

BECOMING VISIONARY: EVALUATION OF A COMPREHENSIVE EYE EXAM CLINIC WITHIN A GERIATRIC REHABILITATION SETTING

We studied the feasibility of having community optometrists offer a Comprehensive Eye Exam (CEE) Clinic for detecting vision loss within a geriatric rehabilitation setting. Findings revealed it is feasible to implement a CEE clinic for older adults within a hospital setting. The CEE clinic was implemented with minimal expenses, low workload burden on staff, and detected significant vision issues among many participants

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Introduction

- **Visual impairments are highly prevalent amongst older adults, but largely undiagnosed. Estimates indicate 20-50% of seniors have undetected reduced vision.**
- Research has shown that visual impairment increases risk of falls, depression, and mortality amongst seniors.
- Studies are lacking that examine the impact of implementing an eye exam clinic within a hospital setting.

Purpose

- The purpose of this study was **to evaluate feasibility of having community optometrists offer a Comprehensive Eye Exam Clinic for detecting vision loss within a geriatric rehabilitation setting.** Outcomes included prevalence of patients with visual deficits, frequency of various visual diagnoses, number of patients referred for further visual assessment; and number of patients who seek out referral. In addition we examined the experiences of the community optometrists, staff, and patients who were involved in the CEE Clinic.

Methods

- Using a descriptive feasibility mixed-methods study we examined 55 older adults (mean age of 80) who participated in the the CEE clinics between April- July 2014.



Results

Length of time since last eye exam

- Mean length of time since last eye exam was 3.4 years ($SD=3.8$ years). **Range was 6 months to 20 years.** Table 1 illustrates in detail range of time since last eye exam.

Table 1. Length of time since last exam	
2 years or less (<i>n, %</i>)	35 (63.6)
2 to 5 years (<i>n, %</i>)	7 (12.7)
5 years or more (<i>n, %</i>)	13 (23.6)
10 years or more (<i>n, %</i>)	6 (10.9)

Vision screening and eligibility for referral

- **46 participants (83%) had detectable vision problems.** Table 2 outlines various detected visual impairments.

Table 2. Detected visual impairments	
Cataracts (<i>n, %</i>)	19 (35)
Macular degeneration (<i>n, %</i>)	9 (16)
Glaucoma (<i>n, %</i>)	5 (9)
Blepharitis/ Dry eye syndrome (<i>n, %</i>)	8 (15)
Other visual problems (eg., acuity changes) (<i>n, %</i>)	7 (13)
Nuclear sclerosis, retinal hemorrhage	2 (4)

- **There was moderate willingness (66%) amongst participants to pursue further follow-up.** 27 participants (49%) were advised to have further follow-up. Of those, 16 were recommended to see an optometrist, of which 9 booked appointments. Eleven were referred to an ophthalmologist, of which 9 booked appointments.
- The clinic was well received by optometrists, staff, and patients. Many reported having a permanent CEE clinic would be a valuable addition to patient care. One therapist shared: **“the clinic provided another tool to the puzzle to assess patients’ functional mobility related to visual acuity”.**

Discussion

- Findings from this pilot suggest it is feasible to implement a Comprehensive Eye Exam Clinic for seniors within a hospital setting. **This clinic was implemented with minimal expenses, low workload burden on staff, and detected significant vision issues amongst many participants.**
- **Several barriers arose in providing optimal eye examinations. Optometrists’ were unable to assess refraction** (a test that measures the eyes' need for corrective lenses) with their travel eye exam kit. Their recommendation was to have a permanent clinic allowing for appropriate testing equipment, ensuring thoroughness and standardization of evaluations.
- Some patients were **overwhelmed with multiple health issues.** As well there were **challenges in finding transportation to appointments.** These both minimized participants’ ability to follow-up with eye specialists.

Conclusion

- This innovative eye exam clinic can assist in providing optimal health care delivery in a cost-efficient manner to our senior population, as well as strengthen partnerships between the Edmonton healthcare community and the Glenrose Rehabilitation Hospital