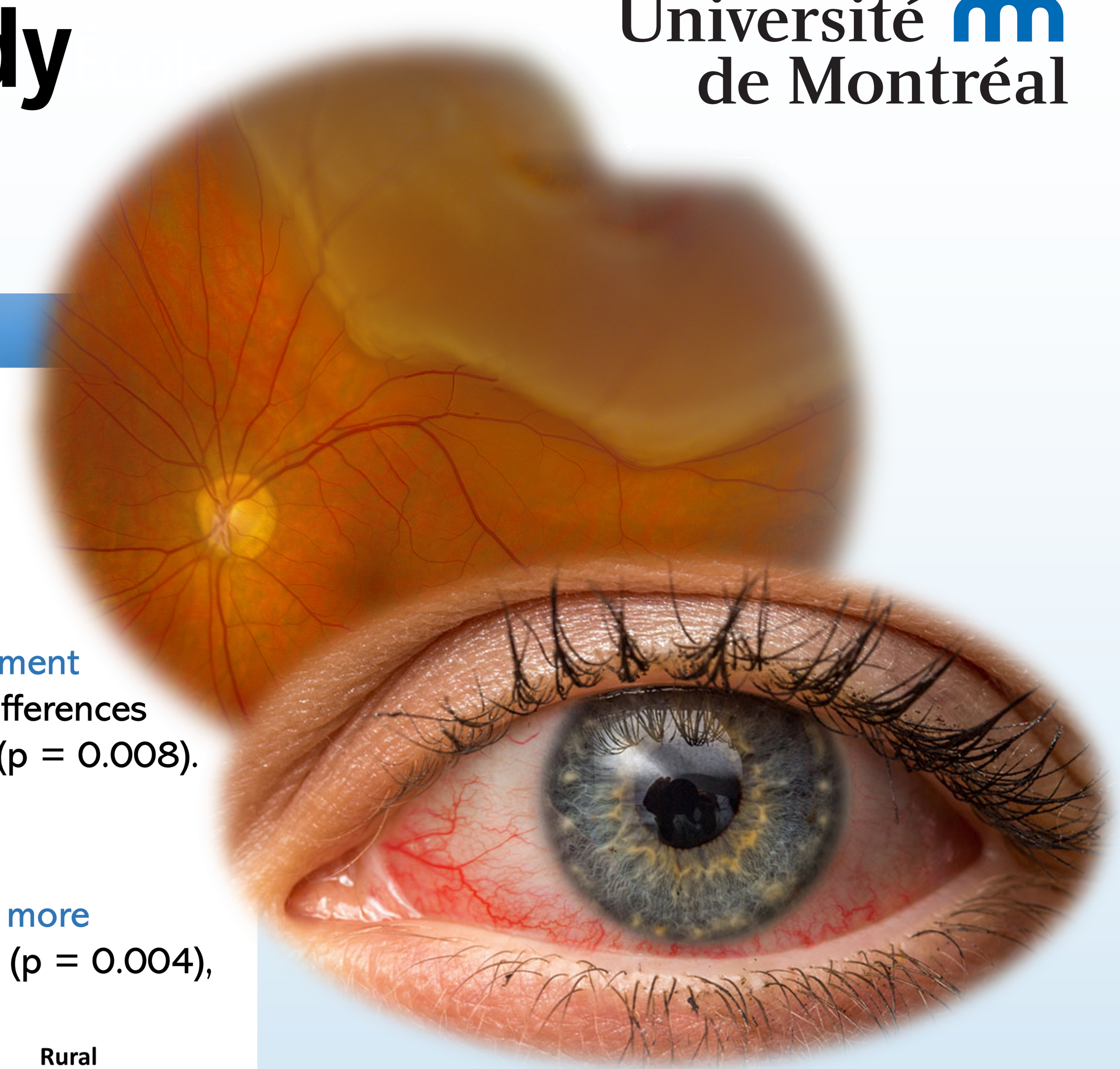


# Access to emergency appointments for new patients in Quebec, Canada : a simulated patient study

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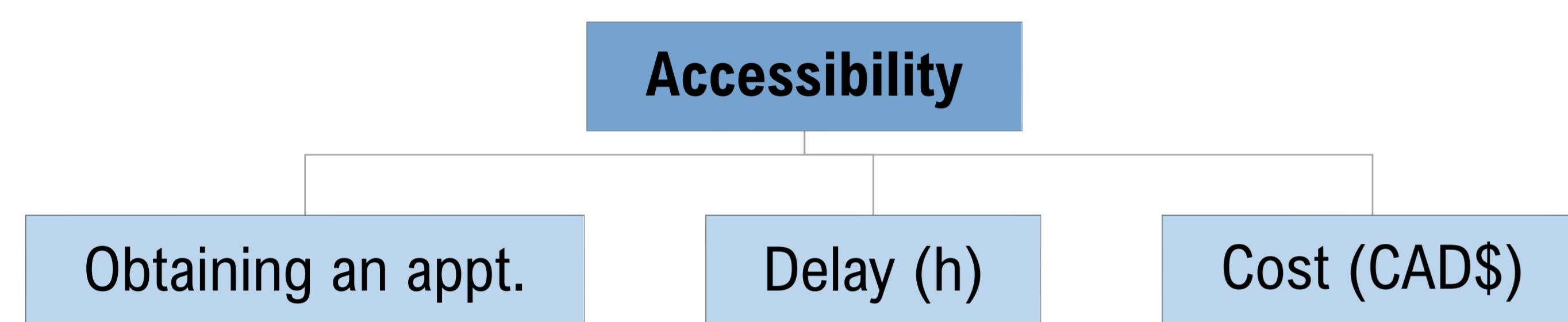


## Introduction

- Optometric therapeutic privileges since 2018
- Primary eye care providers, including eye emergency consultations
- Emergency appointment fees covered by Québec Health Insurance Plan (RAMQ)
- Treatment fees at the expense of the patient
- Disparities exist in
  - internal clinic policies
  - geographical distribution of optometrists in Quebec

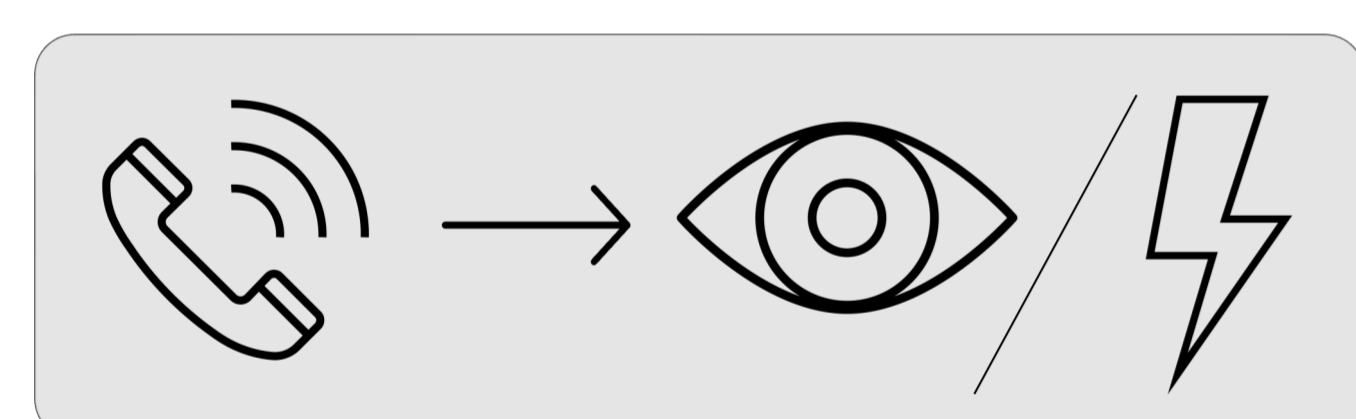
## Objective

To describe the accessibility of ocular emergency appointments for new patients in optometry practices throughout Quebec, Canada, according to morbidity and region.

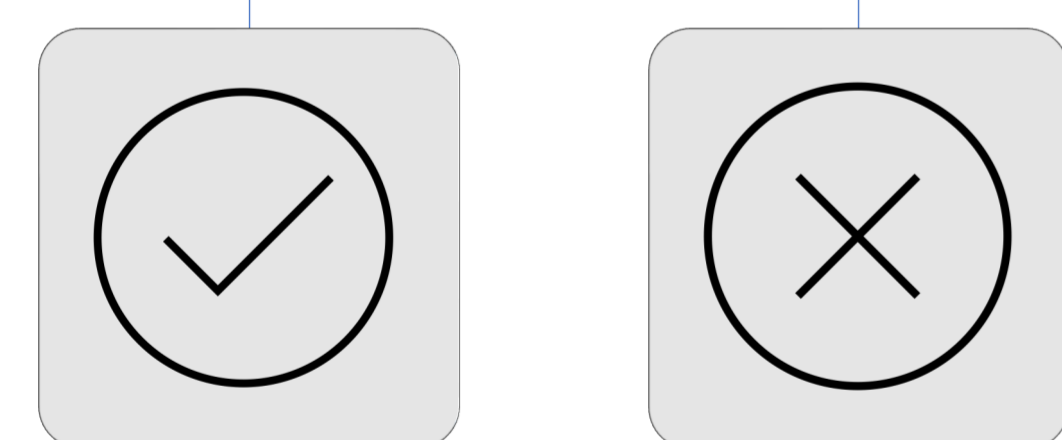


## Method

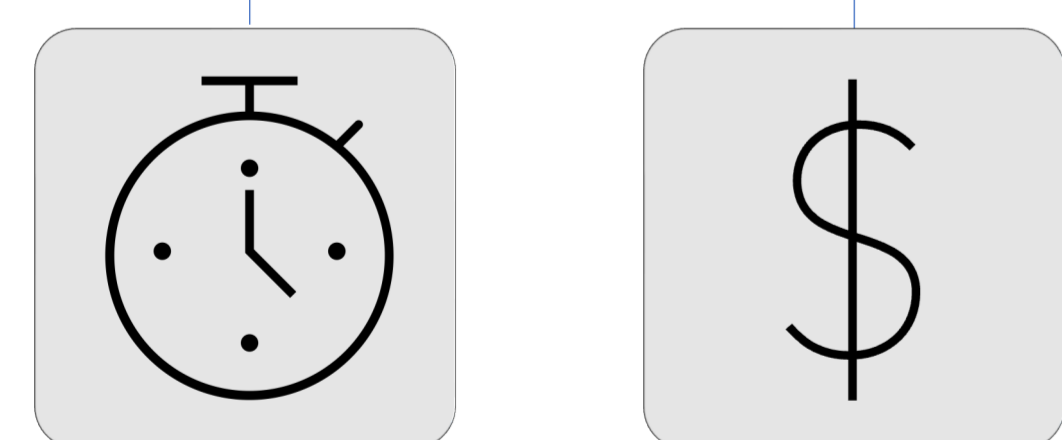
- Cross-sectional study, conducted in 89 randomly selected optometry clinics across Quebec, divided between urban, semi-urban and rural areas



- Simulated patients calls, taking the role of a new patient seeking an eye emergency appointment



- One call for a low morbidity emergency (acute red eye), and one call for a high morbidity emergency (recent onset of flashes)



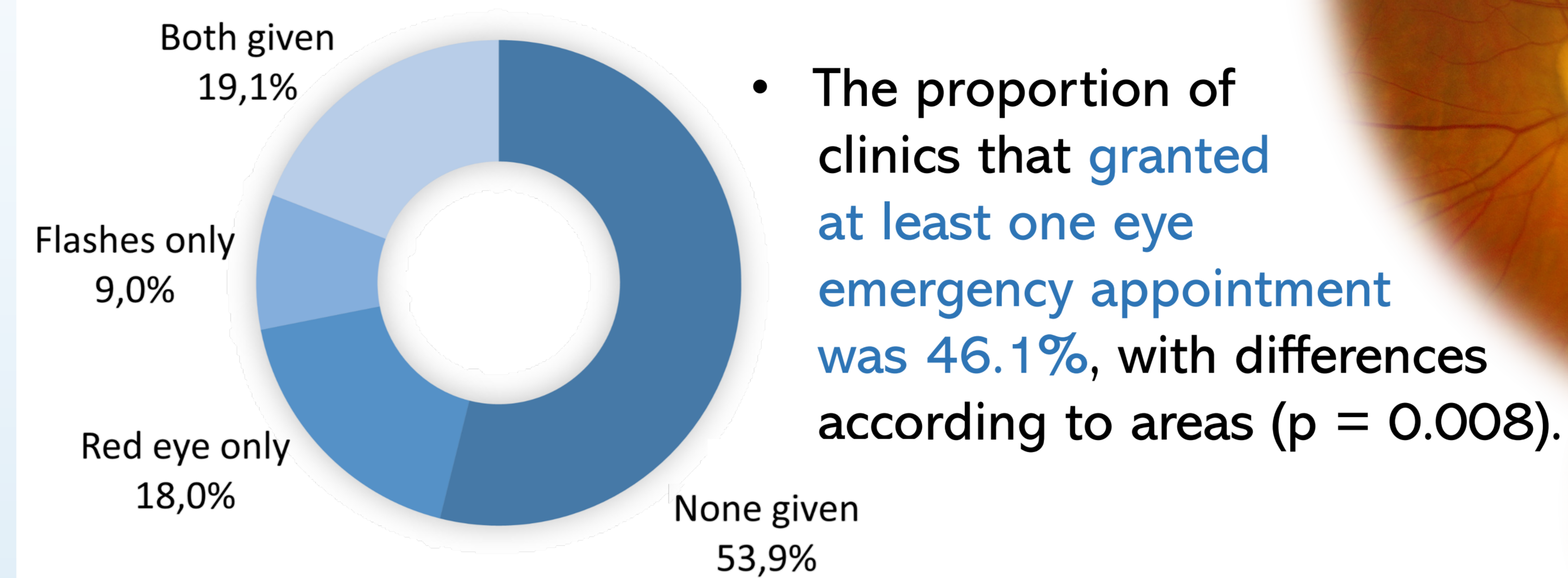
- Comparisons using parametric (chi squared) or non-parametric tests (Fisher's exact test, Wilcoxon signed-rank test, Kruskal-Wallis H test)

## References

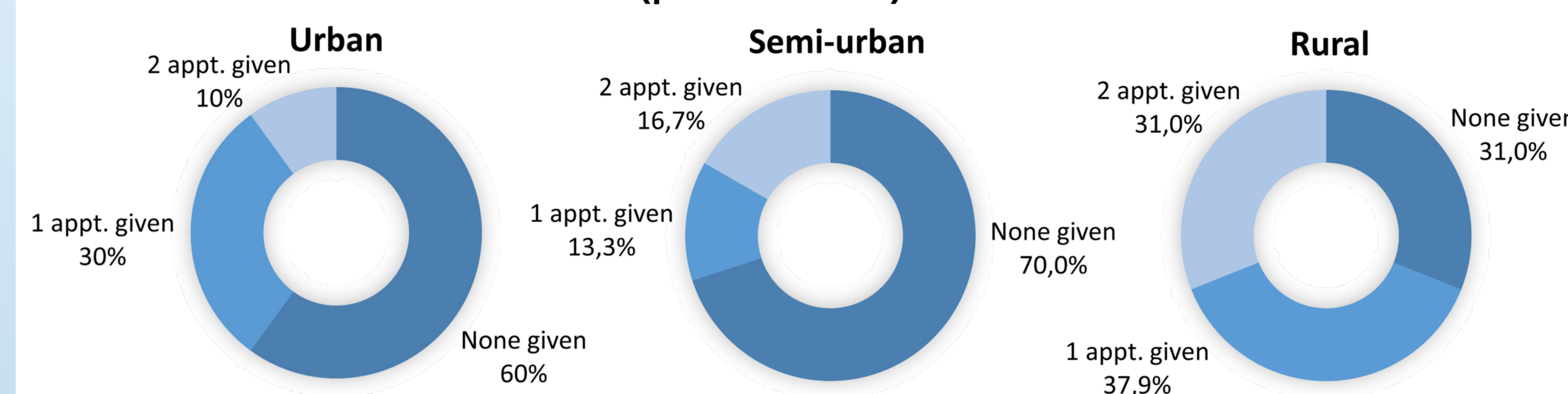
1. Campbell RJ, Hatch WV, Bell CM. Canadian Health Care: A Question of Access. Arch Ophthalmol. 2009;127(10):1384-6.
2. Shah T, Milosavljevic S, Bath B. Geographic availability to optometry services across Canada: mapping distribution, need and self-reported use. BMC Health Serv Res. 2020;20(1):639-51.
3. Québec Gd. Régie de l'assurance maladie du Québec [En ligne]. Québec: Gouvernement du Québec; 2020. Services optométriques [cité le 29 septembre 2021]; [7]. Disponible: <https://www.ramq.gouv.qc.ca/fr/citoyens/assurance-maladie/services-optometriques>
4. AOQ. Sondage sur la pratique optométrique, printemps 2020. Montréal: Association des optométristes du Québec; 2020.
5. Canada Gd. Statistique Canada [En ligne]. Ottawa: Statistique Canada; 2017. Classification des centres de population et des régions rurales 2016 [modifié le 8 février 2017; cité le 2 octobre 2021]; [15]. Disponible: <https://www.statcan.gc.ca/fr/sujets/norme/ccpr/2016/introduction>
6. Association des optométristes du Québec [En ligne]. Montréal: AOQ; 2022. [Tableau]. Guide sommaire des tarifs 2022 [modifié le Janvier 2022; cité le 25 septembre 2022]; [2]. Disponible: <https://www.aooqnet.qc.ca/assets/pdf/Grilledetarifs2022-FR.pdf>
7. Picture 1 : Cindy Montague / EyeRounds.org, The University of Iowa
8. Picture 2 : Sruilk/Shutterstock.com

## Results

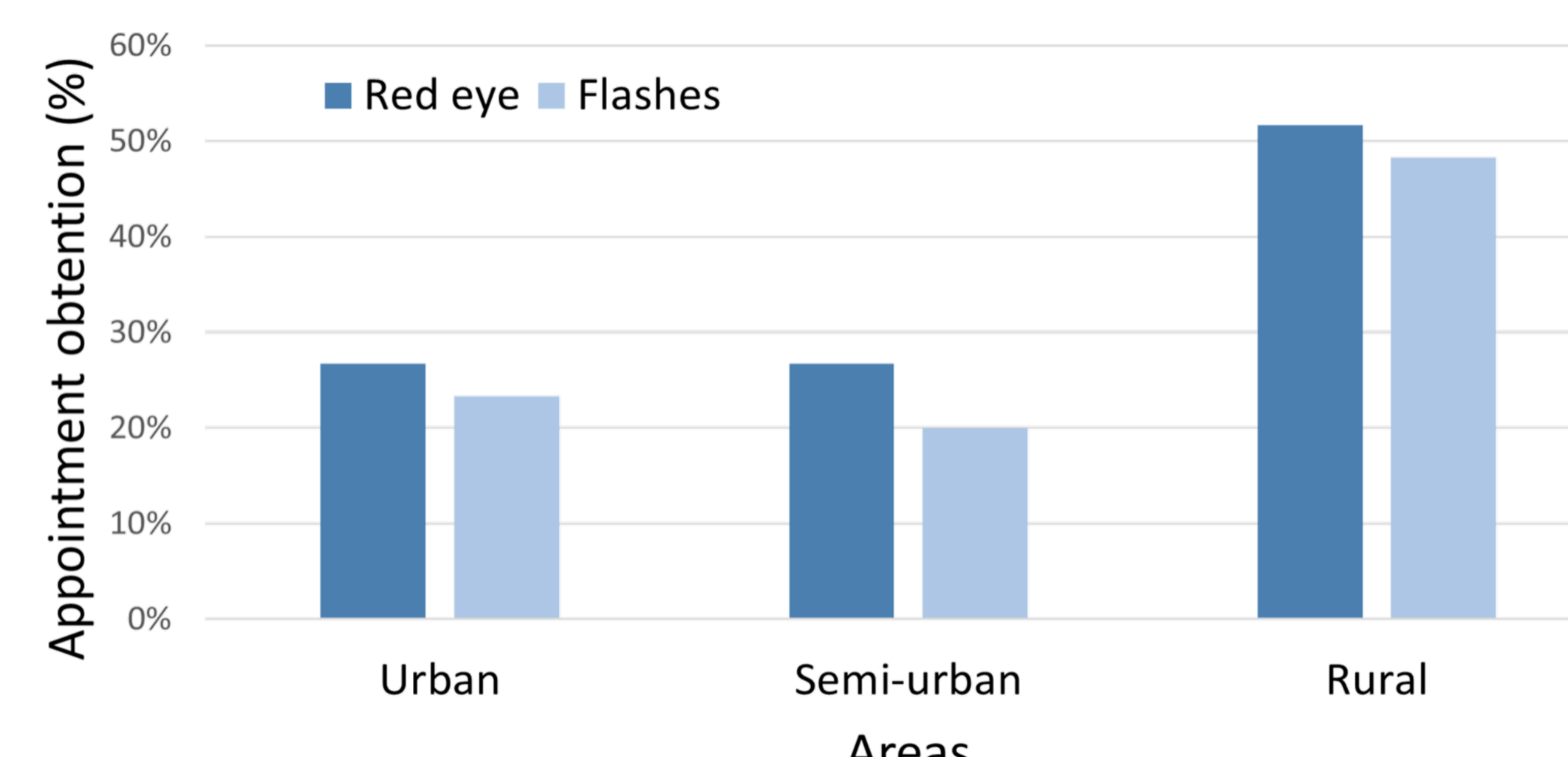
### Appointment obtention



- Obtaining at least one type of appointment was **more probable in rural areas** compared to urban areas ( $p = 0.004$ ), or to semi-urban area ( $p = 0.001$ ).



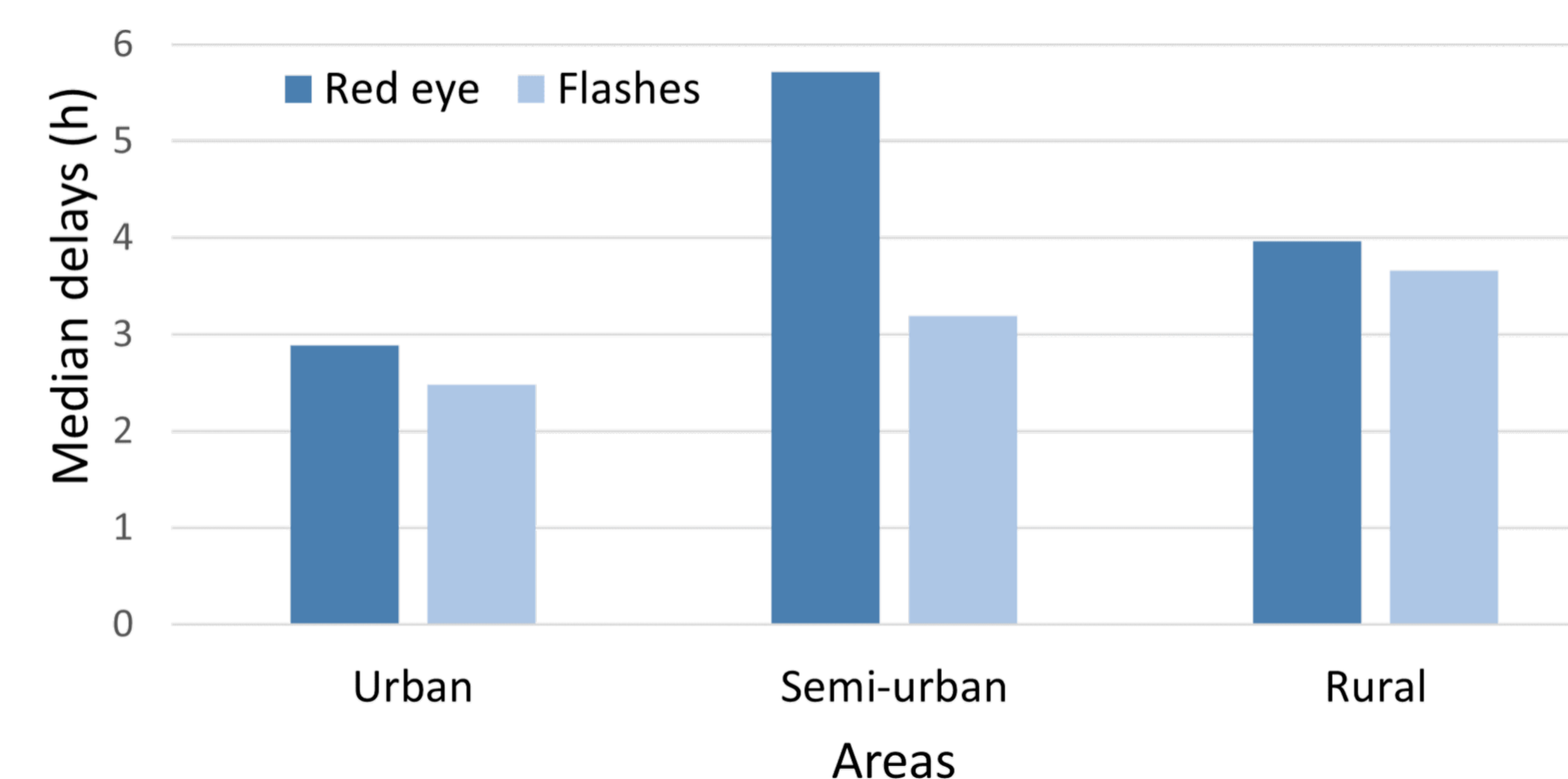
- Patients with a **high morbidity condition did not yield better chances** of obtaining an appointment than those with a **low morbidity condition** ( $p = 0.63$ )



### Delay

- No differences between areas ( $p = 0.3$ ), nor between morbidity ( $p = 0.78$ )

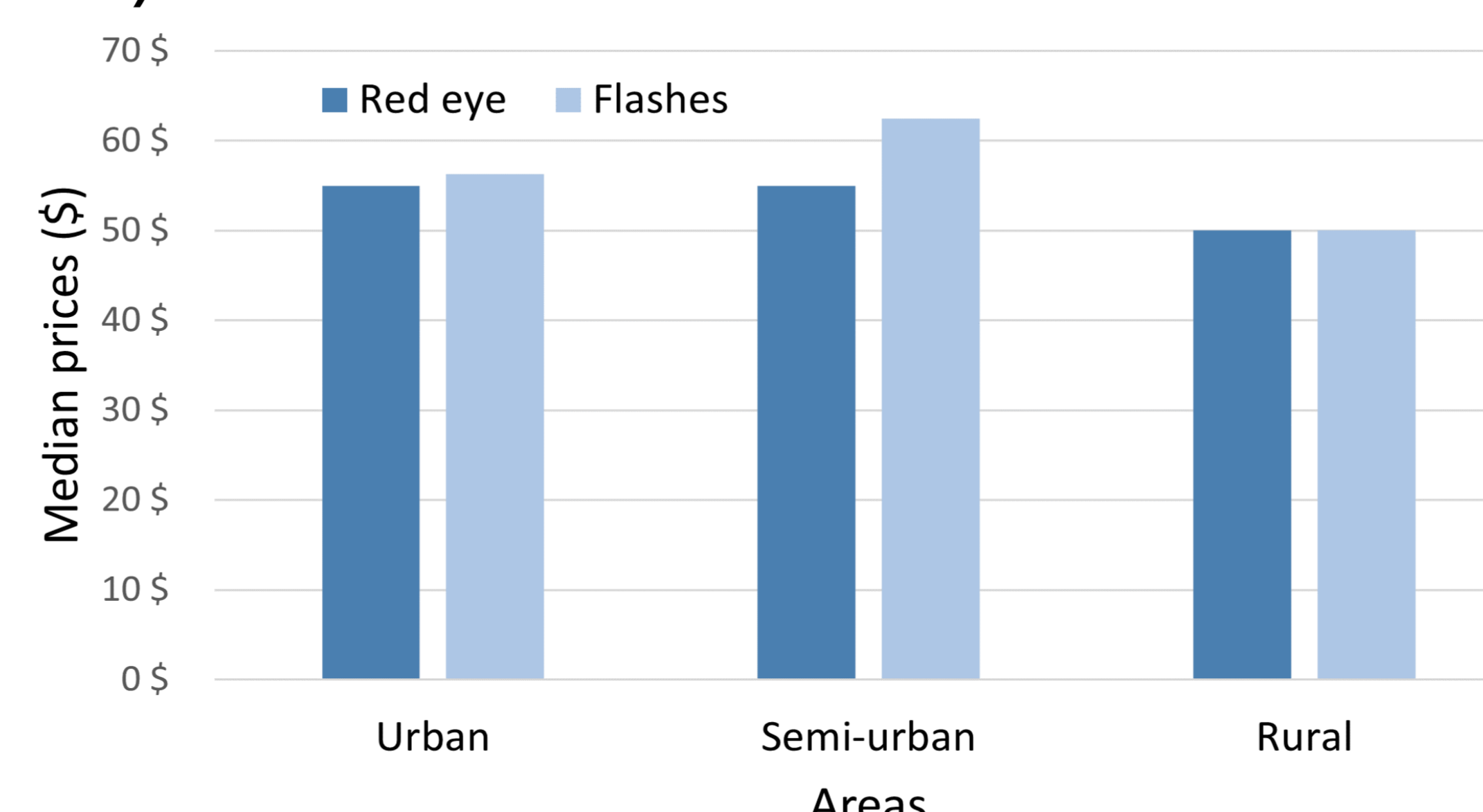
Median delay  
IQR = 4.6  
**3.72h**



### Cost

- No differences between areas ( $p = 0.17$ ), nor between morbidity ( $p = 0.2$ )

Median price  
IQR = 15.0  
**55 CAD\$**



## Discussion

### Appointment obtention

- **Easier in rural areas** : limited access in ophthalmology, giving more responsibility to optometrists as primary eye care giver
- **Appointment demand exceeding offer** : many requests were denied because of an already full schedule or other emergencies already booked
- General trend : **more emergencies booked for a red eye than for flashes**. Longer chair time because of dilation?

### Delay

- Trend : **faster for flashes and faster in urban areas**

### Cost

- Trend : **uniform across Quebec** and in adequation with Québec's Optometrists Association (AOQ) price range recommendation for eye emergencies (50-75\$ at the time of the study)

## TAKE HOME MESSAGE

- Median delays and costs of an eye emergency appointment seem **uniform across Quebec regardless of morbidity**
- The proportion of optometry clinics offering emergency appointments to new patients is **uneven, favoring rural practices**
- Obtaining an appointment is **impossible in more than half of the cases**.