Enhancing Patient Agency in Psychiatric Healthcare Using Quick Response Codes

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Introduction

In psychiatric healthcare settings, patient agency is variously represented and can be limited through the language of health information and mediation of resources used by providers. Also, patients construct their identity and act as agents in response to the healthcare system, become knowledgeable, and manage their health conditions.[1] A patient's level of health literacy is variable and it can be difficult to accurately remember and organize new medical information presented in an appointment or counseling session.[2] For example, paper handouts are common educational resources provided to patients in outpatient psychiatric clinics. However, most resources are in English, which may not be inclusive to all patient demographics. The utilization of quick response (QR) codes can prove to be a nuanced method to improve patient agency via health education.[3] Research indicates that QR codes are generally well-received, but are rarely used for patient health and the healthcare system.[4]

Materials and Methods

Following QIRB approval, study standardized binders with laminated QR coded sheets dedicated to different psychiatric disease states (such as common child psychiatry disorders and adult psychiatry disorders), navigating the healthcare system, and the cultural dimensions to health will be created and distributed to the providers of outpatient psychiatric clinics. This nuanced resource will be offered to patients during their appointments or counseling sessions. With any smartphone camera, patients will scan these QR codes and retrieve provider approved health and healthcare system resources in either English or Spanish. Once retrieved, patients will have continued access to any information linked to previously scanned QR codes. **[Figure 2]**

If TTUHSC Psychiatry were to implement a digital solution allowing continued access to approved health educational materials, do you believe this might be helpful to the patient?

- Yes
- No
- Unsure/Maybe

80% / 13.3%
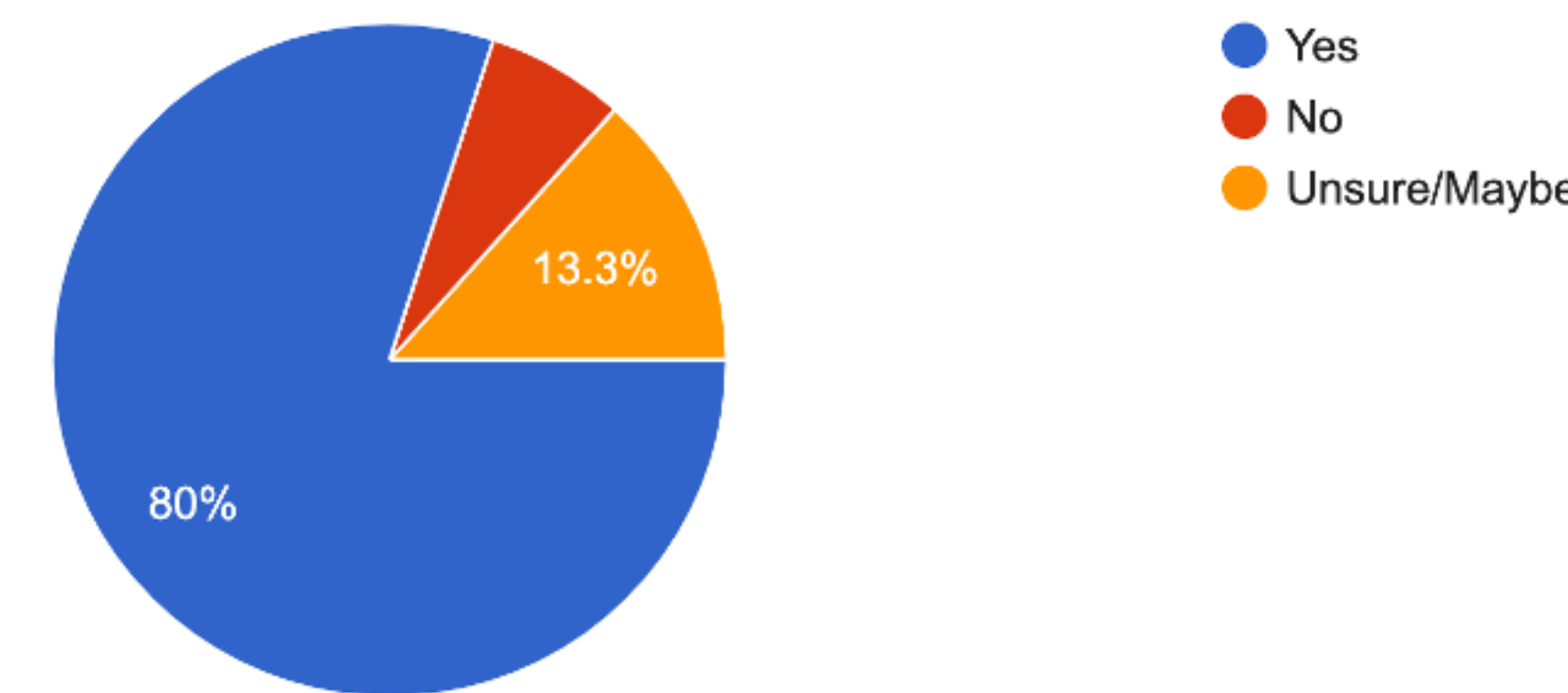
In regards to patient education, do you believe that having online Spanish translations of resources would increase patient utilization of and access to educational materials?

- Yes
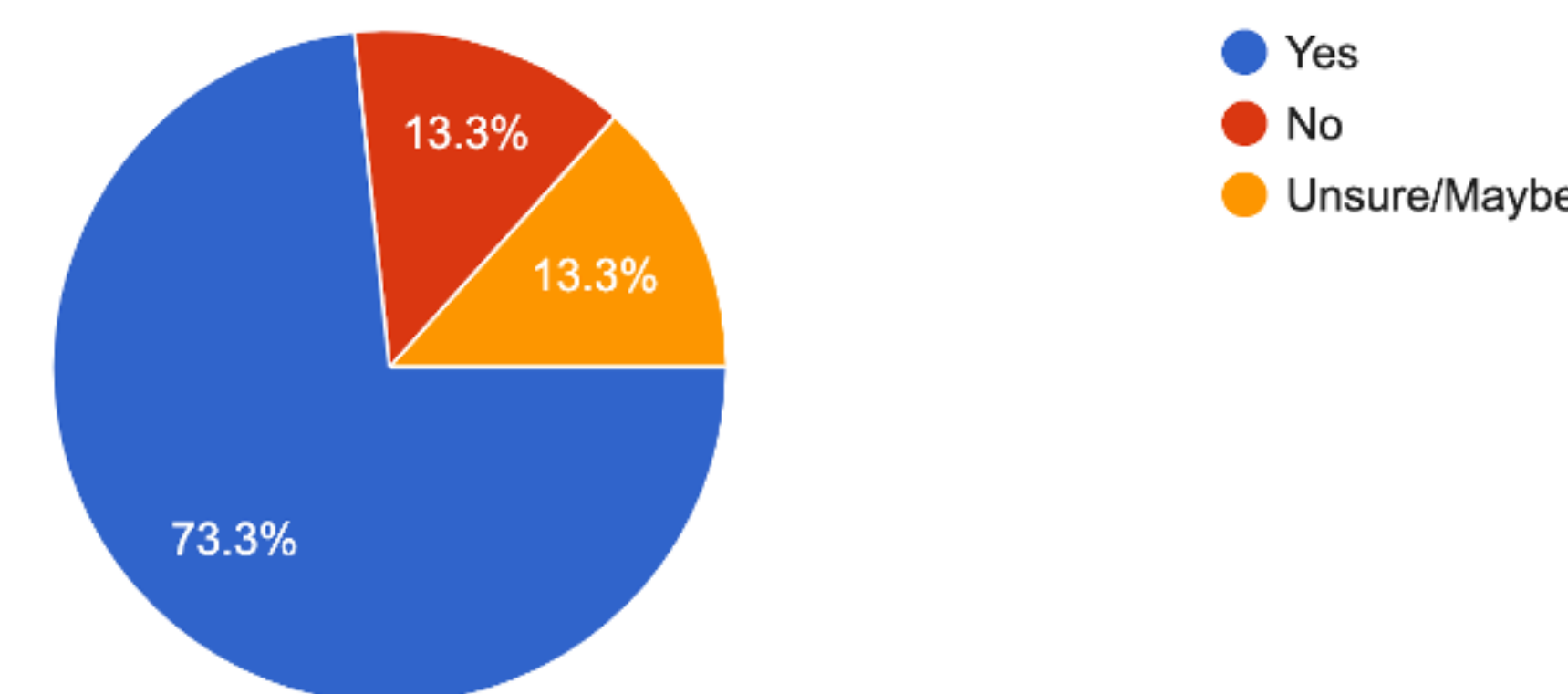- No
- Unsure/Maybe

73.3% / 13.3% / 13.3%

Figure 1. Pre-implementation survey results indicating providers believe a digital solution and Spanish translations of resources would be helpful to increase patient access to materials
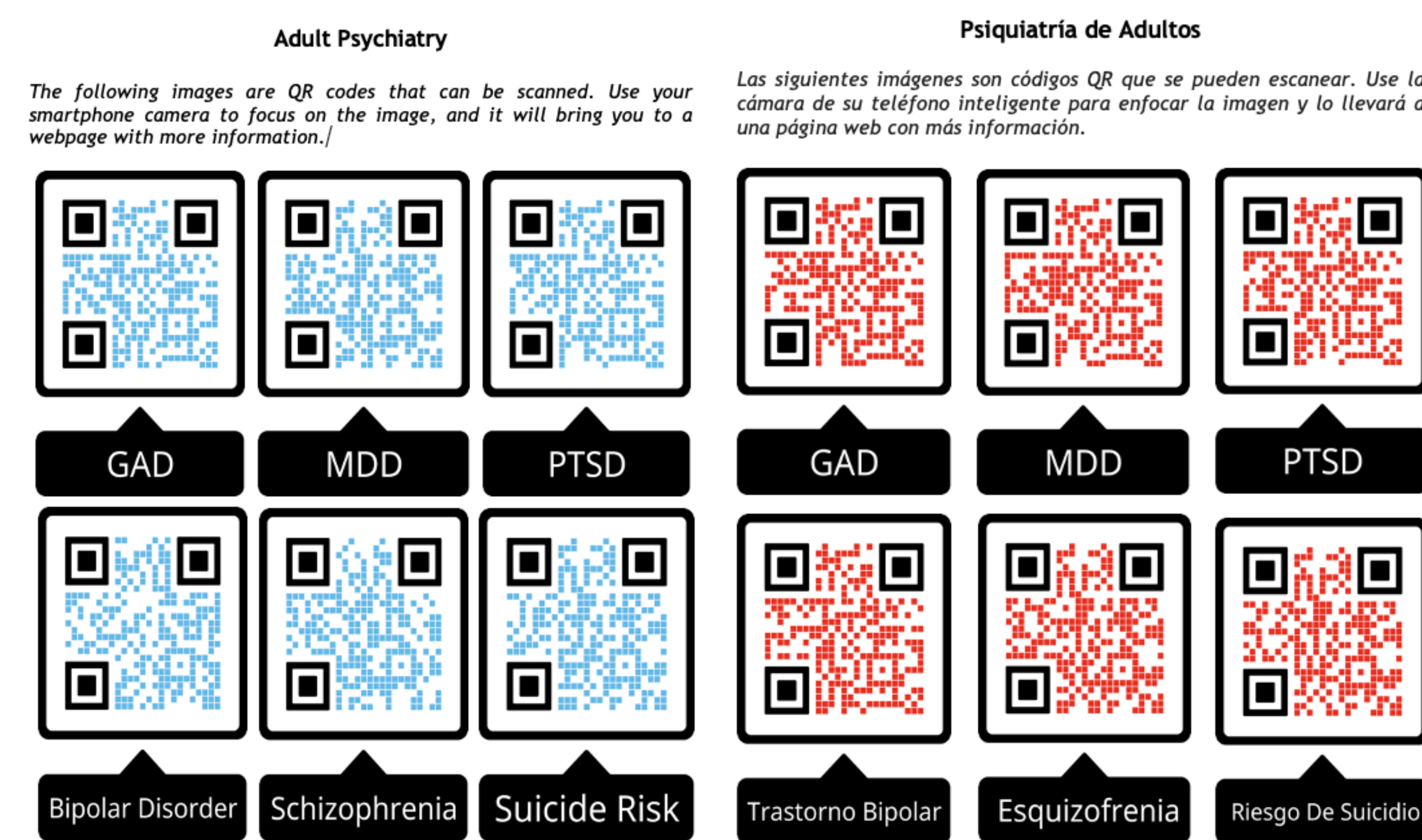

Adult Psychiatry

The following images are QR codes that can be scanned. Use your smartphone camera to focus on the image, and it will bring you to a webpage with more information./

GAD | MDD | PTSD
Bipolar Disorder | Schizophrenia | Suicide Risk

Psiquiatria de Adultos

Las siguientes imágenes son códigos QR que se pueden escanear. Use la cámara de su teléfono inteligente para enfocar la imagen y lo llevará a una página web con más información.

GAD | MDD | PTSD
Trastorno Bipolar | Esquizofrenia | Riesgo De Suicidio

Figure 2. Samples of QR codes containing educational materials in English and Spanish

Discussion: Pre-Implementation

Pre-implementation surveys revealed that 80% of department providers and staff find educational materials (handouts or brochures) helpful or very helpful for patients. However, over 90% of providers and clinical staff anticipate that patients retain these paper materials for less than a month before they are lost or forgotten. Over 80% of respondents believed that patient access to educational materials would increase by implementing digital solutions to allow continued online access along with Spanish translated resources to promote inclusive patient agency. **[Figure 1]**

Conclusion

Our goal is to improve psychiatric patient access to and utilization of health information by at least 20% in 6 months. After 6 months, providers will be surveyed again regarding perceived improvements in patient access to educational information and the overall role of QR codes in the clinic. The pre- and post-implementation study-created survey data will be assessed in order to gather physician and patient feedback. Based on feedback from providers, changes will be implemented in the next cycle of implementation. This quality improvement project is particularly unique given its goal of increasing access for primarily Spanish speaking patients. Furthermore, such innovative and sustainable solutions may also serve to close the health literacy gap and increase patient agency in underserved populations.

References:
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4. Upton, J., Olsson-Brown, A., Marshall, E., & Sacco, J. (2017). Using QR codes to enable quick access to information in acute cancer care. British Journal of Nursing, 26(10), S4-S12.