

Increasing dermatological health literacy in underserved populations through utilizing quick response (QR) codes for patient education



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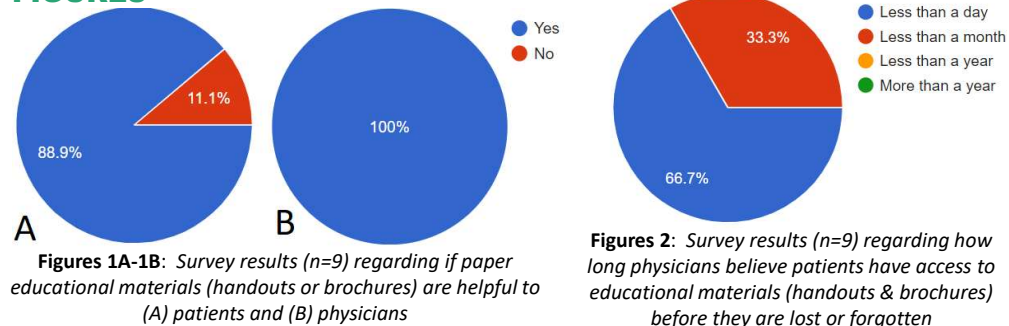
BACKGROUND

This quality improvement project utilizes QR codes to increase patient access to educational materials. The pre-implementation survey revealed that dermatology physicians have found that educational materials (handouts or brochures) are helpful for both physicians (87.5%) and patients (100%); however, most physicians anticipate that patients retain these paper materials for less than a day before they are lost or forgotten (62.5%) [Figures 1-2]. Most respondents believe that patient access to educational materials would increase by implementing internet-based solutions to allow continued online access to English PDFs (75%), Spanish PDF translations (62.5%), and large-text PDFs for the visually impaired (75%) [Figures 3A-3C].

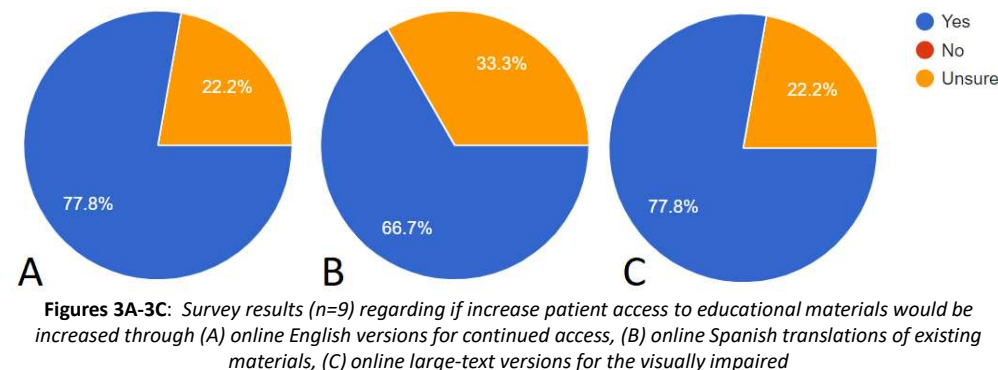
METHODS

Sixteen existing paper educational materials were digitized, uploaded, and linked to QR codes; the same was done after Spanish translations and large-text conversions [Figures 4A-4C]. Laminated code sheets were created and placed in dermatology clinic rooms with instructions on their use.

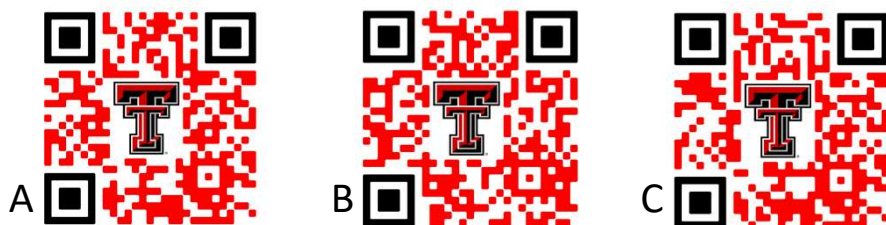
FIGURES



Figures 2: Survey results (n=9) regarding how long physicians believe patients have access to educational materials (handouts & brochures) before they are lost or forgotten



Figures 3A-3C: Survey results (n=9) regarding if increase patient access to educational materials would be increased through (A) online English versions for continued access, (B) online Spanish translations of existing materials, (C) online large-text versions for the visually impaired



Figures 4A-4C: Examples of QR codes created for dry skin care in (A) English, (B) Spanish, and (C) large-text [fully scannable QR codes]

DISCUSSION

A review of published literature indicates that QR codes are generally well-received,¹ but few projects utilize QR codes for patient education. A family medicine clinic used QR codes to connect patients to information about medications and equipment,² while an orthopedics department placed QR code stickers onto casts that linked to the healthcare team website.³ Our project is particularly unique given its goal of increasing access for Spanish-only patients and the visually impaired, and such innovative solutions may be helpful to bridge the health gap in underserved populations.

CONCLUSION

Given the dermatological health disparities in underserved populations, including minority populations and rural regions, innovative solutions may be necessary to bridge the gap. After 6 months, providers will be surveyed regarding perceived improvements in patient access to educational information and the overall role of QR codes in the clinic.

REFERENCES

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