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An Eye Screening and Eye Health Education Pilot Program in Senior Living Communities

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Transitioning into Aging Research

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Background

- As older Americans expected to reach 72 million by 2030, independent and assisted living facilities, referred to together as Senior Living Facilities (SLFs), will increase in popularity.
- Federal mandated oversight of healthcare is limited at SLFs.
- This study examines vision impairment of residents in SLFs and the perceived value of an ocular health screening and education program.

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Vision Impairment Among Older Adults Residing in Assisted Living

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**152 Subjects, 30% Average Participation at 12 SLFs
98% White, 70% between 80-90 years, 82% Female
39% Vision <20/40 in the better seeing eye
66% Low Contrast Sensitivity (<1.50)**

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Methods

- Cross sectional study of volunteer members of 2 Senior Living Communities
- 183 older adults were recruited from two local suburban Senior Living Communities from January 2015-January 2016:
 - Fairport Baptist Homes (Fairport, NY)
 - St. John's Meadows (Rochester, NY)
- Enrolled subjects completed an 1) eye screening and baseline survey, 2) eye health education session and follow-up survey

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Older Adults in Senior Living Communities

Group Educational Sessions (given by Ophthalmologist (PI))

Visual Acuity - ETDRS
Contrast Sensitivity - Pelli
Autorefraction - Nikon SK
Fundus Photography - Zeiss
OCT Imaging - Cirrus

Flaum Eye Institute Reading Center And REDCap Database
- Images and Data Read by Ophthalmologist (PI)

Patient Report Generation

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Demographics

Variable	Category	Mean or %
Mean Age:	N/A	82 yrs.(SD 7.5)
Gender:	Female	79%
Race:	Non-Hispanic White	90%
Education:	High School Diploma or Higher	96%
Income:	Adequate Income or Higher	85%
Residence:	Live Alone	77%

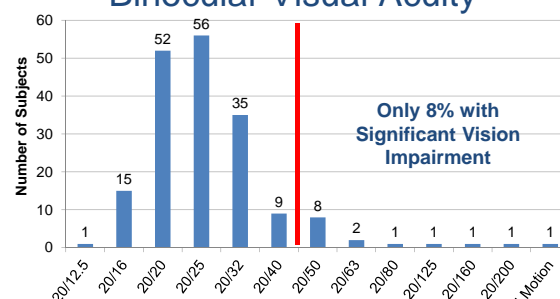
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Self-Reported Health Status and Healthcare Use/Access

Variable	Response Category	%
Health Status (self-reported)	Good or Better	80
Health Insurance:	Have Coverage	98
Primary Care Doctor:	Yes	98
Routine PCP Checkup:	Within Past Year	91
Have Eye Doctor:	Yes	91
Eye Exam:	Within Past Year	79

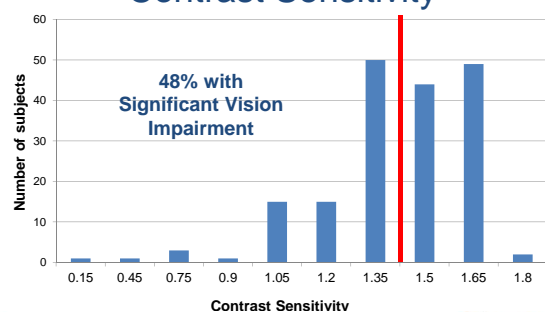
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Very Good ETDRS Binocular Visual Acuity



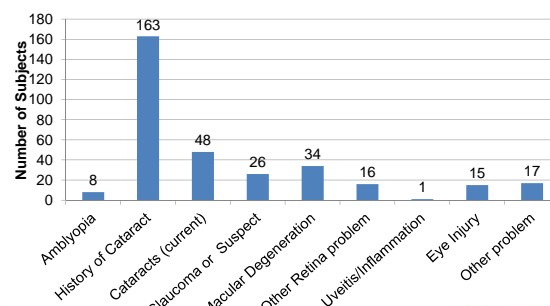
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Impaired Binocular Contrast Sensitivity

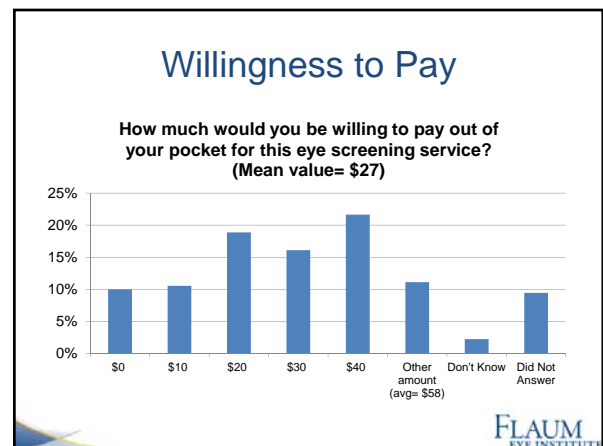
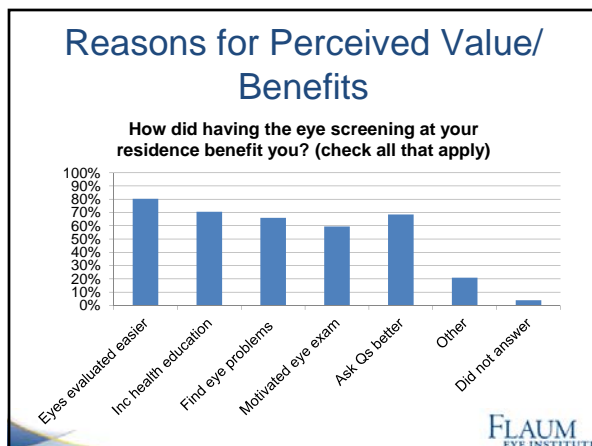
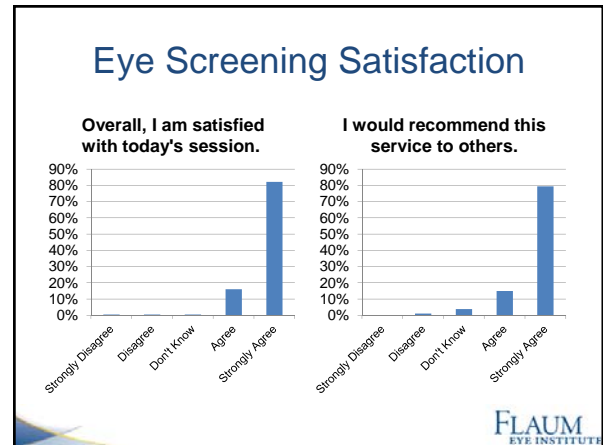
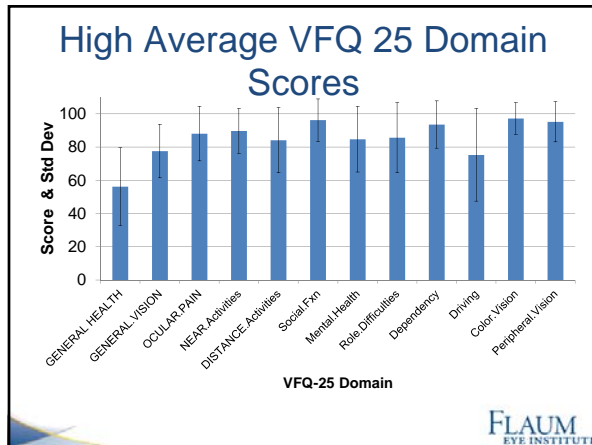
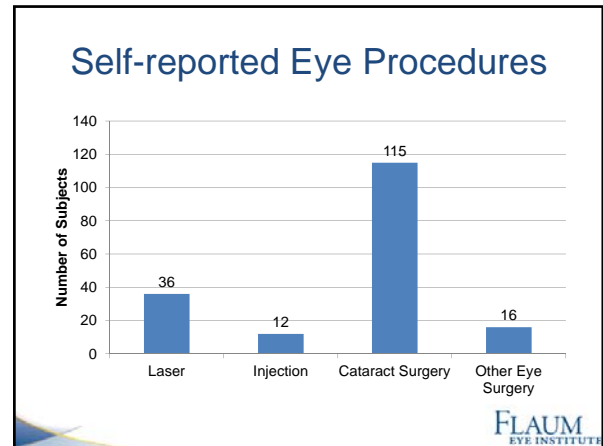
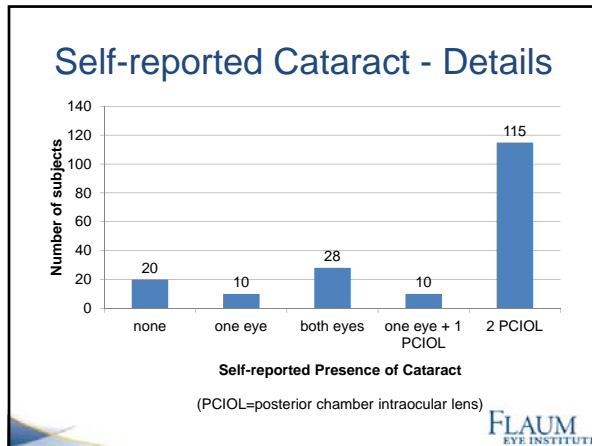


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Self-reported Eye Disease Prevalence



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Eye Education Session

After the education session, respondents

- showed increased eye health knowledge/
performed better on the eye health quiz ($t=7.04$, $p<0.001$)
- increasingly reported
 - Understanding the benefits of regular eye exams ($z=2.03$, $p=0.04$)
 - Plans to get an eye exam ($z=2.18$, $p=0.03$)
 - Understanding their eye treatment options ($t=2.89$, $p<0.01$)
 - Understanding how to prevent further eye problems ($t=3.43$, $p<0.001$)

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Summary

- High levels of satisfaction with screening.
- Most subjects were receiving regular eye care and did not have significant vision impairment.
- Yet most subjects still found value in the on-site screening and expressed willingness to pay out-of-pocket for the screening service.

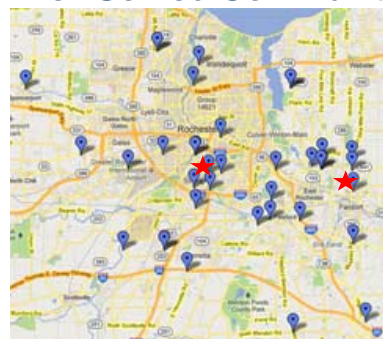
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Limitations

- Self Selected Population
- Only 25% of SLF population
- Patient satisfaction surveys given by study coordinator.

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Geriatric Medical Care at SLFs: Well Served Community



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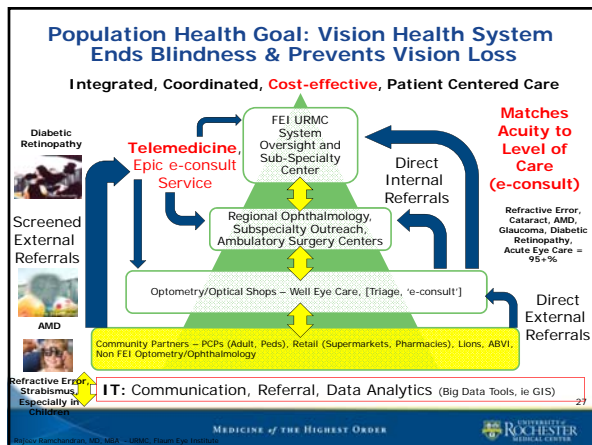
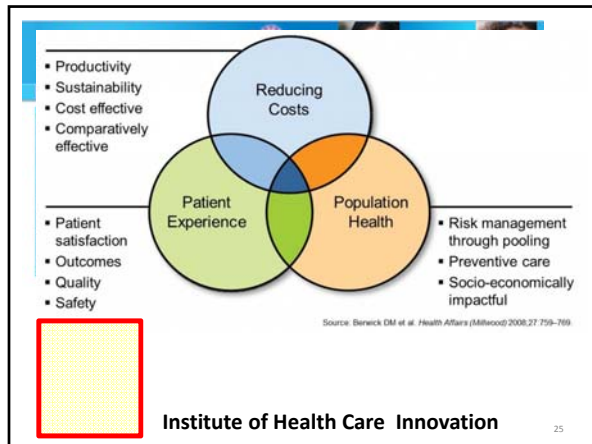
Next Steps

- Complete data collection, data entry, data cleaning, data analysis.
 - Final 4 screening days scheduled April 2016
- Compare screening and self-reported data to most recent eye and primary care exam notes.
- Further analysis of data to determine which group of subjects may benefit the most from onsite screening and education.

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Thank you!

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