Addressing Primary Care Quality Gaps through Tele-Ophthalmology in the Lower Naugatuck Valley

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Background
Retinopathy screening is a key performance measure and one of the cornerstones of quality diabetic care. Although retinal imaging has classically been used in the detection of diabetic retinopathy, it can also be used in the detection of other eye diseases including:

- Macular degeneration
- Hypertensive retinopathy
- Cardiovascular disease
- Glaucoma

In order to increase retinal screening rates and close quality gaps for our patients, we have developed a tele-ophthalmology screening program in Griffin Hospital’s resident ambulatory care clinic. This new clinic will recruit patients from Griffin Hospital and its associated primary care offices, Griffin Faculty Physicians (GFP).

Goals/Objectives
On-site retinal screening in a primary care setting and telemedicine-based retinal evaluation will increase the rate of retinal screening.

- Diagnosis and treatment of eye disease will increase.
- Patients and staff will be satisfied with the screening procedure.

Methods/Approach

![Image of retinal screening process]

- **Patients at risk of retinal eye disease have images taken**
- **An ophthalmologist reviews images. Was there evidence of eye disease?**
  - **Yes**: Patient is referred for further follow-up to a retinal specialist
  - **No**: Review of images are reported back to Primary Care Physician (PCP)

![Image of ophthalmologist reviewing retinal images]

- **Information gathered through this screening process is also stored in Athena for easy and efficient PCP access**

Preliminary Results
- As of October, 37 diabetic patients have been screened for eye disease.
- 19 patients have had their images reviewed by a retinal specialist.
- 1 patient had evidence of mild non-proliferative diabetic retinopathy.
- 1 patient had evidence of moderate non-proliferative diabetic retinopathy.
- 1 patient had evidence of age-related macular degeneration.
- 1 patient had evidence of non-diabetic maculopathy.

Future Directions
- Expand tele-retinal screening to other primary care sites and outreach/health fairs.
- Develop a protocol to audit retinal images for quality and diagnostic accuracy.
- Develop a protocol to track patients to ensure that follow-up appointments were made.

References