Improving the Evaluation of Diabetic Retinopathy Within a Closed Health System

A Quality Improvement Program

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1 | QI-CME FRAMEWORK
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**Defining the Need for QI-CME**

- Prevalence of diabetic retinopathy (DR) is increasing
  - By 2020, nearly 6 million Americans may suffer from DR
  - Rates of DR are projected to triple by 2050

- Yet screening rates remain poor
  - Approximately 75% of Americans with DR are unaware of their condition

Establishing Partnerships

- Access to endocrinologists and PCPs for QI-CME participation
- EHR access, data collection, and analysis

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2 | PROGRAM GOALS
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**Primary Objective**

To improve screening rates for DR within a closed health care system

**Secondary Objectives**

- Increase knowledge regarding DR screening guidelines
- Improve communication between providers & patients

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3 | TIMELINE & INTERVENTIONS
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**Baseline**

- Baseline demographics of patients seen by either endocrinologists or PCPs:
  - Ophthalmology, n=1,931
  - Endocrinologists, n=51

**Pre-education**

- Correct responses on pretest
  - Ophthalmologists, n=1,931
  - Endocrinologists or PCPs, n=51

**Post-education**

- Overall there was a 54% relative increase in knowledge and competence
- Post-learning, providers are 30% more likely to provide evidence-based care

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4 | DEMOGRAPHICS
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<table>
<thead>
<tr>
<th>Degree</th>
<th>Specialty</th>
</tr>
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<tbody>
<tr>
<td>MD/DO</td>
<td>Ophthalmology</td>
</tr>
<tr>
<td>Other HCP</td>
<td>Ophthalmology</td>
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</tbody>
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5 | CLOSED NETWORK OUTCOMES
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**Primary Objective – Reduced Time to Follow-up with Ophthalmology**

- Baseline to post, 120 day reduction
- Baseline to post, 130 day reduction

**Secondary Objectives – Knowledge, Competence, and Satisfaction**

- Overall there was a 116% relative increase in knowledge and competence
- 54% relative increase regarding DR pathophysiology
- Post-learning, 100% knew DR screening guidelines
- 54% relative increase regarding DR treatment
- 72% plan to improve their communication with patients with diabetes
- 99% overall satisfaction rating

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6 | EXTENDED REACH OUTCOMES
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**Pre-education**

Correct responses on pretest

- Ophthalmologists, n=1,931
- Endocrinologists or PCPs, n=51

**Post-education**

- Ophthalmologists were more knowledgeable than Endos/PCPs regarding DR treatment, yet less-so regarding screening

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7 | CHALLENGES & OPPORTUNITIES
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Challenges were encountered, albeit with potential solutions for future QI-CME

**Establishing partnerships**

- Must engage correct people within system with access to pertinent tools and data
- Select faculty champion to gain buy-in from health system

**Within-system participant recruitment**

- Engaging a faculty champion to motivate learners
- Personalized report of baseline practice to activate learning

**Scalability & Reproducibility**

- Engaging a different system using this model of success
- Recruiting additional relevant audiences within same system

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References


This activity was supported by an educational grant from Regeneron Pharmaceuticals, Inc.