NHRMC Physician Group
Quality Sharing Day

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Director of Clinical Quality
Physician Quality Partners
July 2018
Includes an Ambulatory Surgery Center (Endo), Full Service Lab, Radiology, and Sleep Labs

NHRMC Physician Group
• Practice Locations – 42
• Total Providers – over 250
• Total Staff – over 600

Provider Mix
• Primary Care – 27% (62 providers)
• Specialists – 60%
• Hospitalists – 13% (31 hospitalists)

Serve six-county region in Southeast North Carolina
• New Hanover
• Brunswick
• Pender
• Columbus
• Duplin
• Onslow
Mission

Leading Our Community to Outstanding Health

Diabetic Retinal Imaging Projects Purpose

To elevate the quality of patient care delivered at New Hanover Medical Group’s (NHMG) Primary Care by using early detection systems for diabetic retinopathy, for NHMG Primary Care diabetic population, to prevent blindness and other eye complications.
Diabetes Statistics

Complex Chronic Condition

- 30.3 million of all ages diagnosed with Diabetes in 2015 (9.4% of the United States population) (1)
- 7.2 million have undiagnosed Diabetes (23.8% of people with diabetes are undiagnosed) (1)
- Seventh leading cause of death in the United States in 2015 (5)
- $245 billion in total direct and indirect costs of diagnosed Diabetes in the United States in 2012 (5)
- Average medical expenditures with diagnosed diabetes approximately $13,000 per year, approximately $7,900 attributed to diabetes (5)
- Estimated 41% increase from estimated $174 billion spent on diabetes in 2007 (ADA Economic 2013)

Diabetic Retinopathy

- Leading cause of blindness in adults under 75
- Increases risk of serious health complications such as heart disease, stroke, kidney failure and etc. (CDC Fast Sheet 2014)
- Over 95% of vision loss preventable with early detection and treatment
CMS ACO Diabetic Eye Exam Measure

Measure Description:
Percentage of patients 18-75 years of age, with an *active* diagnosis, during the measurement year or the year prior, of Type 1 or 2 Diabetes, who were screened for diabetic retinal disease by one of the following:

- Retinal or dilated eye exam performed by an eye care professional
- Retinal image read by a qualified eye care professional, if image performed in Primary Care Providers office setting (allowed)
- Retinal image read by a retinal specialists, if imaging performed in Primary Care Providers office setting (allowed)
- Or had a negative retinal exam in 12 months prior to the measurement period

https://qpp.cms.gov/mips/explore-measures/quality-measures
What is Diabetic Retinal Imaging?

- Can be a non-dilated exam
- Non-radiation exam
- Bilateral exam
- Digital picture of the back of the eye
  - Shows retina, optic disk, and blood vessels
- Evaluates the health of your eye and finds certain diseases
- Does not replace a regular eye exam but adds another layer of precision
**PROPOSAL A3**

**Theme:** Diabetic Retinal Exams and HEDIS Quality Measures  
**Leader:** Dr. Amy Messler, Dr. Jeffrey Warhaftig, Dan Goodwin, Kim Hoed, Marian Proctor

### Current Condition(s)
- Current diabetic retinal exam completion (total NHRMC Physician Group) for the 12-month period ending 9/30/2016 is **29%**, which is well below the proposed target of **75%**.
- Over 50% of diabetic patients are not getting diabetic eye exams in any setting, where diabetic retinopathy is the leading cause of blindness in adults under 75 and with today's therapies, over 50% of vision loss is preventable.
- When diabetic eye exams are completed in the Ophthalmology setting, the results are not being reviewed at the primary care offices, so QHI primary care practices are not meeting diabetic eye exam quality measures.

### Proposal
1. Retinal exam ordered and performed in PCP office and image uploaded to NHRMC PACS for storage and interpretation. No additional staffing is anticipated to be needed for this 3-minute exam.
2. Retina of Coastal Carolina contracted for interpretation & dictation via power-scribe with final report returned to PCP & ordering provider via existing NHRMC interface.
3. PCP to act on retinal results and generate referrals as needed.

**PROS**
- Able to meet quality metric target for completion of diabetic eye exams
- Eliminates human error associated with manual process of scanning paper and updating quality results in Epic.
- Guarantees a returned report appropriately indexed in the patient’s EMR chart

**COSTS**
- $ per exam for image storage  
- Retinal camera @ $ per exam

### Implementation Schedule

<table>
<thead>
<tr>
<th>Activity</th>
<th>Responsible</th>
<th>Expected Outcomes</th>
<th>By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitting project (Request A3)</td>
<td>Kim Hoed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Request professional services contract for reads</td>
<td>Kim Hoed, Dan Goodwin, Tony Newman</td>
<td></td>
<td>done</td>
</tr>
<tr>
<td>Business Plan Review</td>
<td>Kim Hoed, Judy Zoltinger</td>
<td>Submitted</td>
<td></td>
</tr>
<tr>
<td>Capital Expenditure</td>
<td>Kim Hoed, Judy Zoltinger</td>
<td>Submitted</td>
<td></td>
</tr>
<tr>
<td>Delivery &amp; install of equipment</td>
<td>Kim Hoed</td>
<td></td>
<td>Jan 1, 2017</td>
</tr>
</tbody>
</table>

### Measurement

- **Metric:** HEDIS Medicare/National Quality Measure for Diabetic Retinal Exam completion
- **Type:** % of eye exam completions
- **Baseline:** 29%
- **Target:** 75%

### Analysis/Evaluation of Alternatives

**Alternate 1**
- Capture diabetic eye exams in patients who are in the Primary Care office setting utilizing a third party A1, telemedicine service for storage and interpretation with a PDF report interface to Epic.

**CONS**
- **Alternate 2 (Eliminated as an option)**
  - Capture diabetic eye exams on patients who are in the Primary Care office setting utilizing a third party A2, for storage and existing interface to file reports directly to Epic and the diabetic eye exam topics is satisfied in Epic.
NHRMC Physician Group

It’s a Process….But Worth It!

From Submitting a Business Plan

Drivers
- Ensure eye results are accessible within Epic
- Achieve a return on capital investment

Compliance
- Billable service to insurance

Performa
- Equipment, Staffing costs

To Approval of Imbedding Retinal Imaging in NHMG Primary Care

- 4-Month Implementation
- Testing completed- Nov 2016
- Professional services contract signed- Dec 2016
- Retinal cameras installed-Jan 2017
- Training completed- Feb 2017

New Hanover Regional Medical Center
Diabetic Eye exam is ordered to be performed during visit
Exam is performed during visit & Images sent to PACS
Interpreted by Retinal Specialist & Results returned to EMR via Interface
Diabetic Eye quality metric updated in EMR

Referral to Eye Care Provider is placed in EMR
Referral order is monitored in EMR to ensure completion
Paper results are scanned to referral order
Diabetic Eye quality metric updated in EMR

Get Diabetic Eye Records order is placed in EMR
Patient record release obtained & faxed at visit check out
Order is monitored in EMR to ensure completion & paper results are scanned to order
Diabetic Eye quality metric updated in EMR

Diabetes Retinal Exam

Retinal Exam and Referrals

Retinal Exam
- Diabetic Retinal Exam
  - Expected: Today, Routine, Clinic Performed

Referrals
- Ambulatory referral to Ophthalmology
  - External Referral, Routine, Ophthalmology, Service Not Available In-House
- Ambulatory referral to Optometry
  - External Referral, Routine, Optometry
- Request for Outside Diabetic Eye Records
  - External Referral, Routine, Continuity of Care
Baseline & 1 Year Quality Metrics

- **NHRMC Physician Group**

![Graph showing baseline and annual results for various metrics including:
- **Baseline Performance**: NHMG Primary Care Baseline, Network Baseline (FM, IM, Primary Care Practices), Non-NHMG Network Primary Care Practices Baseline.
- **Installation of Retinal Cameras**: NHMG Primary Care 1 Yr. Results (Post Retinal Imaging Imbedded), Network 1 Yr. Results (FM, IM, Primary Care Practices), Non-NHMG Network Primary Care Practices 1 Yr. Results (Retinal Imaging Not Imbedded).
Return on Capital Investment

Return on Initial Equipment Investment Costs Achieved in the First 9 months.

Total Net Revenue - Expenses
Within the first year of the program 1,194 imaging exams were completed, reaching 25% of the diabetic population in primary care.

10% of Exams Completed Identified Disease Present!

56% of disease identified was Diabetic Retinopathy
• 53% were identified as new or early findings

34% of disease identified was Glaucoma or Glaucoma Suspect
• 59% were identified as new or early findings

10% of disease identified was Hypertensive Retinopathy
• 66% were identified as new or early findings

15% of the patients imaged had Cataracts
Feedback from Eye Care Professional:

“The project is beating my expectations”, “I recently saw 2 patients today and from the eye screening, that patient had newly diagnosed severe disease”, “both patients said they saw an eye doctor two years ago and those patients would have gone blind without treatment, but they are asymptomatic now”, ”unfortunately when they have symptoms it may be too late and we have likely caught them in time to save their eyesight” and “please let your team know that their work is making a huge difference in patients’ lives!”.

Pt 24 optic cup/disc ratio ... normal
eye pressures but significant glaucoma
visual field loss R>L

Starting pt on topical tx right away...
will follow
Nice find!!

Tari

New Hanover Regional Medical Center
When Collaboration, Interfacing, CDS, & BPA’s are applied effectively it:

- Increases the Quality of Patient Care
- Boosts Provider, Staff, & Patient Satisfaction
- Ability to Monitor Outcomes of Test Results
- Improves Workflows and Efficiencies
- Reduces Patients Cost of Care with Early Detection
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APPENDIX
References


NCQA PCS Response to Case #00004218

Question:
My question is pertaining to the retinal exam score under the diabetes category. Does a fundus photograph taken in a primary care doctor’s office interpreted by a retina specialist yearly qualify or is the requirement a dilated retinal exam by an ophthalmologist or optometrist?

NCQA’s response:
Yes, the fundus photograph taken in a primary care office and interpreted by a retina specialist meets the CDC eye exam criteria for HEDIS reporting. For the Eye Exam numerator, the member must have a retinal or dilated eye exam by an eye care professional in the measurement year, or a negative retinal exam by an eye care professional in the year prior to the measurement year in order to be considered compliant. For the exam to be counted during the measurement year, at a minimum, the note in the medical record must be prepared by an ophthalmologist, optometrist, PCP, or other health care professional, indicating that a comprehensive eye exam was completed by an eye care professional, the date it was done and the results, OR a chart or photograph of retinal abnormalities indicating the date when the fundus photography was performed and evidence than an eye care professional reviewed the results; alternatively, results may be read by a qualified reading center that operates under the direction of a medical director who is a retinal specialist.

NCQA PCS Response to Case #00006534

Question:
When performing retinal screening is a 45 degree undilated photo acceptable or does the image have to be 7 field ETDRS total retinal area dilated photo?

NCQA’s response:
The measure requires evidence that either a dilated eye exam or a retinal eye exam was performed by an eye care professional. This can include a chart or photograph of the retina indicating the date when the fundus photography was performed and evidence that an eye care professional reviewed the results. Or evidence that the results were read by a qualified reading center that operates under the direction of a medical director who is a retinal specialist.