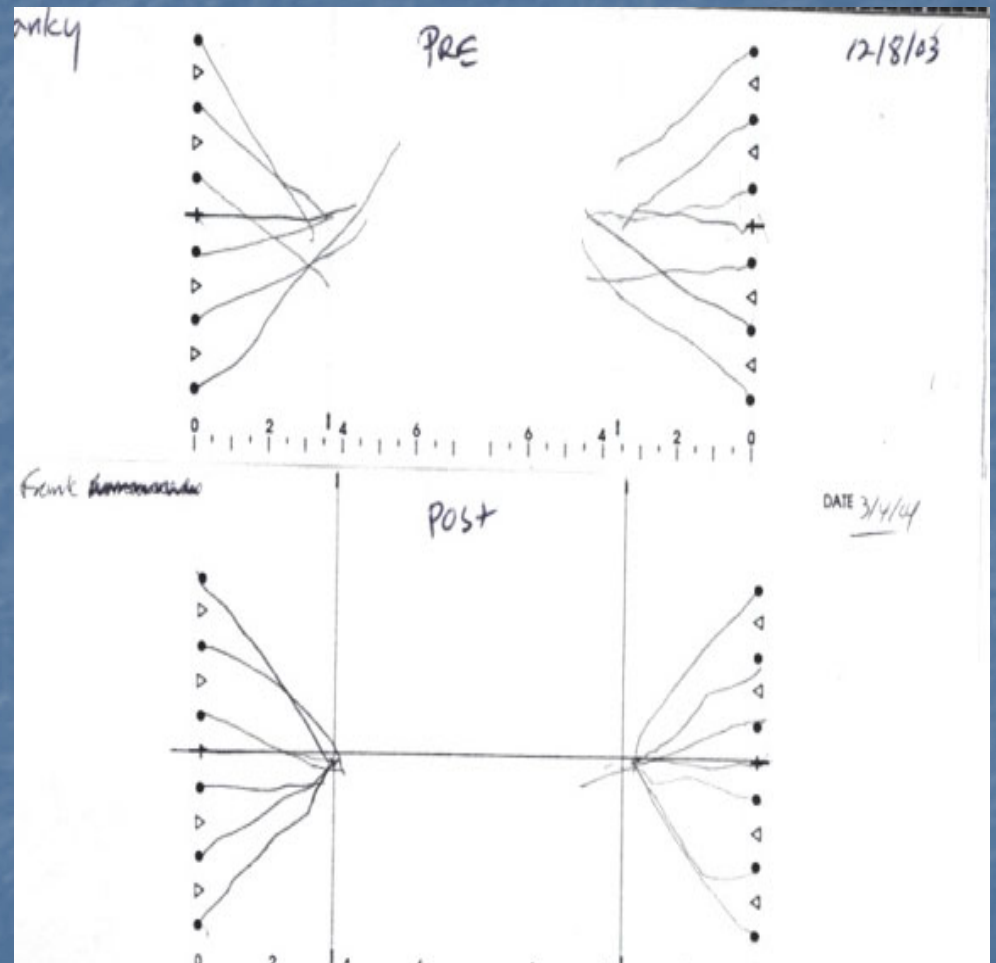
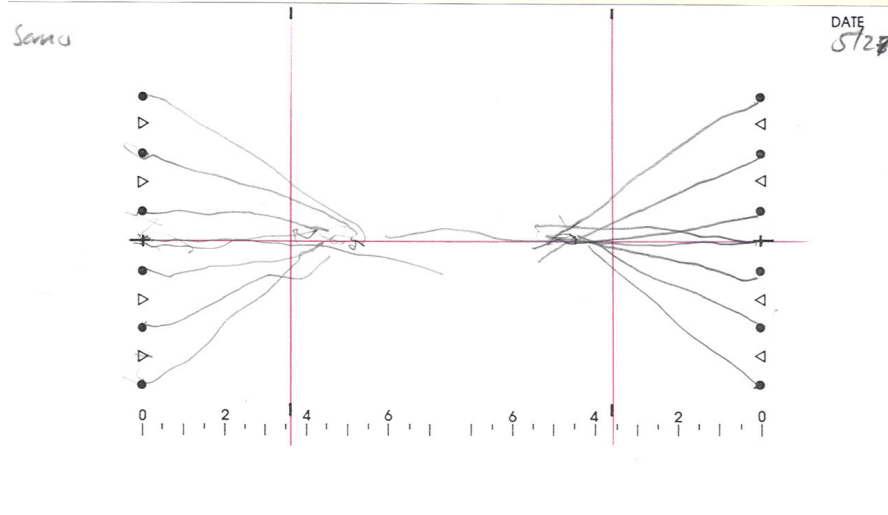
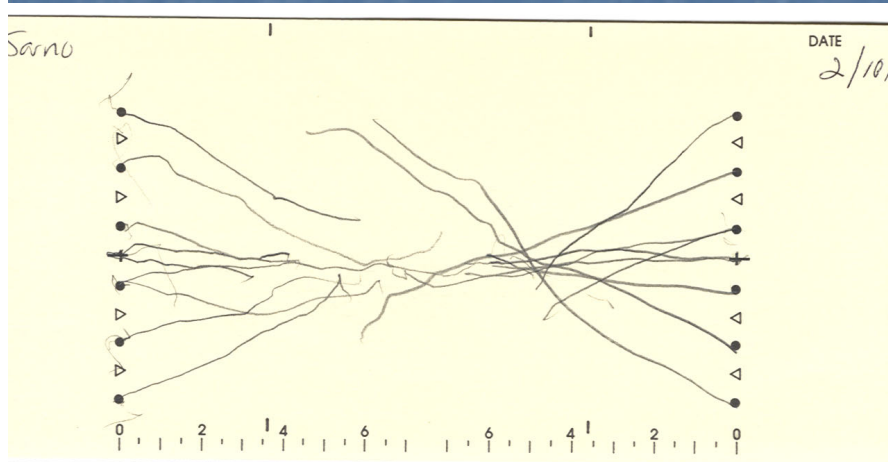
DEM SCORESHEET									
# Knowledge Pretest Y N									
Articulation Pretest Y N									
TEST A	TEST B	TEST C							
3 4	6 7	3 7	5 9	8					
7 5	3 9	2 5	7 4	6					
5 2	2 3	1 4	7 6	3					
9 1	9 9	7 9	3 9	2					
8 7	1 2	4 5	2 1	7					
2 5	7 1	5 3	7 4	8					
5 3	4 4	7 4	6 5	2					
7 7	6 7	9 2	3 6	4					
4 4	5 6	6 3	2 9	1					
6 8	2 3	7 4	6 5	2					
1 7	5 2	5 3	7 4	8					
4 4	3 5	4 5	2 1	7					
7 6	7 7	7 9	3 9	2					
6 5	4 4	1 4	7 6	3					
3 2	8 6	2 5	7 4	6					
7 9	4 3	3 7	5 9	8					
9 2	5 7	TIME 36 sec ADJ Time			Ver/Hor 34, 36				
3 3	2 5	Errors			Equi				
9 6	1 9	Rx used			Total Errors				
2 4	7 8	Name			Date				
14 Sec		18 Sec		DOB		AGE		Grade	
Other									



Measurements Influenced by Field Changes

Other Testing VO Star

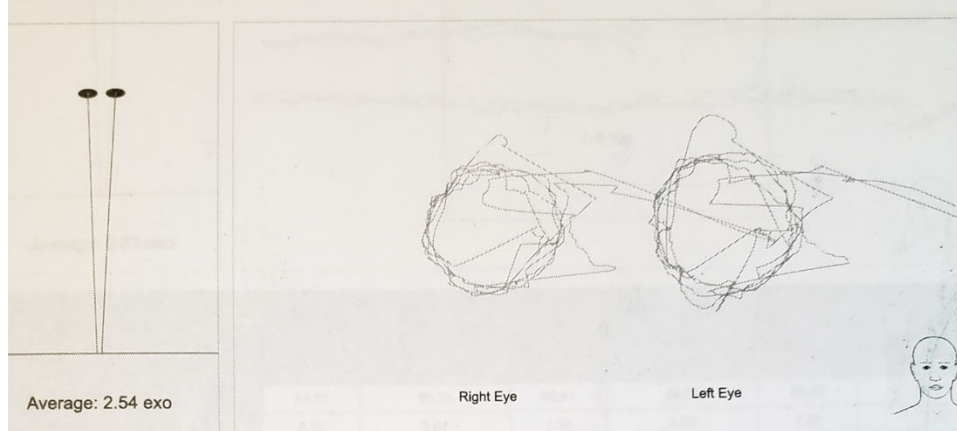




Measurements Influenced by Field Changes

Other Testing

Right Eye



Metrics	Right Eye		Left Eye		Both Eye	
	Actual	Population Age 53-62	Actual	Population Age 53-62	Actual	Population Age 53-62
Smooth Pursuit (%)	86.35	89.48	84.12	90.08	83.11	93.11
Accade (%)	11.12	4.37	14.65	4.8	12.73	4.02
ation (%)	2.53	3.81	1.23	3.64	4.15	2.17
Target Velocity Error (dps)	21.55	14.77	21.07	14.67	21.21	14.59
Horizontal Synchronization SP (0-1)	0.97	0.91	0.95	0.9	0.96	0.91
Vertical Synchronization SP (0-1)	0.98	0.87	0.97	0.88	0.98	0.87
Metrics	Right Eye		Left Eye		Both Eye	
	Actual	Population Age 53-62	Actual	Population Age 53-62	Actual	Population Age 53-62
Target Smooth Pursuit (%)	26.52	59.21	52.64	64.5	59.19	68.9
Active Smooth Pursuit (%)	16.74	5.97	8.02	3.1	7.20	1.87
Ant Smooth Pursuit (%)	37.70	14.82	17.73	10.89	11.35	15.4

