



# COMPREHENSIVE OPTOMETRY SIMPLIFIED

HOW TO INCREASE MEDICAL MANAGEMENT,  
ADHERE TO PRACTICE GUIDELINES, AND DECREASE  
DEPENDENCE ON MANAGED VISION CARE

KYLE D KLUTE, OD, FAAO

GOOD LIFE EYECARE

OMAHA, NE & GLENWOOD, IA



**WHAT ARE YOUR BIGGEST CHALLENGES,  
OBSTACLES, AND HEADACHES IN  
COMPREHENSIVE OPTOMETRY?**



Too much dependence on managed vision care

Adhering to disease standards of care/guidelines

Billing and coding appropriately

Getting paid appropriately/remaining profitable

Integrating vision/refractive AND medical care

ALL OF THE ABOVE?



# IS (SUB)SPECIALIZATION THE ANSWER?

# MY PROBLEMS PROBLEMS (GRIEVANCES) WITH (SUB)SPECIALIZATION



Urban-centric – indirectly hurts rural optometry

Chronic eye disease are rarely isolated

The average eye care consumer does not care

Perpetuates a false dichotomy b/t medical and refractive eye care

It is not best for your patient



**OPTOMETRISTS ARE THE *BEST*  
TRAINED *BEST* POSITIONED  
PRIMARY EYE CARE PROVIDERS.  
PERIOD.**

# WHAT IS PRIMARY EYE CARE?



*“Primary eye care is the provision of appropriate, accessible, and affordable care that meets patients’ eye care needs in a comprehensive and competent manner”*

# WHAT IS PRIMARY EYE CARE?



- Educating patients about maintaining and promoting healthy vision.
- Performing a comprehensive examination of the visual system.
- Screening for eye diseases and conditions affecting vision that may be asymptomatic.
- Recognizing ocular manifestations of systemic diseases and systemic effects of ocular medications.
- Making a differential diagnosis and definitive diagnosis for any detected abnormalities.
- Performing refractions.
- Fitting and prescribing optical aids, such as glasses and contact lenses.
- Deciding on a treatment plan and treating patients' eye care needs with appropriate therapies.
- Counseling and educating patients about their eye disease conditions.
- Recognizing and managing local and systemic effects of drug therapy.
- Determining when to triage patients for more specialized care and referring to specialists as needed and appropriate.
- Coordinating care with other physicians involved in the patient's overall medical management.
- Performing surgery when necessary.



# WHAT IS THE REALITY?



- 30% of ODs do ZERO medical
- In 2019:
  - 62.7% of ODs billed Medicare in 2019
  - 32% of ODs billed Medicare for fundus photos
  - 29.5% of ODs billed Medicare for VF
  - 27% of ODs billed Medicare for OCTs

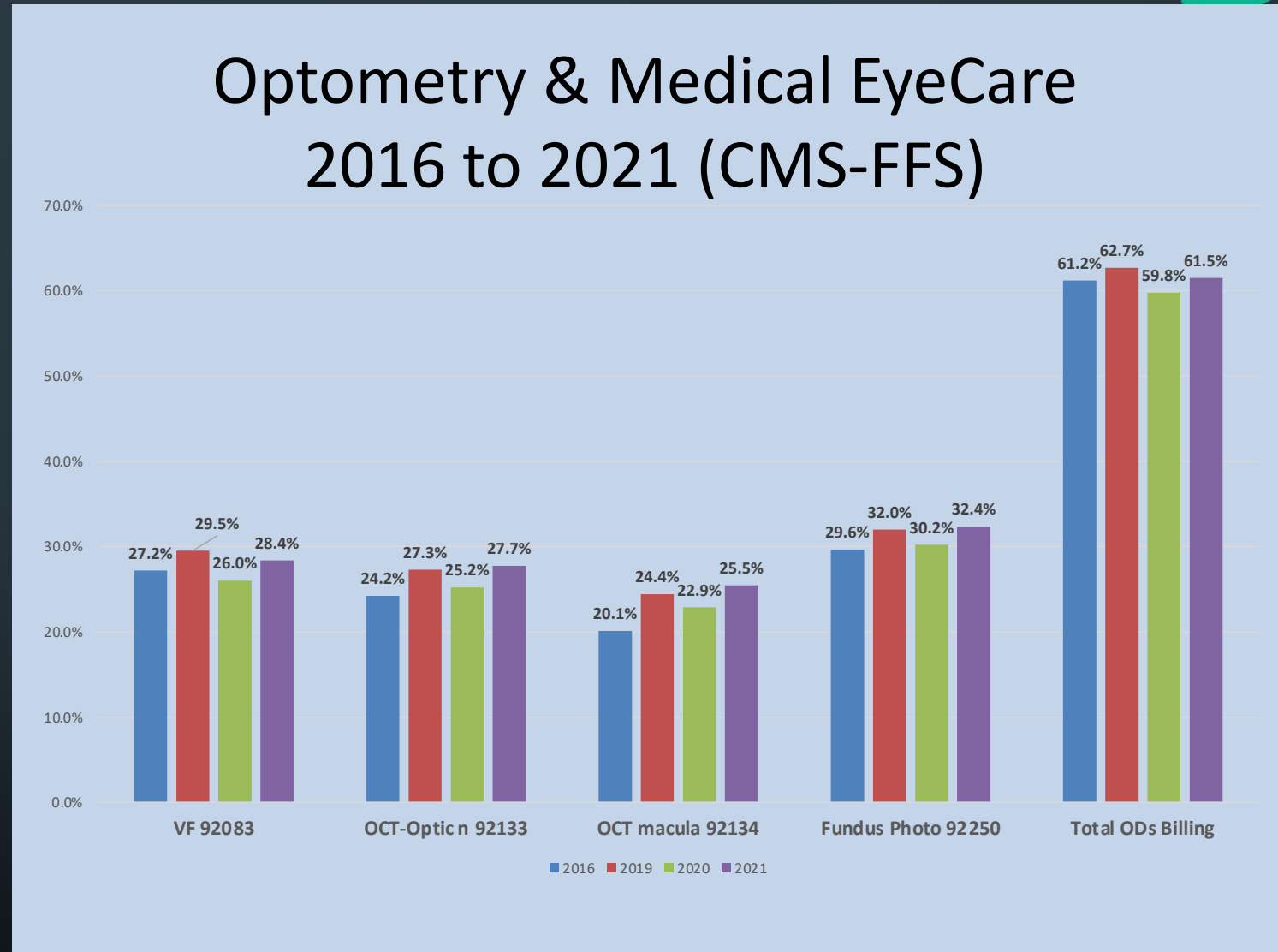


Figure used with permission from Richard Edlow, OD

## WHAT IS THE REALITY?



*“~1.5x growth in medical eye exams from 2020 to 2030 when comparing routine vision exams vs medical eye exams”*

*– Richard Edlow, OD “Eyeconomist”*

# WHAT IS THE REALITY *IN SOUTH DAKOTA*?



	Average	High	Low	GOAL
992x3 vs. 992x4 Ratio	?	?	?	~ 1.00
992xx per Refraction	?	?	?	> 50%
VF per Refraction	?	?	?	10%
OCT-N per Refraction	?	?	?	10%
Gonio per Refraction	?	?	?	10%
OCT-M per Refraction	?	?	?	10%
Fundus photos per Ref	?	?	?	10%
Ext photos per refraction	?	?	?	10%

# WHAT IS THE REALITY IN TX/ALA/CA?



	Average	High	Low	GOAL
992x3 vs. 992x4 Ratio	4.72	15.75	1.33	~ 1.00
992xx per Refraction	31.14%	63.66%	7.75%	> 50%
VF per Refraction	7.37%	20.26%	1.79%	10%
OCT-N per Refraction	8.69%	19.97%	3.94%	10%
Gonio per Refraction	3.05%	16.64%	0	10%
OCT-M per Refraction	8.24%	19.25%	1.87%	10%
Fundus photos per Ref	34.19%	99.46% (optos?)	1.67%	10%
Ext photos per refraction	1.00%	3.95%	0	10%

# WHAT DO MY NUMBERS LOOK LIKE?



	Average	Suburbs	Small Town	GOAL
992x3 vs. 992x4 Ratio	1.17	1.54	0.80	~ 1.00
992xx per Refraction	42.5%	25%	60%	> 50%
VF per Refraction	10%	5%	15%	10%
OCT-N per Refraction	19.5%	7%	32%	10%
Gonio per Refraction	5%	3%	7%	10%
OCT-M per Refraction	12.5%	8%	17%	10%
Fundus photos per Ref	6.5%	5%	8%	10%
Ext photos per refraction	9%	10%	8%	10%

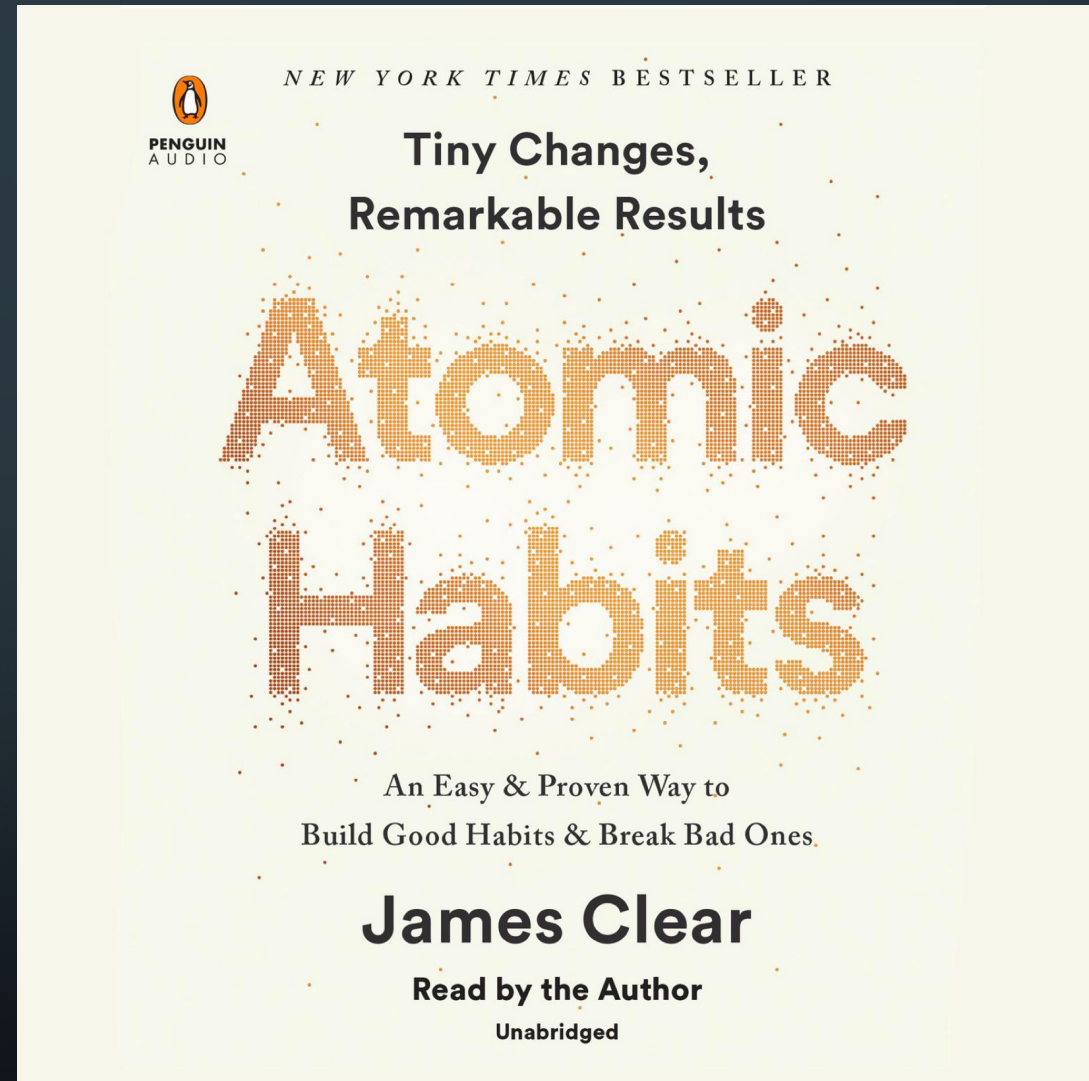


**HOW DO WE CHANGE?**



## KEY INSIGHT

- Beliefs underlie actions
- Actions reinforce beliefs



BEHAVIORAL CHANGE  
REQUIRES *BOTH*

**Beliefs/Identity**



**Actions**





**Total Patient  
Care Model  
=  
Primary Eye  
Care**



BELIEF

ACTION

OUTCOME



**BEST Trained  
Primary Eye  
Care  
Providers**



**Thriving &  
Sustainable  
Primary Care  
OD Practices**

# INCREASE MEDICAL CARE IN COMPREHENSIVE EYE CARE IN 7 STEPS



**STEP 1**

Know Your Numbers



**STEP 2**

Utilize 99 Codes Appropriately



**STEP 3**

Implement/Improve Glaucoma Protocol



**STEP 4**

Implement/Improve Macular Disease Protocols



**STEP 5**

Implement/Improve DM and Peripheral Disease Protocols



**STEP 6**

Implement/Improve Ocular Surface Disease Protocols



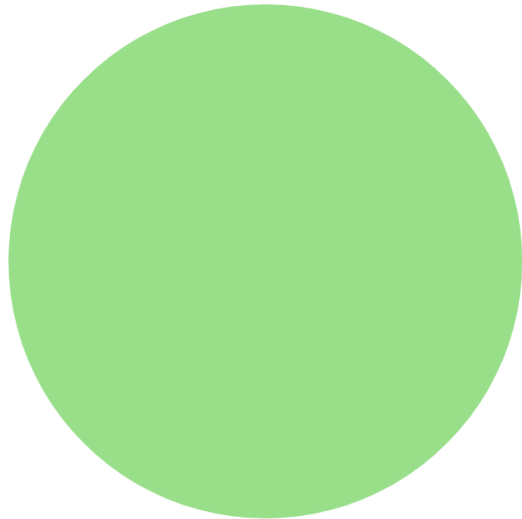
**STEP 7**

Make Managed Vision Care Optional With Total Patient Care

# FINANCIAL DISCLOSURES/BIASES

## General Payments by Nature of Payment in 2022

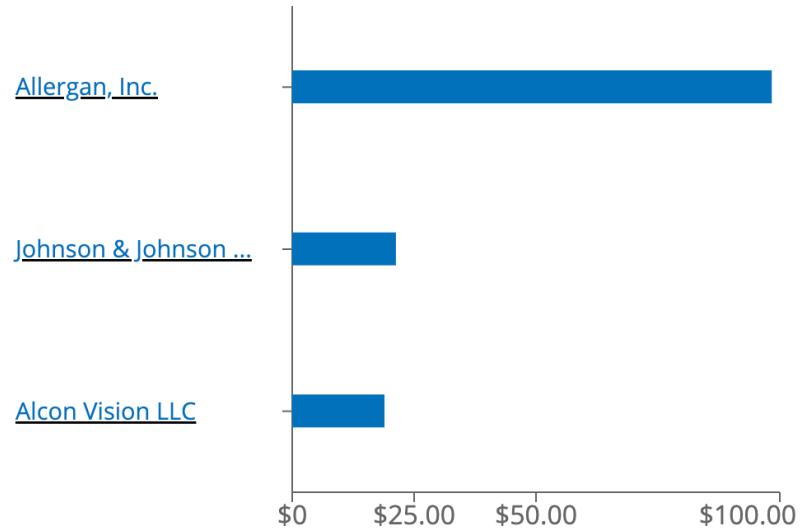
[What are the different natures of payment?](#)



Nature of payment	Amount (%)	Number of Payments
Food and Beverage	\$138.54 (100.0%)	3

## Top Companies Making General Payments in 2022

Display as: [Chart](#) [Table](#)  
Use the Table view to see more details.



## List of General Payments in 2022

# FINANCIAL DISCLOSURES/BIASES



# FINANCIAL DISCLOSURES/BIASES

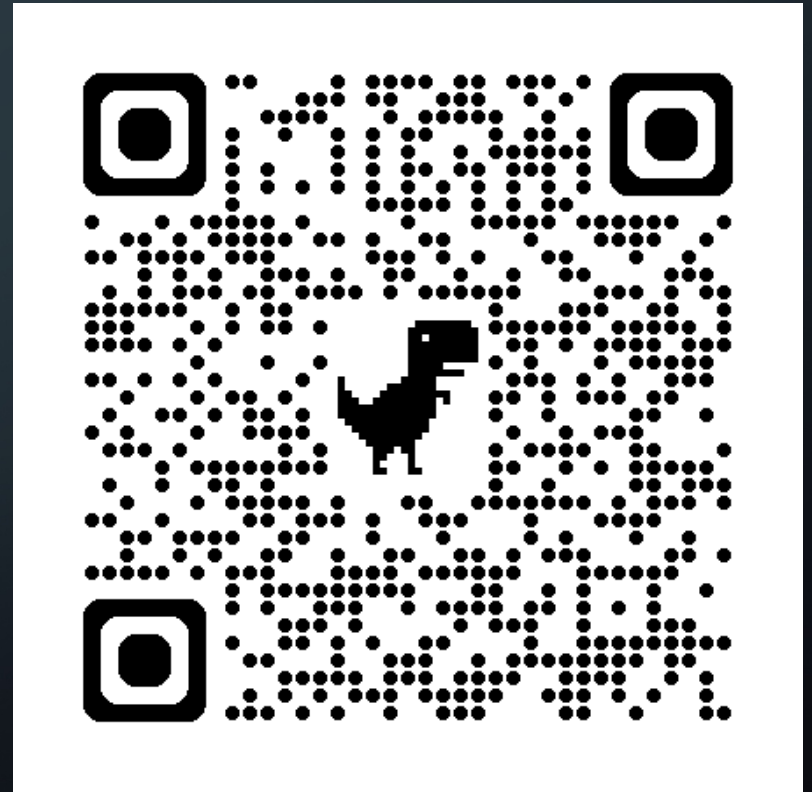


Welcome to Optometry Simplified.

In this biweekly blog post, I've curated the best resources to help you grow personally and professionally.

My mission is to find what's best for my patients and my practice.

Here's what I've found...



# FINANCIAL DISCLOSURES/BIASES



- Online Community
- Access to B&C and many more courses
- Mastermind Groups
- Monthly “Office Hours”
- Disease centric metrics

The screenshot shows the EyeCode Education website. The top navigation bar includes links for ALL COURSES, CUSTOM CONSULTATION, LIVE COURSES, NSUOCO ONLINE CE, AUTOCODER, and CHART AUDITING. There are also buttons for SIGN IN and GET STARTED NOW. The main heading is "Comprehensive Optometry Simplified" with a subtext: "An online community with on-demand courses to help optometrists increase medical management and medical insurance utilization to grow their practices." Below this are two buttons: "Get Started Now" and "Free - Analyze Your Data". The main content area features a section titled "Eliminate Frustration" with a paragraph: "We all struggle to handle the complexities of providing full-scope, comprehensive eye care. Unfortunately, many of us struggle alone. Is that you? Do you struggle with:". To the right of this text is a list of five items, each preceded by a green checkmark:

- ✓ When and how to determine if it is "MEDICAL" or "ROUTINE".
- ✓ Confidently utilizing 99 codes, 92 codes, modifiers, procedure codes and special testing.
- ✓ Understanding which metrics are indicators of successful comprehensive eyecare.
- ✓ What specific protocols to follow for managing complex chronic diseases.
- ✓ Integrating clear processes for incorporating new technology.

# INCREASE MEDICAL CARE IN COMPREHENSIVE EYE CARE IN 7 STEPS



**STEP 1**

Know Your Numbers



**STEP 2**

Utilize 99 Codes Appropriately



**STEP 3**

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**STEP 4**

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**STEP 5**

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**STEP 6**

Implement/Improve Ocular Surface Disease Protocols



**STEP 7**

Make Managed Vision Care Optional With Total Patient Care





## 9 KPI's to Grow Medical Optometry

- Revenue per OD Hour
- 992x3 vs 992x4
- 992xx per Refraction
- VF per Refraction
- OCT-N per Refraction
- Gonioscopy per Refraction
- OCT-M per Refraction
- Fundus Photos per Refraction
- External Photos per Refraction

## STEP 1

## Know Your Numbers

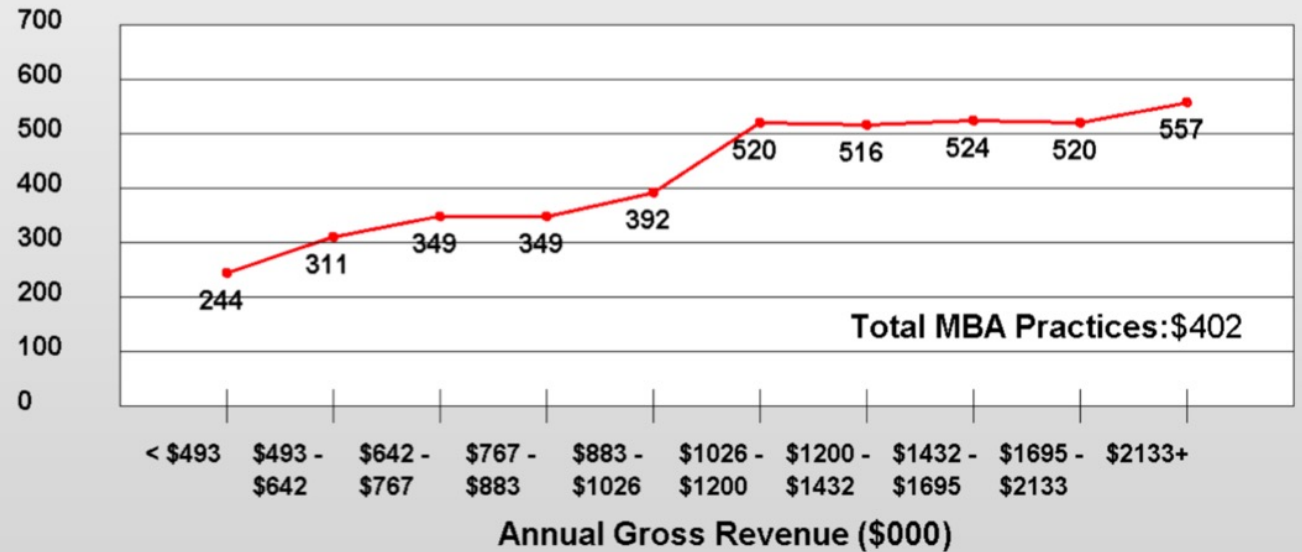


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*Gross Revenue per OD Hour by Practice Size*

Gross Revenue per OD Hour





## 9 KPI's to Grow Medical Optometry

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**GOAL =  
RATIO ~ 1**



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- External Photos per Refraction

**GOAL =**  
**50%+**



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- External Photos per Refraction

Cureus

Open Access Review  
Article

DOI: 10.7759/cureus.11686

## Epidemiology of Glaucoma: The Past, Present, and Predictions for the Future

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### Abstract

Glaucoma is a multifactorial optic degenerative neuropathy characterized by the loss of retinal ganglion cells. It is a combination of vascular, genetic, anatomical, and immune factors. Glaucoma poses a significant public health concern as it is the second leading cause of blindness after cataracts, and this blindness is usually irreversible. It is estimated that 57.5 million people worldwide are affected by primary open-angle glaucoma (POAG). People over 60 years of age, family members of those already diagnosed with glaucoma, steroid users, diabetics, as well as those with high myopia, hypertension, central cornea thickness of <5 mm, and eye injury are at an increased risk of glaucoma. By 2020, it is expected that approximately 76 million people will suffer from glaucoma with that number estimated to reach 111.8 million by 2040.

In this article, we perform an extensive literature review focusing on the epidemiology of glaucoma and try to determine the number of people affected; we categorize them by sex, location, and level of income. Furthermore, we strive to estimate the future projection of the disease in the next 20 years (2040) while determining the disease burden, including the cost involved in treating and preventing the disease and the disease and disability projection of glaucoma.

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Categories: Ophthalmology, Public Health, Epidemiology/Public Health



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- Fundus Photos per Refraction
- External Photos per Refraction

**GOAL =**  
**10%+**

## STEP 1

## Know Your Numbers



# 9 KPI's to Grow Medical Optometry


- Revenue per OD Hour
- 992x3 vs 992x4
- 992xx per Refraction
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- Gonioscopy per Refraction
- OCT-M per Refraction
- Fundus Photos per Refraction
- External Photos per Refraction

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EVIDENCE-BASED CLINICAL PRACTICE GUIDELINE

Care of the Patient with  
Primary Open-Angle Glaucoma

18 Oct 2023

 AMERICAN OPTOMETRIC ASSOCIATION

POAG Draft Two



## 9 KPI's to Grow Medical Optometry

- Revenue per OD Hour
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**GOAL =**  
**10%+**



## STEP 1

## Know Your Numbers



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### Patterns and Disparities in Recorded Gonioscopy During Initial Glaucoma Evaluations in the United States

Lee Jun Hui \* • Yoo Kristy \* • Lung Christina • ... Toy Brian • Sanvicente Carina • Xu Benjamin

Show all authors • Show footnotes

Published: February 26, 2024 • DOI: <https://doi.org/10.1016/j.ajo.2024.02.032>

**PURPOSE**  
Article info To assess patterns in gonioscopy during initial glaucoma evaluations in the United States.

**DESIGN**  
Related Articles Retrospective, case-control study.

**METHODS**  
Patients undergoing initial glaucoma evaluation between 2009-2020 were identified in the Optum Clinformatics® DataMart. Initial evaluation was defined as 1) glaucoma suspect, 2) ocular hypertension (OHTN), 3) primary open-angle glaucoma (POAG), 4) secondary glaucoma



## 9 KPI's to Grow Medical Optometry

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**GOAL =**  
**10%+**



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**GOAL =**  
**10%+**



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**GOAL =**  
**10%+**



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**GOAL =**  
**10%+**

# INCREASE MEDICAL CARE IN COMPREHENSIVE EYE CARE IN 7 STEPS



**STEP 1**

Know Your Numbers



**STEP 2**

Utilize 99 Codes Appropriately



**STEP 3**

Implement/Improve Glaucoma Protocol



**STEP 4**

Implement/Improve Macular Disease Protocols



**STEP 5**

Implement/Improve DM and Peripheral Disease Protocols



**STEP 6**

Implement/Improve Ocular Surface Disease Protocols



**STEP 7**

Make Managed Vision Care Optional With Total Patient Care

## STEP 2

# Utilize 99 Codes Appropriately



	Problems	Data	Risk	Time
99202 99212	<p><b>Minimal</b></p> <ul style="list-style-type: none"> <li>•1 Self-limited or minor problem</li> </ul>	<p><b>Minimal</b></p> <ul style="list-style-type: none"> <li>•Minimal (&lt; 2) or no orders, tests performed, or additional documents analyzed</li> </ul>	<p><b>Minimal</b></p> <p>Minimal risk of morbidity from additional diagnostic testing or treatment</p>	<p>NP: 15-29 mins EP: 10-19 mins</p>
99203 99213	<p><b>Low</b></p> <ul style="list-style-type: none"> <li>•2 or more self-limited or minor problems; or</li> <li>•1 stable chronic illness; or</li> <li>•1 acute, uncomplicated illness or injury</li> </ul>	<p><b>Limited</b></p> <ul style="list-style-type: none"> <li>•2 orders, tests performed, or additional documents analyzed, or</li> <li>•assessment requiring an independent historian</li> </ul>	<p><b>Low</b></p> <p>Low risk of morbidity from additional diagnostic testing or treatment. Example:</p> <ul style="list-style-type: none"> <li>•<b>OTC medication</b></li> </ul>	<p>NP: 30-45 mins EP: 20-29 mins</p>
99204 99214	<p><b>Moderate</b></p> <ul style="list-style-type: none"> <li>•1 or more chronic illnesses with exacerbation, progression, or side effects of treatment; or</li> <li>•2 or more stable chronic illnesses; or</li> <li>•1 undiagnosed new problem with uncertain prognosis; or</li> <li>•1 acute illness with systemic symptoms; or</li> <li>•1 acute complicated injury</li> </ul>	<p><b>Moderate</b></p> <p><b>Any 1 of the following:</b></p> <ul style="list-style-type: none"> <li>•3 orders, tests performed, or additional documents analyzed</li> <li>•Independent interpretation of a test performed by another physician</li> <li>•Discussion of management or test interpretation with external physician</li> </ul>	<p><b>Moderate</b></p> <p>Moderate risk of morbidity from additional diagnostic testing or treatment. Examples:</p> <ul style="list-style-type: none"> <li>•<b>Prescription drug medication</b></li> <li>•Decision regarding <b>minor surgery</b> with identified patient or procedure risk factors</li> <li>•Decision regarding <b>major surgery</b> without identified patient or procedure risk factors</li> <li>•Diagnosis or treatment significantly limited by social determinants of health</li> </ul>	<p>NP: 45-59 mins EP: 30-39 mins</p>
99205	<p><b>High</b></p> <ul style="list-style-type: none"> <li>•1 or more chronic illnesses with severe exacerbation, progression, or side effects of treatment; or</li> <li>•1 acute or chronic illness or injury that</li> </ul>	<p><b>Extensive</b></p> <p><b>Any 2 of the following:</b></p> <ul style="list-style-type: none"> <li>•3 orders, tests performed, or additional documents analyzed</li> <li>•Independent interpretation of a test performed</li> </ul>	<p><b>High</b></p> <p>High risk of morbidity from additional diagnostic testing or treatment. Examples:</p> <ul style="list-style-type: none"> <li>•Drug therapy requiring intensive monitoring for toxicity</li> <li>•Decision for elective <b>major surgery</b> with identified patient or</li> </ul>	<p>NP: 60-74 mins EP: 40-54 mins</p>

**Problems**

**Data**

**Risk**

**Time**

99202  
99212

Minimal

- 1 Self-limited or minor problem

Minimal

- Minimal (< 2) or no orders, tests performed, or additional documents analyzed

Minimal

Minimal risk of morbidity from additional diagnostic testing or treatment

NP:15-29 mins  
EP: 10-19 mins

99203  
99213

Low

- 2 or more self-limited or minor problems; or
- 1 stable chronic illness; or
- 1 acute, uncomplicated illness or injury

Limited

- 2 orders, tests performed, or additional documents analyzed, or
- assessment requiring an independent historian

Low

Low risk of morbidity from additional diagnostic testing or treatment. Example:  
•**OTC medication**

NP: 30-45 mins  
EP: 20-29 mins

99204  
99214

Moderate

- 1 or more chronic illnesses with exacerbation, progression, or side effects of treatment; or
- 2 or more stable chronic illnesses; or
- 1 undiagnosed new problem with uncertain prognosis; or
- 1 acute illness with systemic symptoms; or
- 1 acute complicated injury

Moderate

- Any 1 of the following:**
- 3 orders, tests performed, or additional documents analyzed
  - Independent interpretation of a test performed by another physician
  - Discussion of management or test interpretation with external physician

Moderate

Moderate risk of morbidity from additional diagnostic testing or treatment. Examples:  
•Prescription drug medication  
•Decision regarding minor surgery with identified patient or procedure risk factors  
•Decision regarding major surgery with identified patient or procedure risk factors  
•Diagnosis or treatment significantly limited by social determinants of health

NP: 45-59 mins  
EP: 30-39 mins

99205  
99215

High

- 1 or more chronic illnesses with severe exacerbation, progression, or side effects of treatment; or
- 1 acute or chronic illness or injury that poses a threat to life or bodily function

Extensive

- Any 2 of the following:**
- 3 orders, tests performed, or additional documents analyzed
  - Independent interpretation of a test performed by another physician
  - Discussion of management or test interpretation with external physician

High

High risk of morbidity from additional diagnostic testing or treatment. Examples:  
•Drug therapy requiring intensive monitoring for toxicity  
•Decision for elective **major surgery** with identified patient or procedure risk factors  
•Decision for **emergency major surgery**  
•Decision regarding **hospitalization**  
•Decision **not to resuscitate** or to deescalate care because of poor prognosis

NP: 60-74 mins  
EP: 40-54 mins

**TOMORROW!**

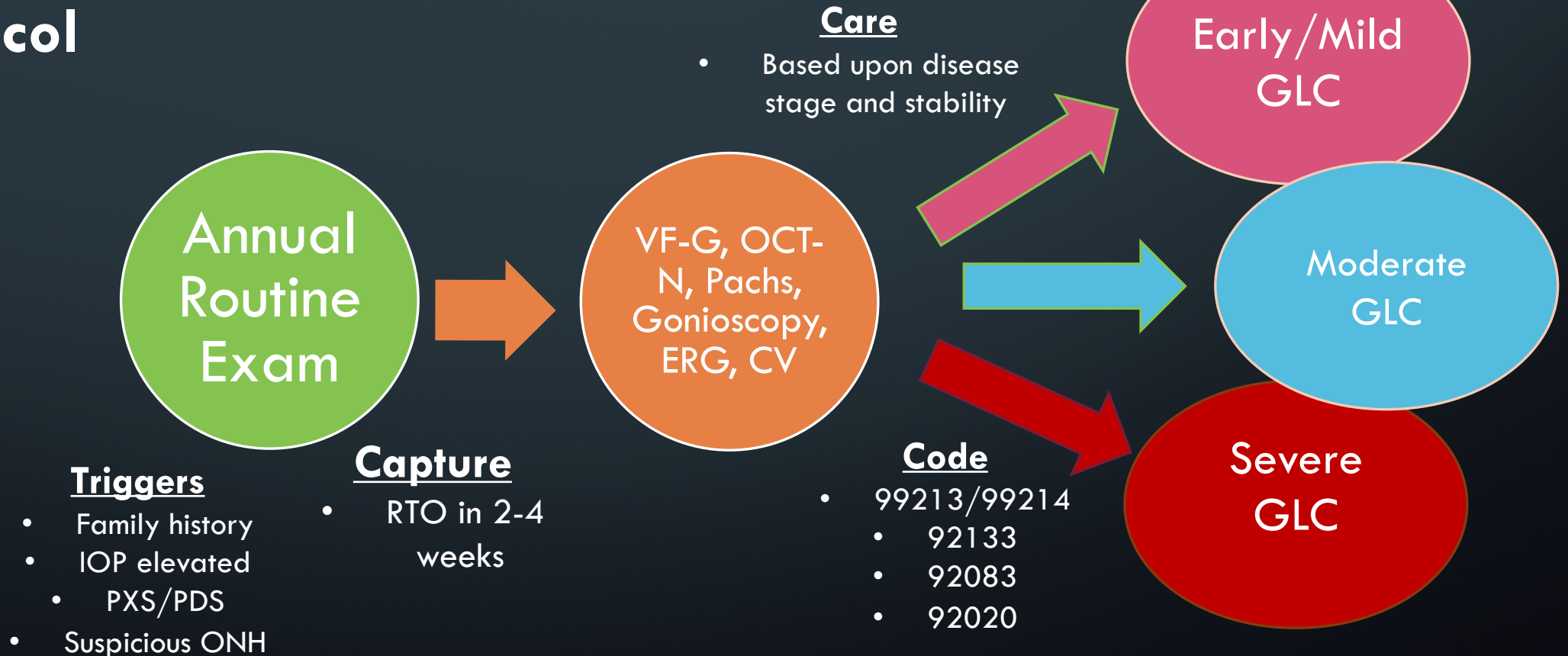


## STEP 3

## Implement/Improve Glaucoma Protocol



# Glaucoma Protocol



# STEP 3

## Implement/Improve Glaucoma Protocol





**STEP 3**

**Implement/Improve Glaucoma Protocol**



24



**STEP 3**

**Implement/Improve Glaucoma Protocol**



Annual  
Routine  
Exam



Profit  
Center  
(SRx, CLRx,  
GLC, AMD,  
DED, etc)

## STEP 3

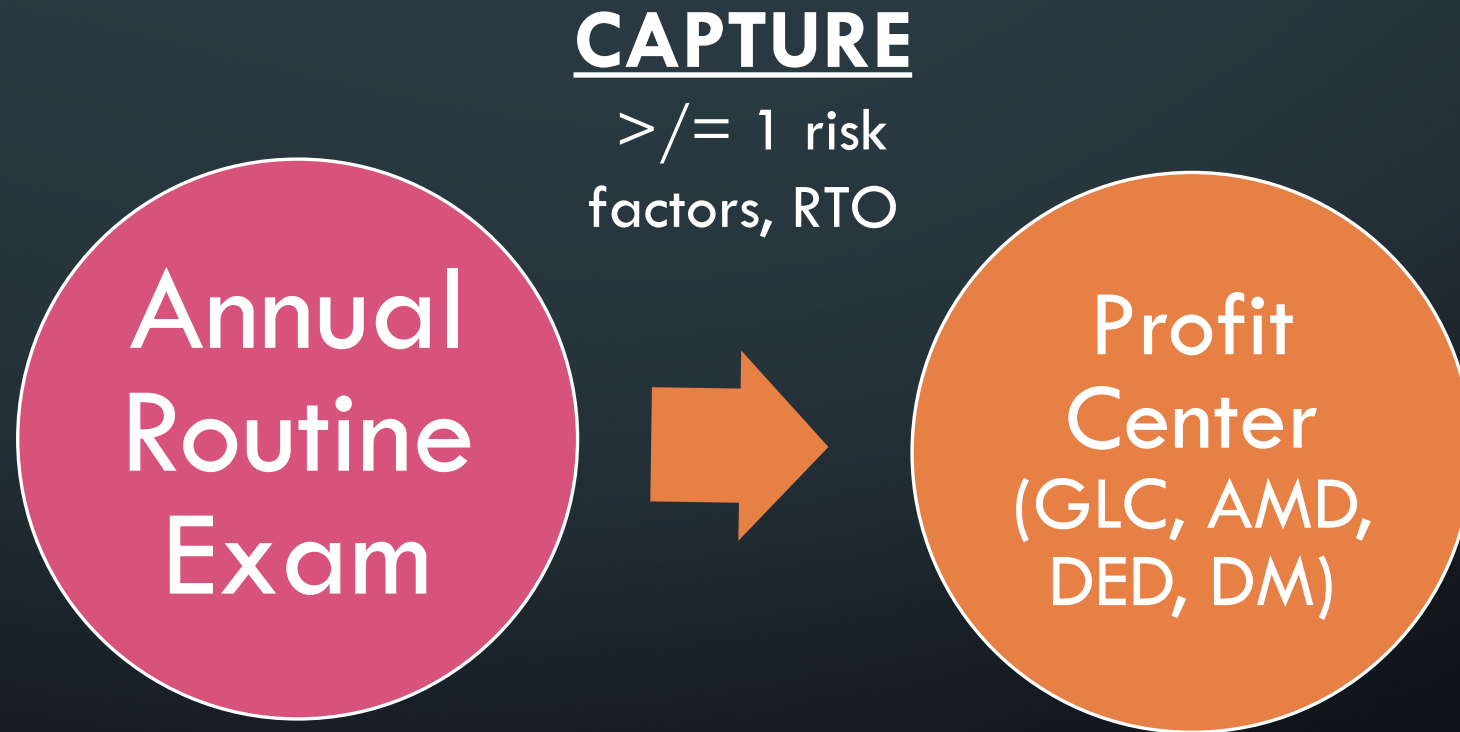
## Implement/Improve Glaucoma Protocol

# Annual Routine Exam

- A. Case history
- B. Health status of the visual system evaluation
  - This must include:
    1. External and internal examination - to include direct and/or indirect ophthalmoscopy
    2. Neurological integrity - pupillary reflexes and extraocular muscle assessment (versions)
    3. Biomicroscopy
    4. Gross visual fields
    5. Tonometry
- C. Refractive status evaluation
  - This must include:
    1. Visual acuity - entering visual acuity with habitual Rx or unaided acuity (as indicated) and best corrected acuity
    2. Subjective refraction and accommodative function
    3. At least one of the following two optional tests:
      - a. objective refraction by retinoscopy or autorefractor
      - b. keratometry
- D. Binocular function
  - This must include recorded data from at least one of the following:
    1. Cover testing
    2. NPC
    3. Phorias
    4. Stereopsis
    5. Vergence testing
    6. Grade of fusion
    7. Fixation disparity
    8. Prism reflex test
    9. Hirschberg corneal reflexes
- E. Diagnosis/treatment plan  
(Use of ICD-10-CM diagnosis code is suggested.)

**STEP 3**

**Implement/Improve Glaucoma Protocol**



## STEP 3

## Implement/Improve Glaucoma Protocol



Elevated IOP

Myopia

Thinner central corneal thickness

Older age

African race or Latino/Hispanic ethnicity

Lower systolic and diastolic blood pressure

Disc hemorrhage

Larger cup-to-disc ratio

Family history

Type 2 diabetes mellitus

Visual field loss

## RISK FACTORS

Low Risk:  $< 3$

High Risk:  $\geq 3$

## STEP 3

## Implement/Improve Glaucoma Protocol



### CAPTURE

>/= 1 risk  
factors, RTO

Annual  
Routine  
Exam



Profit  
Center  
(GLC, AMD,  
DED, DM)

### Glaucoma Prevalence:

- 2.4% to 4.0% over 40 (all races)
- 5.2% over 60 (AA)



**STEP 3**

**Implement/Improve Glaucoma Protocol**



Annual Routine Exam

**CAPTURE**

>/= 1 risk factors



Office visit PLUS which tests?



**CARE**

Follow standards of care

**CODE**

most appropriate for most reimbursement



Tx/Mngt Level 1

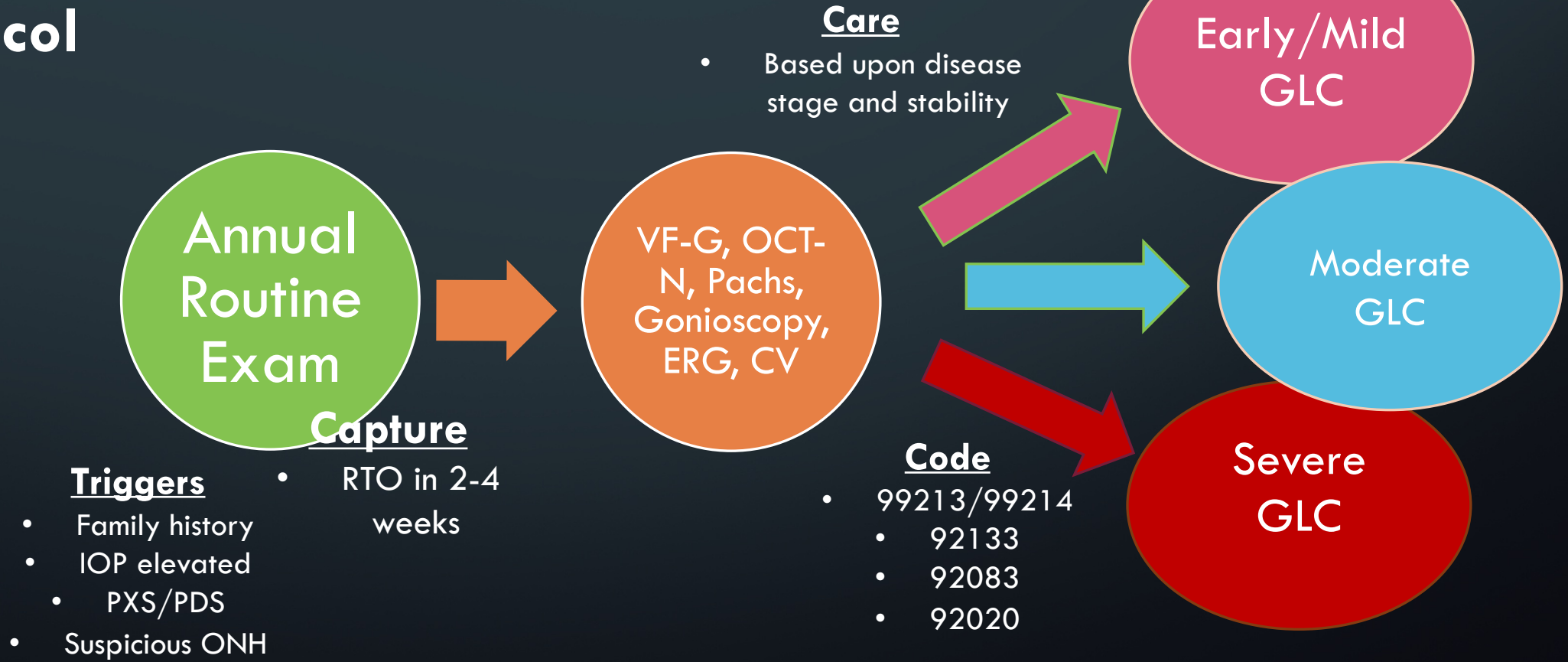
Tx/Mngt Level 2

STEP 3

Implement/Improve Glaucoma Protocol

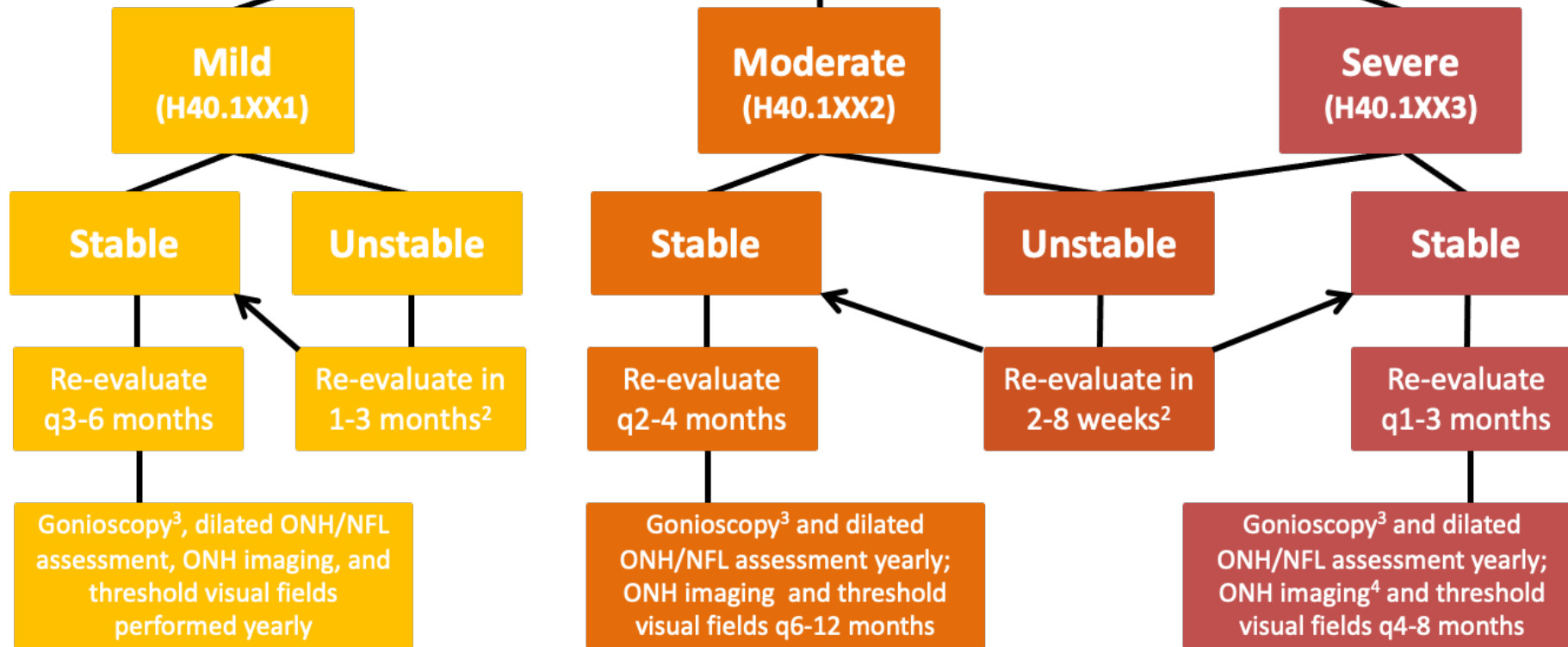


# Glaucoma Protocol



# Open Angle Glaucoma (H40.11, H40.12, H40.13, H40.14)

Establish target IOP, perform gonioscopy, tonometry, dilated ONH/NFL assessment, ONH imaging, and threshold visual fields repeated to establish baseline<sup>1</sup>



1: Visual fields may need to be repeated up to 3-5 times in first 2 years of diagnosis to find progression.

2: Recommended re-evaluation interval until stability established.

3: Gonioscopy is recommended yearly or as conditions indicate.

4: ONH imaging, especially OCT may not be reliable for severe glaucoma damage due to floor effect.

# INCREASE MEDICAL CARE IN COMPREHENSIVE EYE CARE IN 7 STEPS



**STEP 1**

Know Your Numbers



**STEP 2**

Utilize 99 Codes Appropriately



**STEP 3**

Implement/Improve Glaucoma Protocol



**STEP 4**

Implement/Improve Macular Disease Protocols



**STEP 5**

Implement/Improve DM and Peripheral Disease Protocols



**STEP 6**

Implement/Improve Ocular Surface Disease Protocols



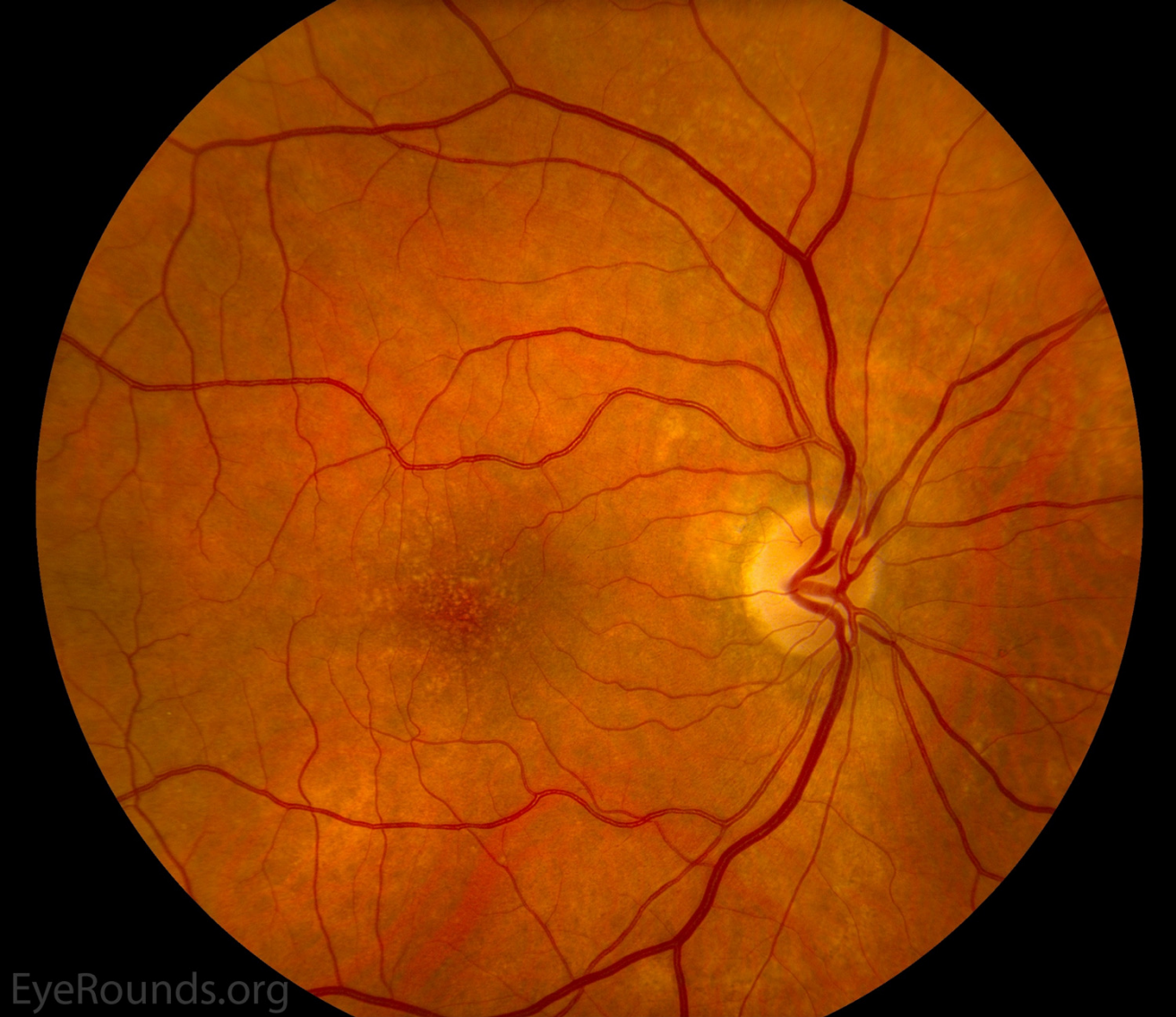
**STEP 7**

Make Managed Vision Care Optional With Total Patient Care



**STEP 4**

**Implement/Improve Macular Disease Protocols**



## STEP 4

## Implement/Improve Macular Disease Protocols



Annual  
Routine  
Exam



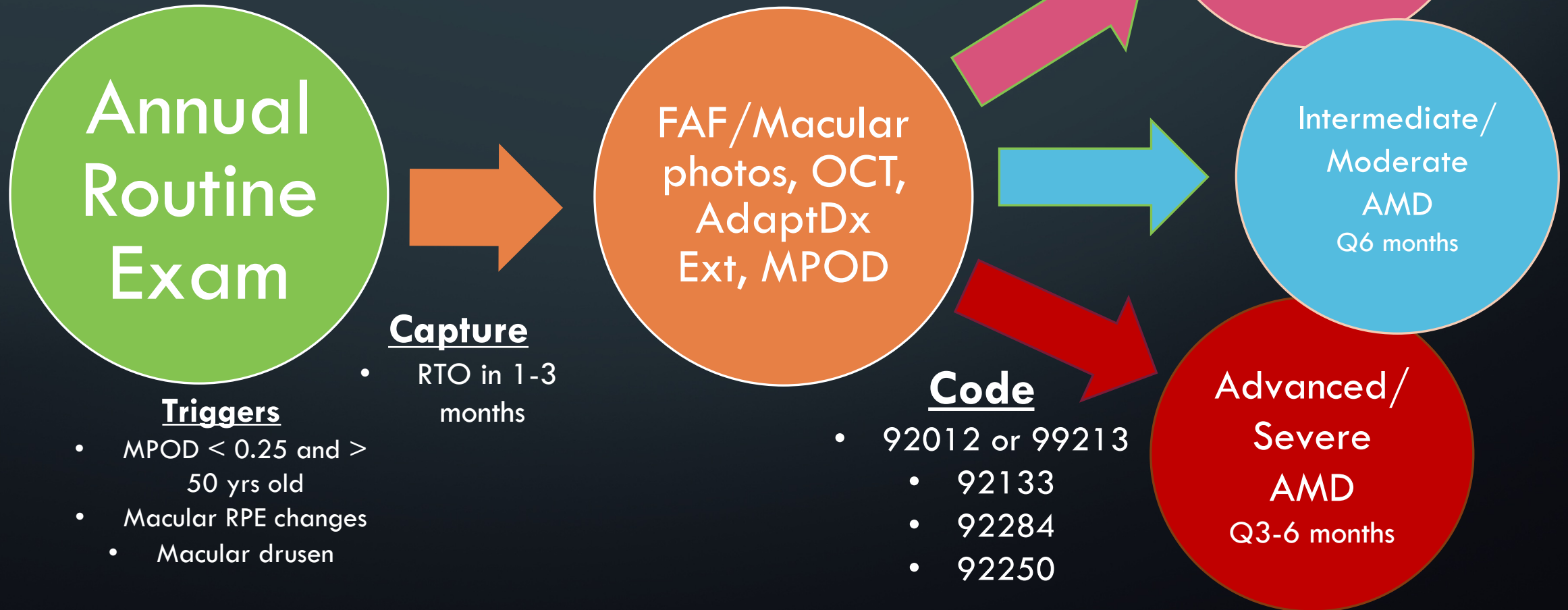
FAF/Macular  
photos, OCT,  
AdaptDx  
Ext, MPOD

### AMD Prevalence:

- **7.1% over 40**
- **12.5% over 60**
- **33.3% over 75**

# STEP 4

# Implement/Improve Macular Disease Protocols



# STEP 4

## Implement/Improve Macular Disease Protocols



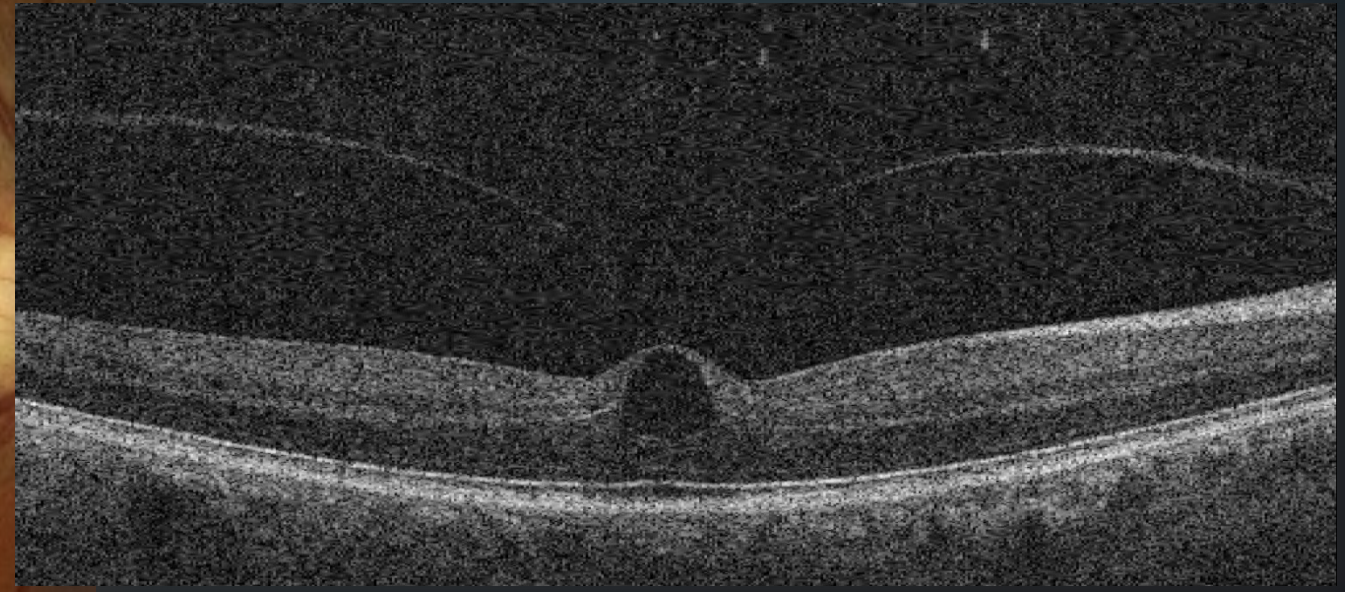
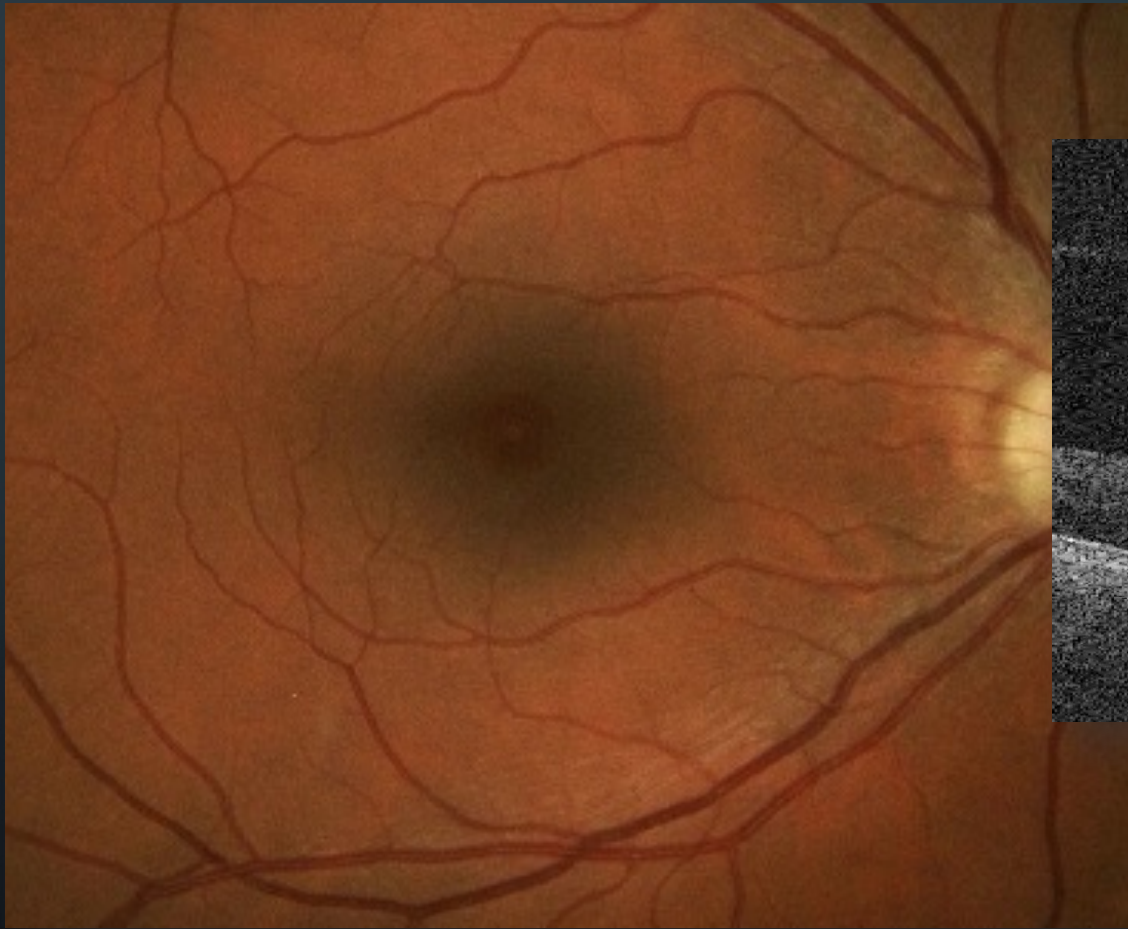
		AMD Plan				
Visit #		Subclinical	Category 1	Category 2	Category 3	Category 4 - Dry
1	Potential Services	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener
	Potential Codes	92014, 92015, 92134, optos	92014, 92015, 92134, optos	92014, 92015, 92134, optos	92014, 92015, 92134, optos	92014, 92015, 92134, optos
2	Potential Services	Dark Adaptation	Office Visit, Photos, DA	Office Visit, Photos, DA	Office Visit, Photos, DA, 10-2	Office Visit, Photos, 10-2
	Potential Codes	92284	99213, 92250, 92284	99213, 92250, 92284	99214, 92250, 92284, 92083	99213, 92250, 92083
3	Potential Services				Office Visit, Mac OCT A	
	Potential Codes				99213, 92134	





**STEP 4**

**Implement/Improve Macular Disease Protocols**



**STEP 4**

**Implement/Improve Macular Disease Protocols**



**ERM Prevalence:**

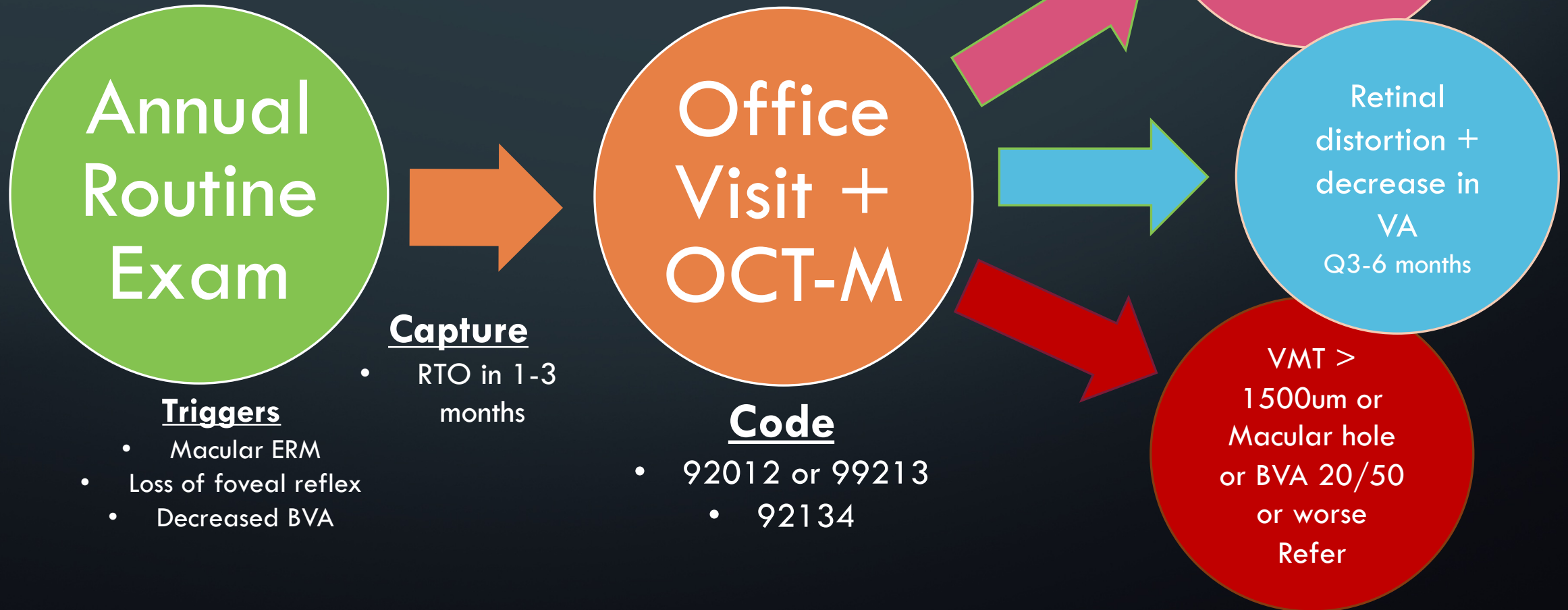
- **2.2% to 28.9%**

**VMT Prevalence:**

- **0.4% to 2.0%**

**STEP 4**

**Implement/Improve Macular Disease Protocols**



# STEP 4

## Implement/Improve Macular Disease Protocols



ERM/MH Plan					
Visit #		VMA	VMT	ERM	Stage 1 MH
1	Potential Services	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener	Comprehensive Examination, Refraction, Mac OCT, retinal screener
	Potential Codes	92014, 92015, 92134, optos	92014, 92015, 92134, optos	92014, 92015, 92134, optos	92014, 92015, 92134, optos
2	Potential Services	Office Visit, Mac OCT	Office Visit, Mac OCT	Office Visit, Mac OCT	Office Visit, Mac OCT, 10-2
	Potential Codes	99213, 92134	99213, 92134	99213, 92134	99213, 92134, 92083
3	Potential Services				Office Visit, Mac OCT
	Potential Codes				99213, 92134
4	Potential Services				Office Visit, Mac OCT
	Potential Codes				99213, 92134

# INCREASE MEDICAL CARE IN COMPREHENSIVE EYE CARE IN 7 STEPS



**STEP 1**

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**STEP 3**

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**STEP 4**

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**STEP 5**

Implement/Improve DM and Peripheral Disease Protocols



**STEP 6**

Implement/Improve Ocular Surface Disease Protocols



**STEP 7**

Make Managed Vision Care Optional With Total Patient Care

## STEP 5

# Implement/Improve DM and Peripheral Disease Protocols



**This Issue** Views **4,944** | Citations **9** | Altmetric **761**

### Original Investigation

June 15, 2023

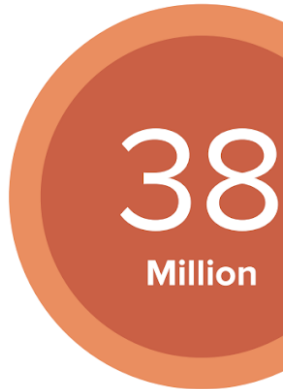
## Prevalence of Diabetic Retinopathy in the US in 2021

Elizabeth A. Lundeen, PhD<sup>1</sup>; Zeb Burke-Conte, BS<sup>2</sup>; David B. Rein, PhD, MPA<sup>3</sup>; et al

[» Author Affiliations](#)

*JAMA Ophthalmol.* 2023;141(8):747-754. doi:10.1001/jamaophthalmol.2023.2289

 [Editorial Comment](#)



About 38 mill  
people **have**

### Key Points

**Question** What was the 2021 US prevalence of diabetic retinopathy and vision-threatening diabetic retinopathy?

**Findings** The study team estimated that 9.60 million people in the US (26.43% of those with diabetes) had diabetic retinopathy and 1.84 million people (5.06% of those with diabetes) had vision-threatening diabetic retinopathy in 2021. There was marked variation in prevalence across states and the number of people living with diabetes-related eye disease grew substantially since prevalence was last estimated in 2004.

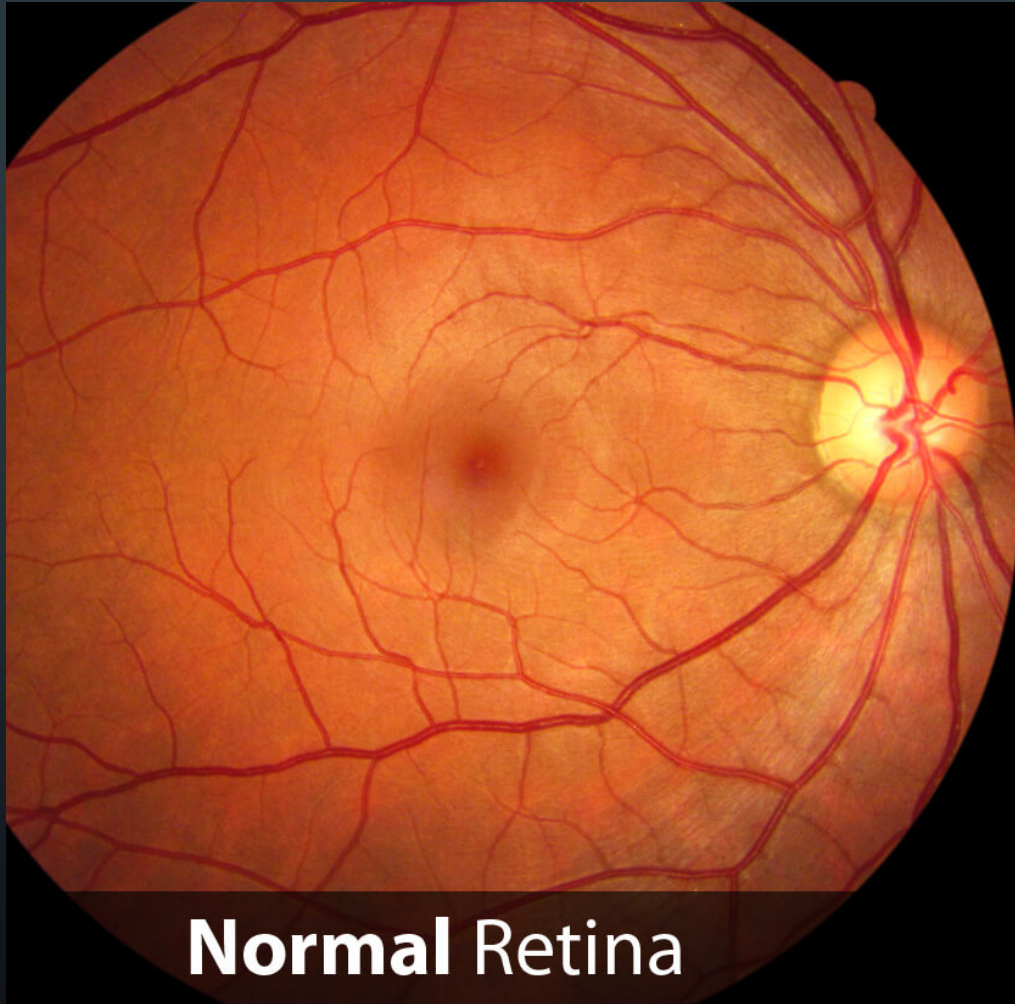
**Meaning** The US prevalence of diabetes-related eye disease remains high and may grow in the coming decades



people **don't**  
**hey have it**

**STEP 5**

**Implement/Improve DM and Peripheral Disease Protocols**



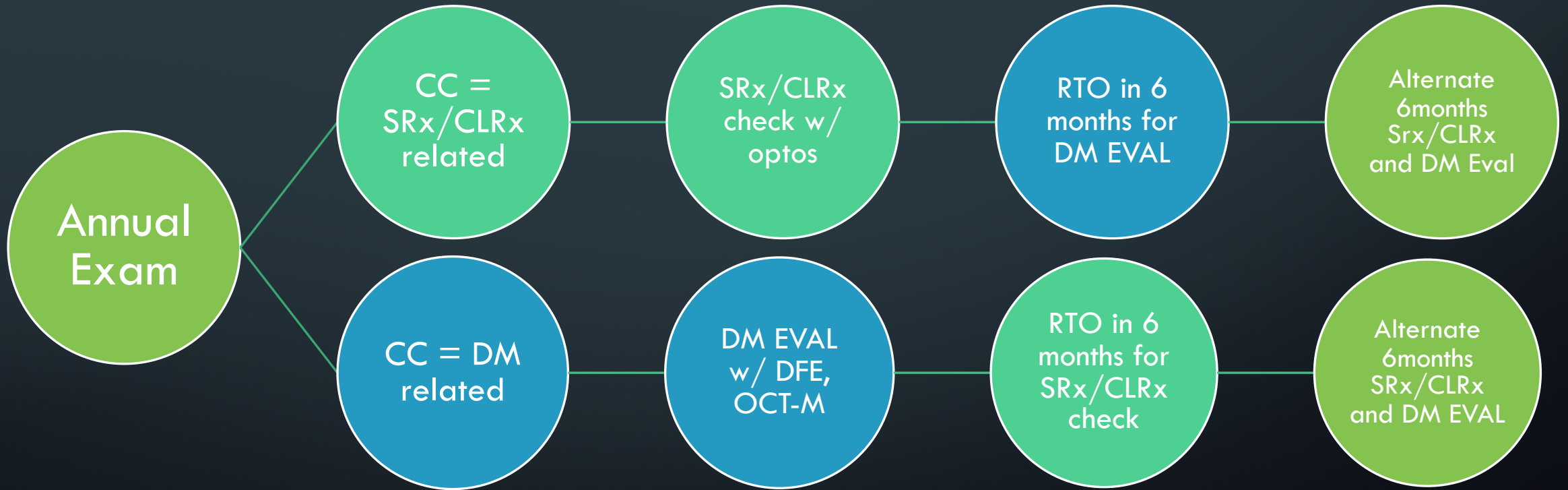
**Normal Retina**



**Diabetic Retina**

**STEP 5**

**Implement/Improve DM and Peripheral Disease Protocols**





## STEP 5

# Implement/Improve DM and Peripheral Disease Protocols



## Prevalence

### Posterior Vitreous Detachment:

- **24%** of 50-59 yo
- **87%** of 80-89 yo

### Lattice Degeneration: 6-8%

### Atrophic holes: 5%

### Choroidal Nevus: 5%

# STEP 5

# Implement/Improve DM and Peripheral Disease Protocols



AMERICAN ACADEMY  
OF OPHTHALMOLOGY®

Protecting Sight. Empowering Lives.®

## Posterior Vitreous Detachment, Retinal Breaks, and Lattice Degeneration Preferred Practice Pattern®

### PVD, Retinal Breaks, and Lattice Degeneration PPP

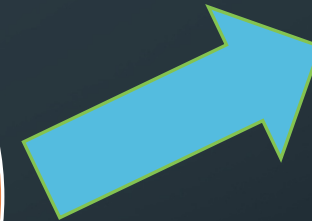
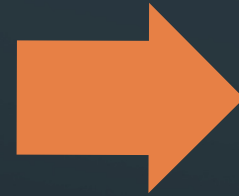
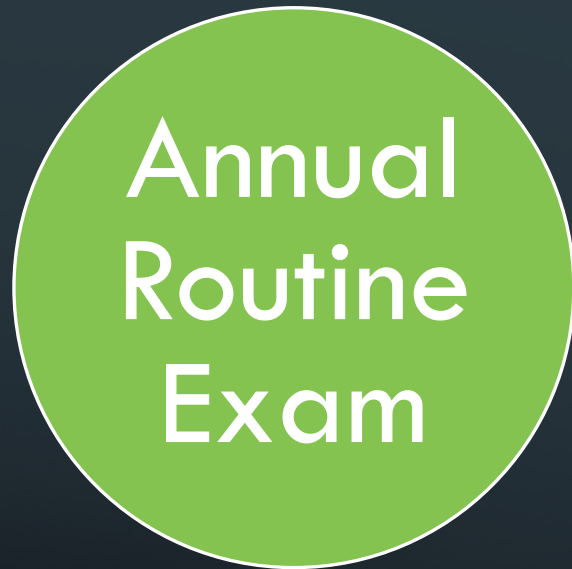
**TABLE 3** RECOMMENDED GUIDELINES FOR FOLLOW-UP

Type of Lesion	Follow-up Interval
Symptomatic PVD with no retinal break	Depending on symptoms, risk factors, and clinical findings, patients may be followed within 2 months, then 6-12 months
Symptomatic PVD with no retinal break but with some vitreous or retinal hemorrhage	Depending on the severity of the retinal hemorrhage, 1-2 weeks For vitreous hemorrhage, weekly until resolved. Ultrasonography to check for retinal tears
Acute symptomatic horseshoe tears	1-2 weeks after treatment, then 4-6 weeks, then 3-6 months, then annually
Acute symptomatic operculated holes	2-4 weeks, then 1-3 months, then 6-12 months, then annually
Acute symptomatic dialyses	1-2 weeks after treatment, then 4-6 weeks, then 3-6 months, then annually
Traumatic retinal breaks	1-2 weeks after treatment, then 4-6 weeks, then 3-6 months, then annually
Asymptomatic horseshoe tears	1-4 weeks, then 2-4 months, then 6-12 months, then annually
Asymptomatic operculated holes	1-4 months, then 6-12 months, then annually
Asymptomatic atrophic round holes	1-2 years
Asymptomatic lattice degeneration without holes	Annually
Asymptomatic lattice degeneration with holes	Annually
Asymptomatic dialyses	<ul style="list-style-type: none"><li>• If untreated, 1-4 weeks, then 3 months, then 6 months, then every 6 months</li><li>• If treated, 1-2 weeks after treatment, then 4-6 weeks, then 3-6 months, then annually</li></ul>
Eyes with atrophic holes, lattice degeneration, or asymptomatic horseshoe tears in patients who have had a retinal detachment in the fellow eye	Every 6-12 months

PVD = posterior vitreous detachment

## STEP 5

## Implement/Improve DM and Peripheral Disease Protocols



### Triggers

- Lattice Degeneration
- Choroidal Nevus
  - Retinal hole
  - Retinoschisis

### Capture

- RTO in 3-6 months

### Code

- 92012 or 99213
  - 99250

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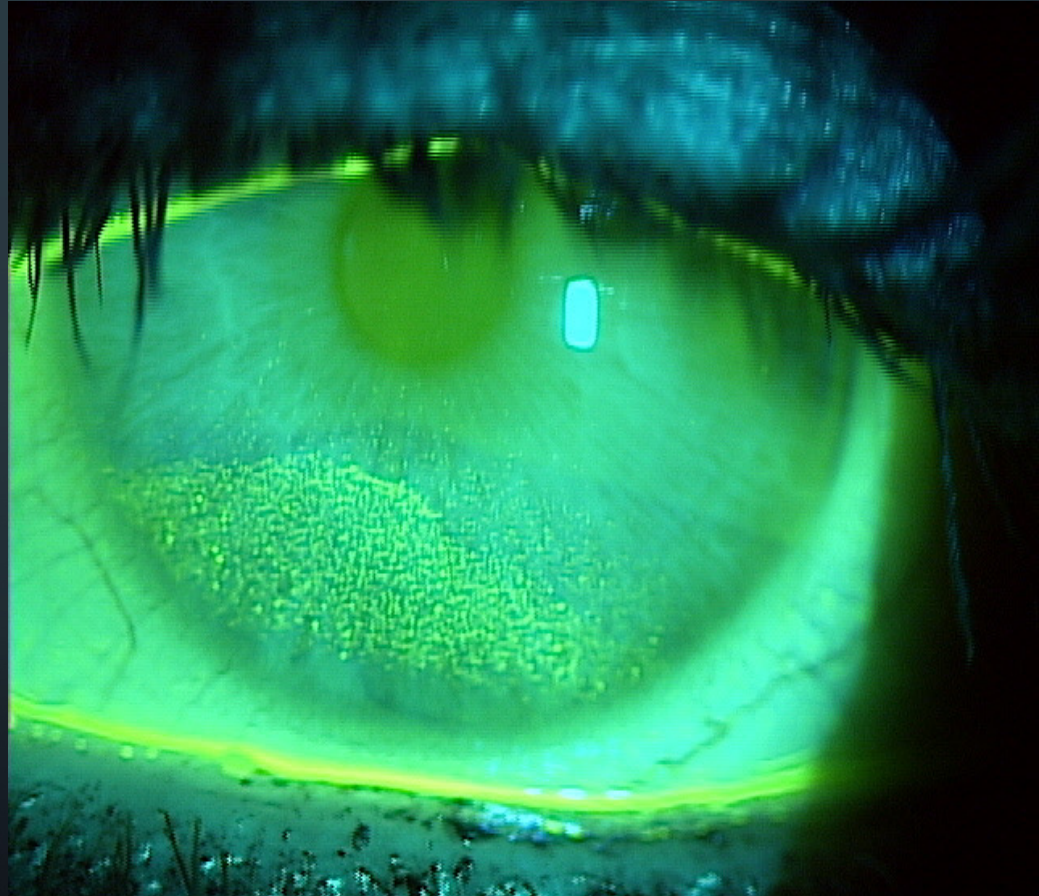
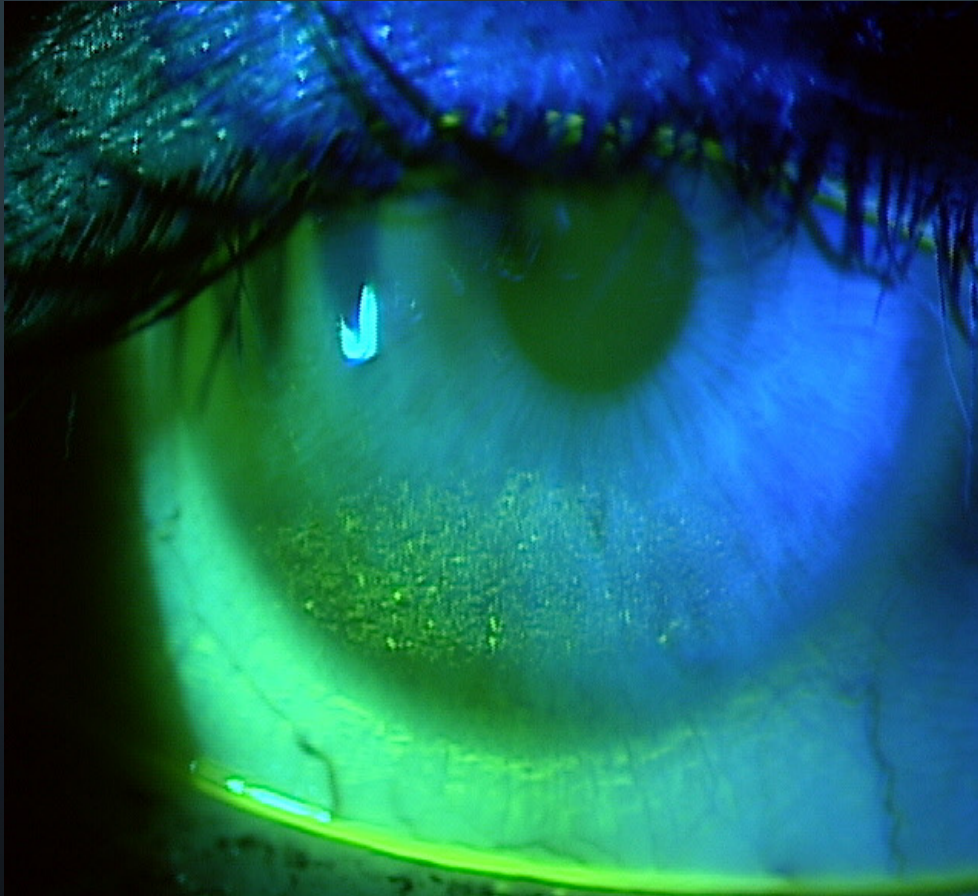


**STEP 7**

Make Managed Vision Care Optional With Total Patient Care

**STEP 6**

**Implement/Improve Ocular Surface Disease Protocols**

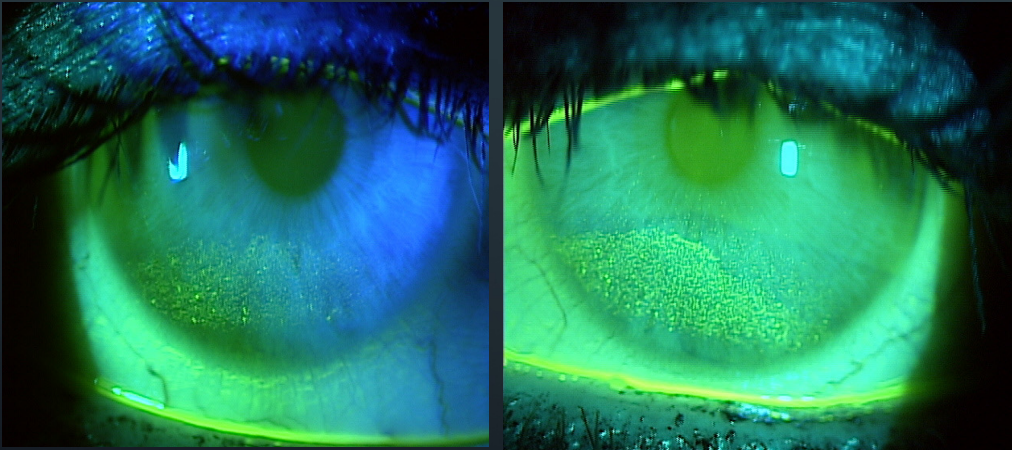


## STEP 6

## Implement/Improve Ocular Surface Disease Protocols



# DRY EYE/OCULAR SURFACE DISEASE



## Prevalence

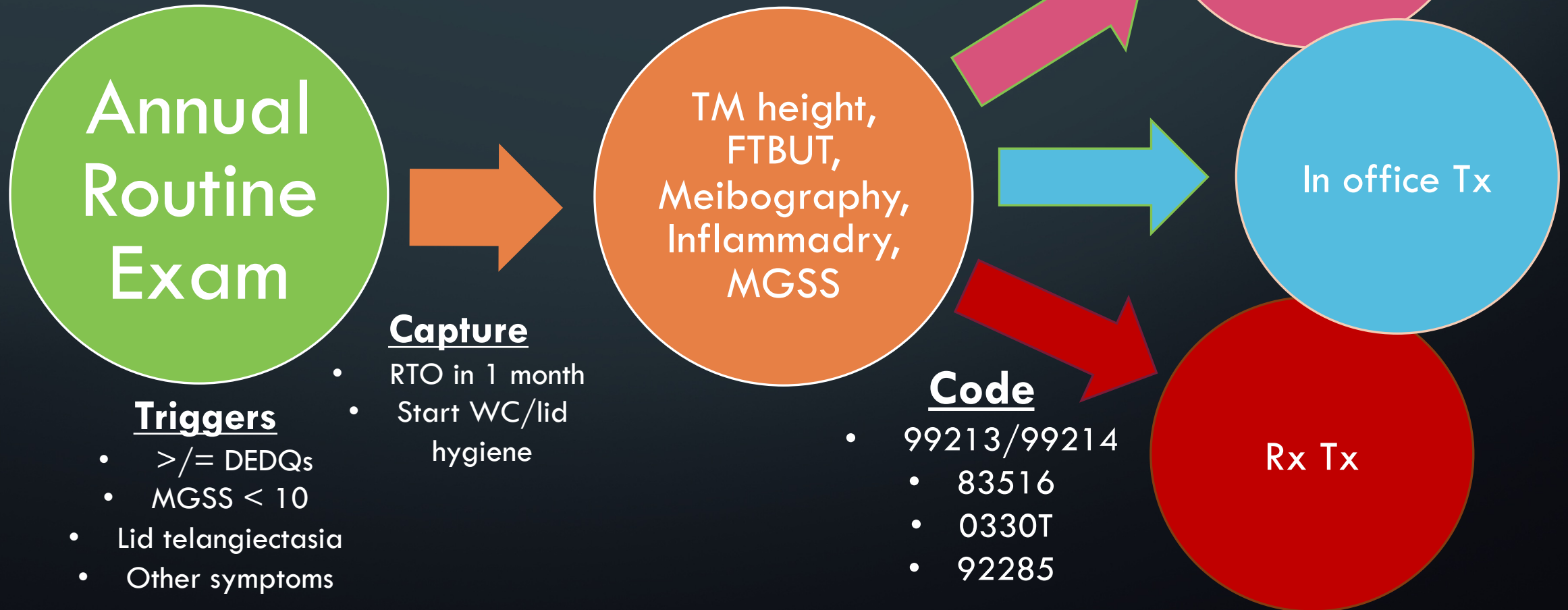
### DED signs and symptoms:

- 8.7 to 30.1%

**MGD: 38-68%**

# STEP 6

## Implement/Improve Ocular Surface Disease Protocols



# STEP 6

## Implement/Improve Ocular Surface Disease Protocols



Signs \ Tx	At Home/OTC	In Office	Pharm/Rx
< Tear Meniscus < Schirmer Score	PF ATs	Punctal occlusion: 180 days, permanent, or cauterization	Cyclosporin, varenicline, amniotic membrane, autologous serum tears, scleral lens
Lid telangiectasia (+)Inflammadry	Omega 3s	Intense Pulsed Light	Doxy/minocycline, amniotic membrane, autologous serum tears, scleral lens
MGSS < 10 MG atrophy	Warm compresses PF ATs	Thermal pulsation, MG expression, lid debridement, LLLT w/ expression, RF w/ expression	Amniotic membrane, autologous serum tears, scleral lens
(+)collarettes (+)scurf (+)madarosis	Lid hygiene: gel, spray, or wipes, Nulids™	Blephex™, etc.	Lotilaner 0.25%



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**STEP 7**

Make Managed Vision Care Optional With Total Patient Care

# STEP 7

## Make Managed Vision Care Optional With Total Patient Care



## STEP 7

## Make Managed Vision Care Optional With Total Patient Care



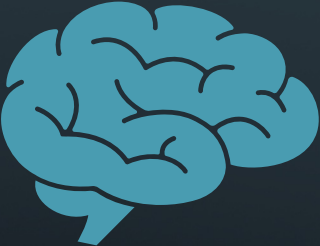
**992xx per  
Refraction  
GOAL = 50%+**

# ONE LAST THING WE MISSED...



**BEST trained primary eye care providers. Period.**

**Beliefs/Identity**



**Actions**



# Further Customized Help



- Online Community
- Access to B&C and many more courses
- Mastermind Groups
- Monthly “Office Hours”
- Disease centric metrics

The screenshot shows the EyeCode Education website. The navigation bar includes links for ALL COURSES, CUSTOM CONSULTATION, LIVE COURSES, NSUOCO ONLINE CE, AUTOCODER, and CHART AUDITING. There are also buttons for SIGN IN and GET STARTED NOW. The main heading is "Comprehensive Optometry Simplified" with a sub-headline: "An online community with on-demand courses to help optometrists increase medical management and medical insurance utilization to grow their practices." Below this are two buttons: "Get Started Now" and "Free - Analyze Your Data". The main content area features a section titled "Eliminate Frustration" with a paragraph: "We all struggle to handle the complexities of providing full-scope, comprehensive eye care. Unfortunately, many of us struggle alone. Is that you? Do you struggle with:" followed by a list of five bullet points, each preceded by a green checkmark.

EyeCode Education

ALL COURSES CUSTOM CONSULTATION LIVE COURSES NSUOCO ONLINE CE AUTOCODER CHART AUDITING

SIGN IN GET STARTED NOW

## Comprehensive Optometry Simplified

An online community with on-demand courses to help optometrists increase medical management and medical insurance utilization to grow their practices.

Get Started Now Free - Analyze Your Data

### Eliminate Frustration

We all struggle to handle the complexities of providing full-scope, comprehensive eye care. Unfortunately, many of us struggle alone. Is that you? Do you struggle with:

- ✓ When and how to determine if it is "MEDICAL" or "ROUTINE".
- ✓ Confidently utilizing 99 codes, 92 codes, modifiers, procedure codes and special testing.
- ✓ Understanding which metrics are indicators of successful comprehensive eyecare.
- ✓ What specific protocols to follow for managing complex chronic diseases.
- ✓ Integrating clear processes for incorporating new technology.

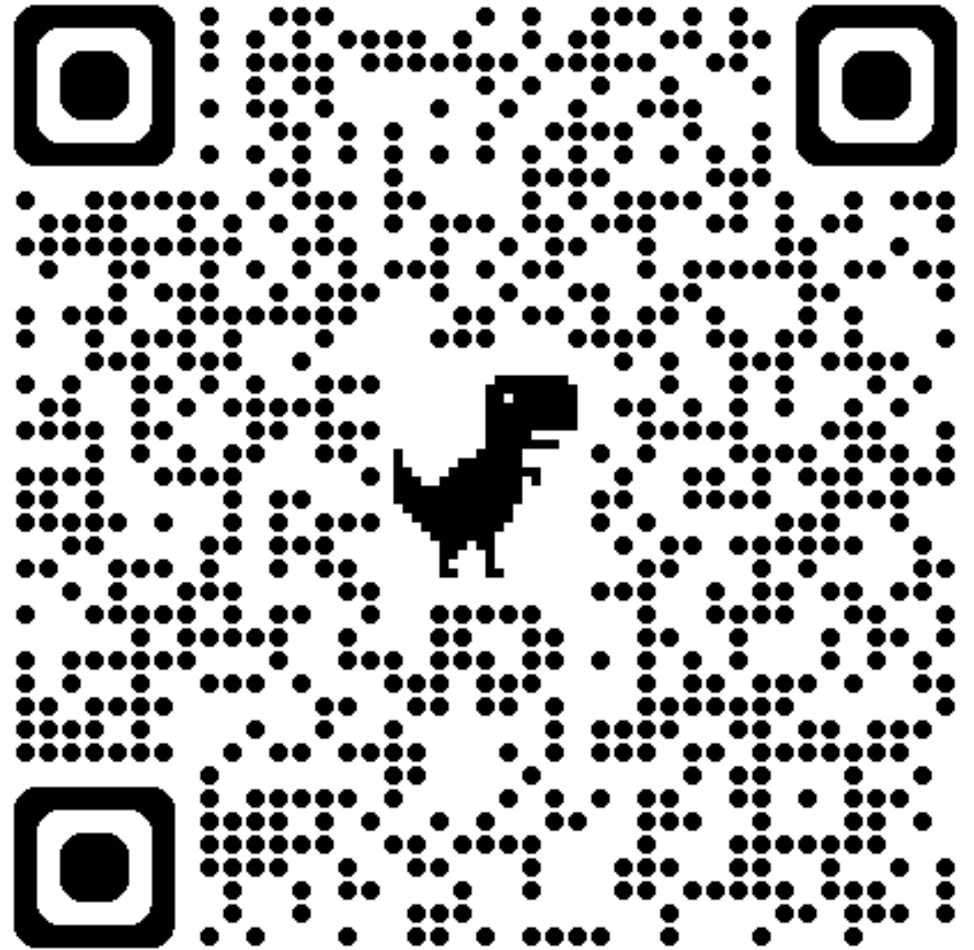
# AUTO Calculate YOUR Medical KPIs



FREE WHITEPAPER

## 9 Key Metrics for Medical Optometry Success

Empower Your Optometric Practice with Valuable Insights and Key Performance Indicators related to Comprehensive Optometry





**QUESTIONS ?**