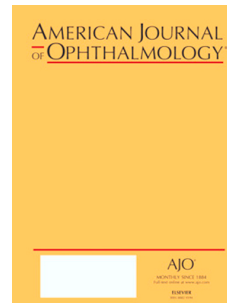


# Accepted Manuscript



Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Methods and Screening Results

Lisa A. Hark, L. Jay Katz, Jonathan S. Myers, Michael Waisbourd, Deiana Johnson, Laura T. Pizzi, Benjamin E. Leiby, Scott J. Fudemberg, Anand V. Mantravadi, Jeffrey D. Henderer, Tingting Zhan, Jeanne Molineaux, Vance Doyle, Meskerem Divers, Christine Burns, Ann P. Murchison, Shae Reber, Arthur Resende, Thien Dan V. Bui, Jane Lee, John E. Crews, Jinan B. Saaddine, Paul P. Lee, Louis R. Pasquale, Julia A. Haller

PII: S0002-9394(17)30276-3

DOI: [10.1016/j.ajo.2017.06.024](https://doi.org/10.1016/j.ajo.2017.06.024)

Reference: AJOPHT 10182

To appear in: *American Journal of Ophthalmology*

Received Date: 9 March 2017

Revised Date: 22 June 2017

Accepted Date: 23 June 2017

Please cite this article as: Hark LA, Katz LJ, Myers JS, Waisbourd M, Johnson D, Pizzi LT, Leiby BE, Fudemberg SJ, Mantravadi AV, Henderer JD, Zhan T, Molineaux J, Doyle V, Divers M, Burns C, Murchison AP, Reber S, Resende A, Bui TDV, Lee J, Crews JE, Saaddine JB, Lee PP, Pasquale LR, Haller JA, Philadelphia Telemedicine Glaucoma Detection and Follow-up Study: Methods and Screening Results, *American Journal of Ophthalmology* (2017), doi: 10.1016/j.ajo.2017.06.024.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**1 ABSTRACT**

2 **Purpose:** To describe methodology and screening results from the Philadelphia  
3 Telemedicine Glaucoma Detection and Follow-up Study.

4 **Design:** Screening program results for a prospective, randomized clinical trial.

5 **Materials and Methods:** Individuals were recruited who were African-American,  
6 Hispanic/Latino, or Asian over age 40 years; Caucasian individuals over age 65 years;  
7 any ethnicity over age 40 years with a family history of glaucoma or diabetes. Primary  
8 care offices and Federally Qualified Health Centers were used for telemedicine (Visit 1).  
9 Two posterior fundus photographs and 1 anterior segment photograph were captured  
10 per eye in each participant, using a non-mydratic, auto-focus, hand-held fundus camera  
11 (Volk Optical, Mentor, Ohio, USA). Medical and ocular history, family history of  
12 glaucoma, visual acuity, and intraocular pressure measurements using the  
13 ICarerebound tonometer (ICare, Helsinki, Finland) were obtained. Images were read  
14 remotely by a trained retina reader and a glaucoma specialist.

15 **Results:** From 4/1/15, to 2/6/17, 906 individuals consented and attended Visit 1. Of  
16 these, 553 participants were female (61.0%) and 550 were African American (60.7%),  
17 with a mean age of 58.7 years. A total of 532 (58.7%) participants had diabetes, and  
18 616 (68%) had a history of hypertension. During Visit 1, 356 (39.3%) participants were  
19 graded with a normal image. Using image data from the worse eye, 333 (36.8%) were  
20 abnormal and 155 (17.1%) were unreadable. A total of 258 (28.5%) had a suspicious  
21 nerve; 62 (6.8%) had ocular hypertension, 102 (11.3%) had diabetic retinopathy; and 68  
22 (7.5%) had other retinal abnormalities.

23 **Conclusion:** An integrated telemedicine screening intervention in primary care offices  
24 and Federally Qualified Health Centers detected high rate of suspicious optic nerves,  
25 ocular hypertension, and retinal pathology.

26

Download English Version:

<https://daneshyari.com/en/article/5702945>

Download Persian Version:

<https://daneshyari.com/article/5702945>

[Daneshyari.com](https://daneshyari.com)