

Digital Platforms to Avoid Hospitalization in Mental Disorders.

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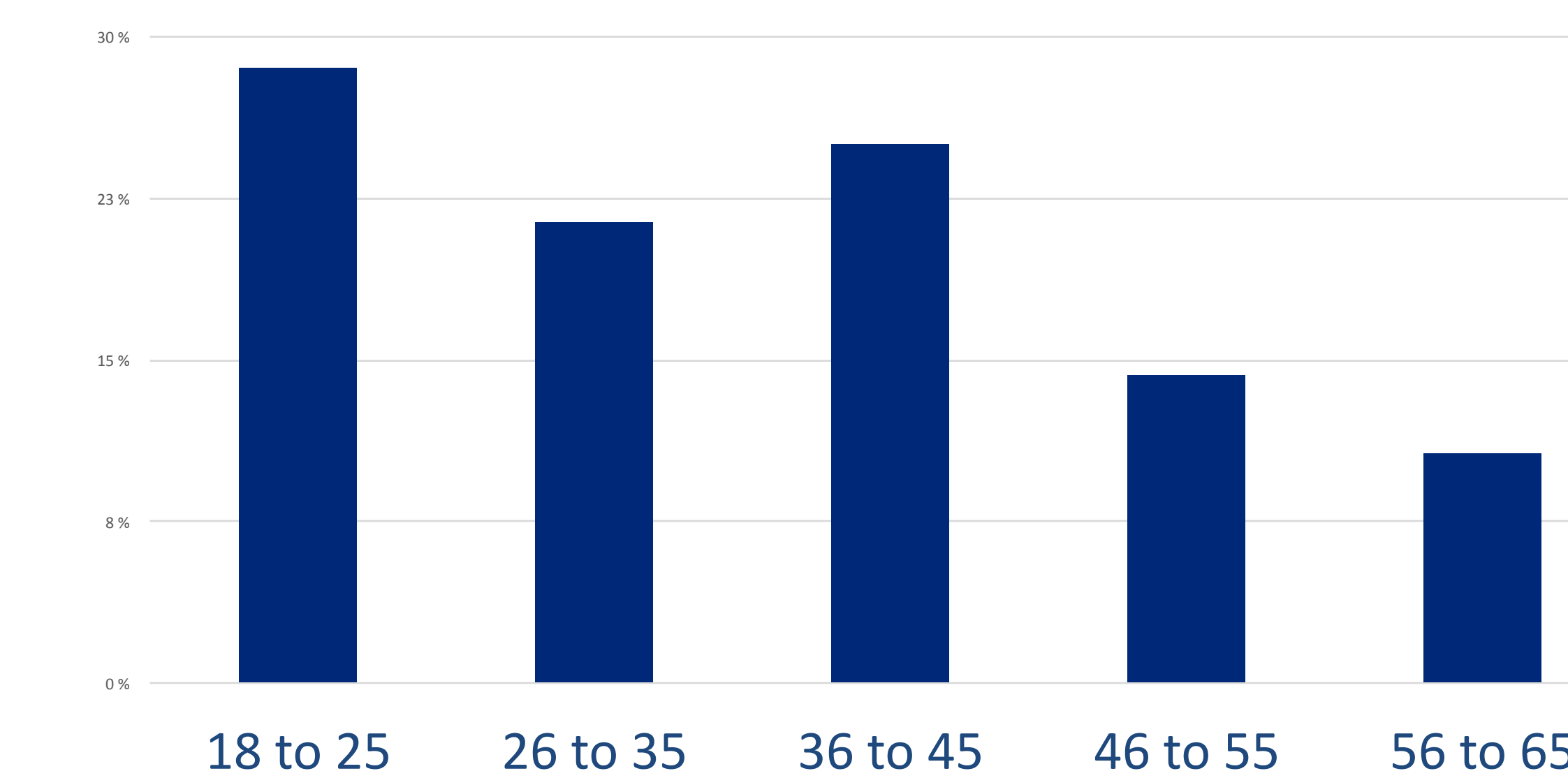
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Background: Mental disorders prevalence and health resources use have been widely studied. Unplanned hospital readmissions for mental illness are generally considered undesirable events as well as generators of higher costs to the health system. The generation of new strategies to avoid them is transcendental and ‘smart health’ promises to be an adequate response to this new reality. That is why the objective of this study is to determine if the employment of a digital platform in patients with diagnoses of mental disorder at hospital discharge and during day hospital, reduces hospital readmissions compared to those who do not use it.

Methods: A digital platform with different functionalities was developed, allowing to record three daily patient behaviors: sleep, mood and energy. Using the Delphi methodology (group of psychiatry specialist experts) provided results in cut-off points that allow to decide if a patient needs a follow-up either through the platform, a phone call, or a priority appointment. A blind, controlled experimental study was carried out with a calculated sample of 121 adult patients (18 to 65 years) with a diagnosis of mental disorder. Only subjects diagnosed with Anxiety, Depression or Bipolar Disorder were included, confirmed by Structured Clinical Interview. Fifty per cent of the patients were given full access to a mobile monitoring platform, while the remaining half received access to a sham application with psycho-education modules. Hospital readmissions were defined as any unexpected admission (urgent admission) after a previous discharge from the same hospital and classified as before 8 days and 30 days after the previous discharge.

Results: Of the total subjects who participated in the study up to March, 39% are patients with full access to the mobile monitoring platform and 61% received access to a sham application with psycho-education modules. Chart 1 shows the diagnosis tendency in the subjects with full access to the platform, indicating depression as the major diagnosis. Chart 2 shows that the sample is concentrated between individuals from ages 18 to 25, while older subjects were less prone to participate. According to the feedback in the recruitment and follow-up, a positive response has been observed from patients and relatives when invited to participate in the study. Moreover, follow-ups by healthcare staff motivated subjects to continue using the platform frequently.

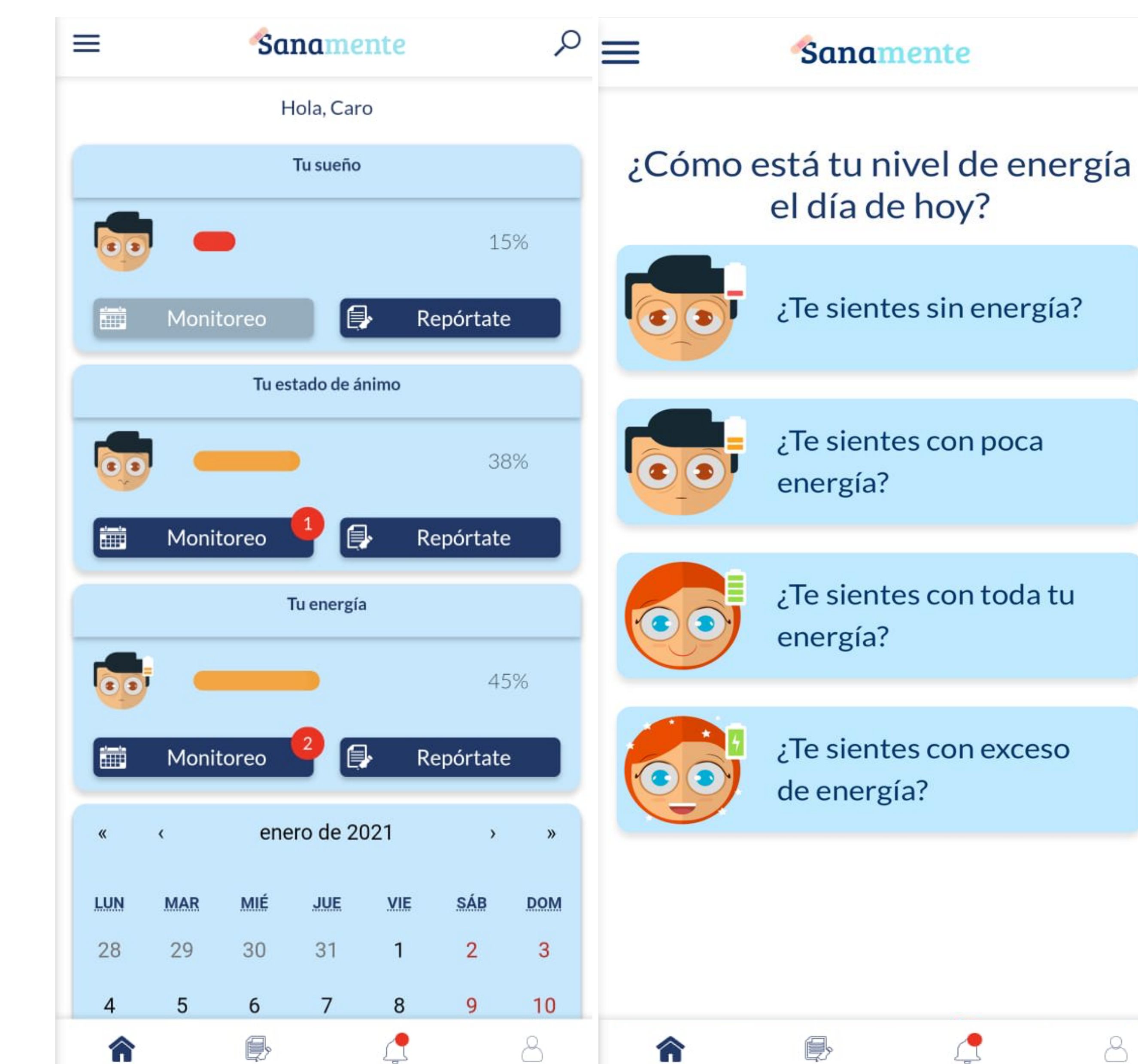


Discussion:

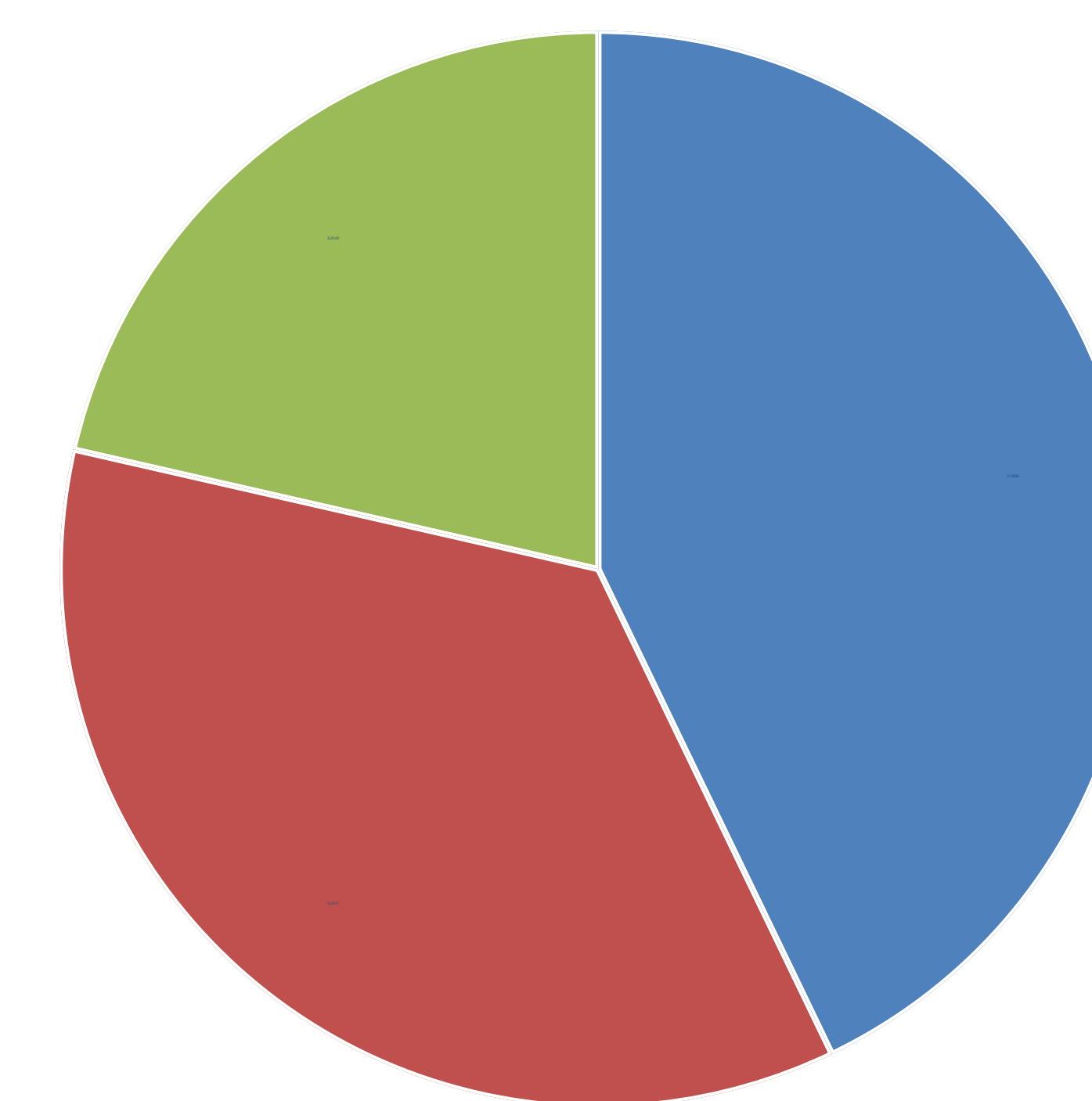
Data available up to this moment has shown a strong motivation from patients to be included in the study. This digital platform grants the benefit to follow-up with patients through their sleep, mood and energy; cardinal symptoms in mental disorders. Digital technology is a tool that allows to enhance the monitoring process of patients with mental disorders in real-time and to transfer health information to be assessed in a timely manner. This study was supported by the Clinic Nuestra Señora de la Paz.

References:

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Patient's sociodemographic characteristics		
Number of patients in the sample	121	
Number of registered patients	30	
Gender	Female	64%
	Male	36%
Civil Status	Single	75%
	In a relationship	21%
	Divorced or Widower	4%
	Technical studies	4%
Educational level	Elementary school	18%
	Middle School	79%
	Technical studies	4%



● Depression ● Bipolar ● Anxiety

Chart 1. Diagnosis distribution among patients