

INTRODUCTION

- Provider cards are extensively used in ophthalmology, yet their typographic accessibility for low-vision patients has never been studied.

AIM

- To examine the accessibility of the ophthalmologist's provider card via quantitative analysis of provider card typography and qualitative exploration into patient experience at a multi-disciplinary ophthalmology clinic.

METHODS

- This study adhered to the Declaration of Helsinki and had ethics approval (Protocol 00153828).
- Provider card size, font, leading, and contrast were analyzed using 41 individual sample cards.
- In August 2025, anonymized surveys collected demographics, visual acuity, and Ishihara colour vision from patients at the Eye Institute of Alberta (Royal Alexandra Hospital, Edmonton, AB).
- The readability of a sample provider card and their importance to the physician-patient relationship were assessed on a visual analog scale.
- Qualitative responses were analyzed using Braun and Clarke's thematic analysis¹.

RESULTS

- Forty-one cards were analyzed, with an average width of 91.43 mm and height of 57.46 mm.
- The average font size was 2.70 mm (7.68 pt) or <20/50 Snellen equivalent. The average ratio of font size (mm) to leading (mm) was 80%. Average contrast ratio was 7.51:1, with 37% (n=15) of cards failing to achieve minimum contrast standards².
- Researchers collected 113 surveys, with 74% (n=84) of participants being above age 45 and 65% (n=74) being female, predominantly from glaucoma and neuro-ophthalmology clinics.
- Mean near visual acuity was 20/30. Twenty-five percent (n=28) tested at test plate or less on Ishihara. Mean readability of a provider card was 8.0/10, though 9% (n=10) reported $\leq 3.0/10$.



Figure 1. Sample provider card developed using averages from typographical analysis.

- The importance of cards to doctor-patient relationships was rated on average 7.6/10, and reliance on card content for follow-up was 6.6/10.
- Readability was hindered by small font (79%, n=89), small size (49%, n=55), and cluttered design (49%, n=51).
- Participants reported physician's name (94%, n=106) and phone number (92%, n=104) as most important content elements.
- Qualitative data (n=31) valued larger font, higher contrast, and minimalistic design.

CONCLUSIONS

- Provider cards are integral to clinical communication, yet design and typography present persistent readability challenges.
- Patient perspectives advocate for foldable, large-font, high-contrast card design with essential information only.
- Adoption may enhance continuity and accessibility of ophthalmic care.

REFERENCES

1. Braun V, Clarke V. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qual Res Psychol.* 2021;18(3):328-352. doi:10.1080/14780887.2020.1769238.
2. Caldwell B, Cooper M, Reid LG, et al. Web Content Accessibility Guidelines (WCAG) 2.0. World Wide Web Consortium; December 11, 2008.

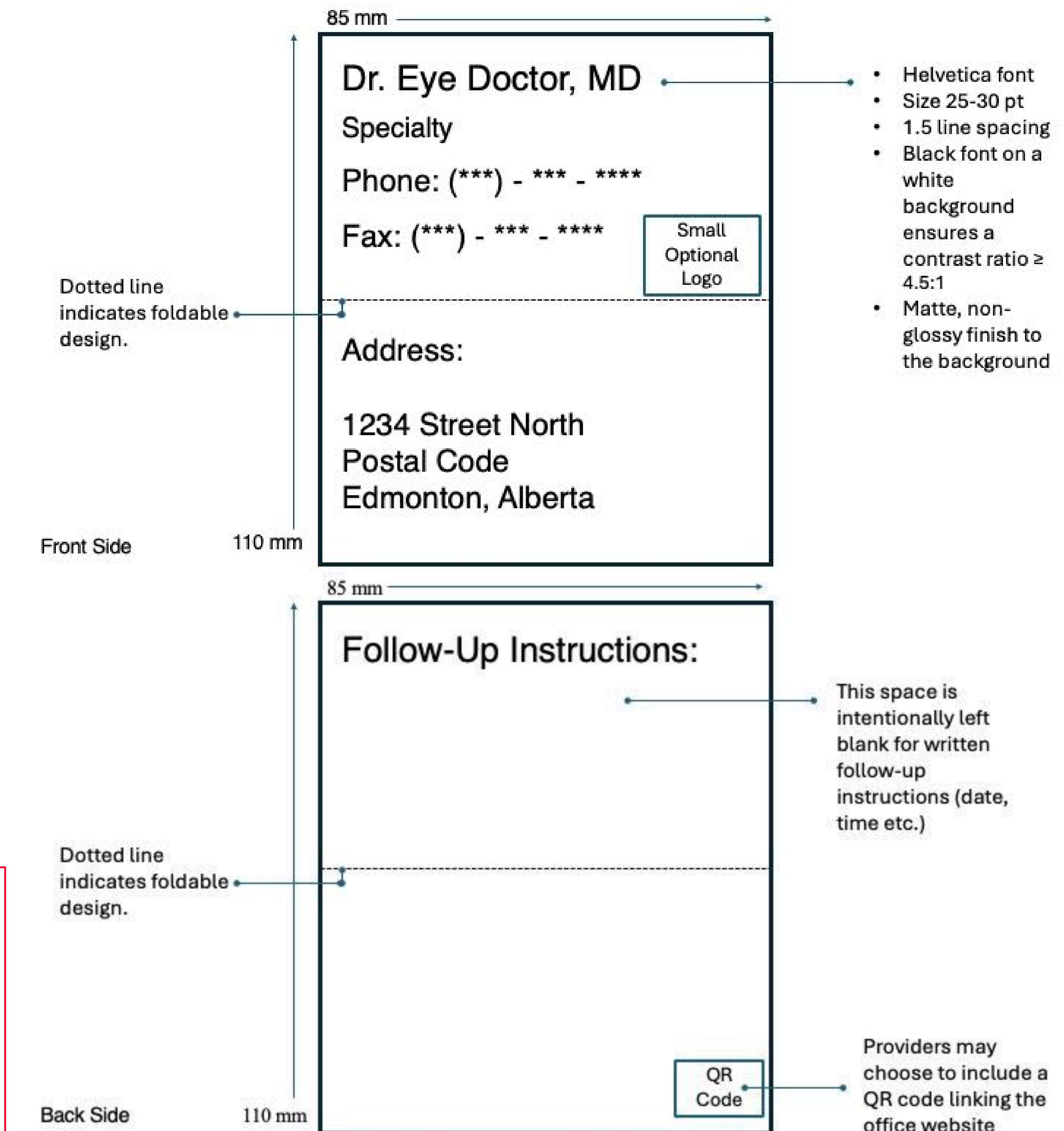


Figure 2. Proposed provider card template, designed for maximal accessibility based on obtained data from ophthalmic patients.

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