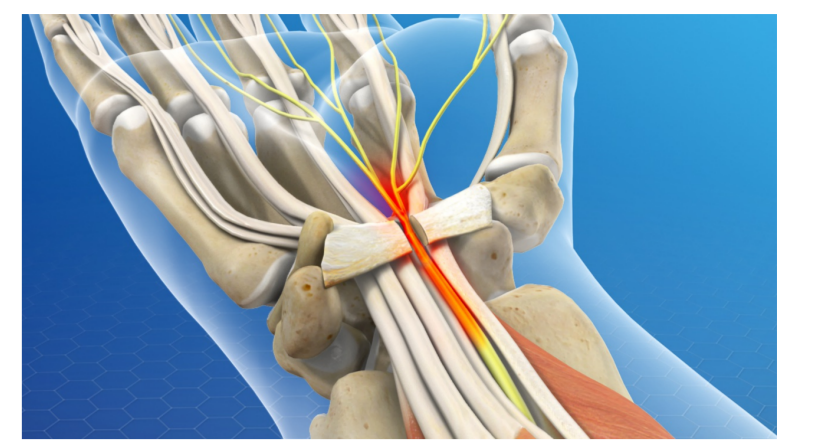


# An online patient education system to effectively deliver remote patient education and support for those undergoing carpal tunnel decompression surgery



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## Introduction

Remote access to patient education and support has become vital due to the ongoing COVID-19 related restrictions. We piloted an online patient education system (PES) using the GoWellHealth platform for patients undergoing carpal tunnel decompression. The aim of this study was to assess levels of engagement and interaction with the platform. This was then compared against patient demographics.

## Methods

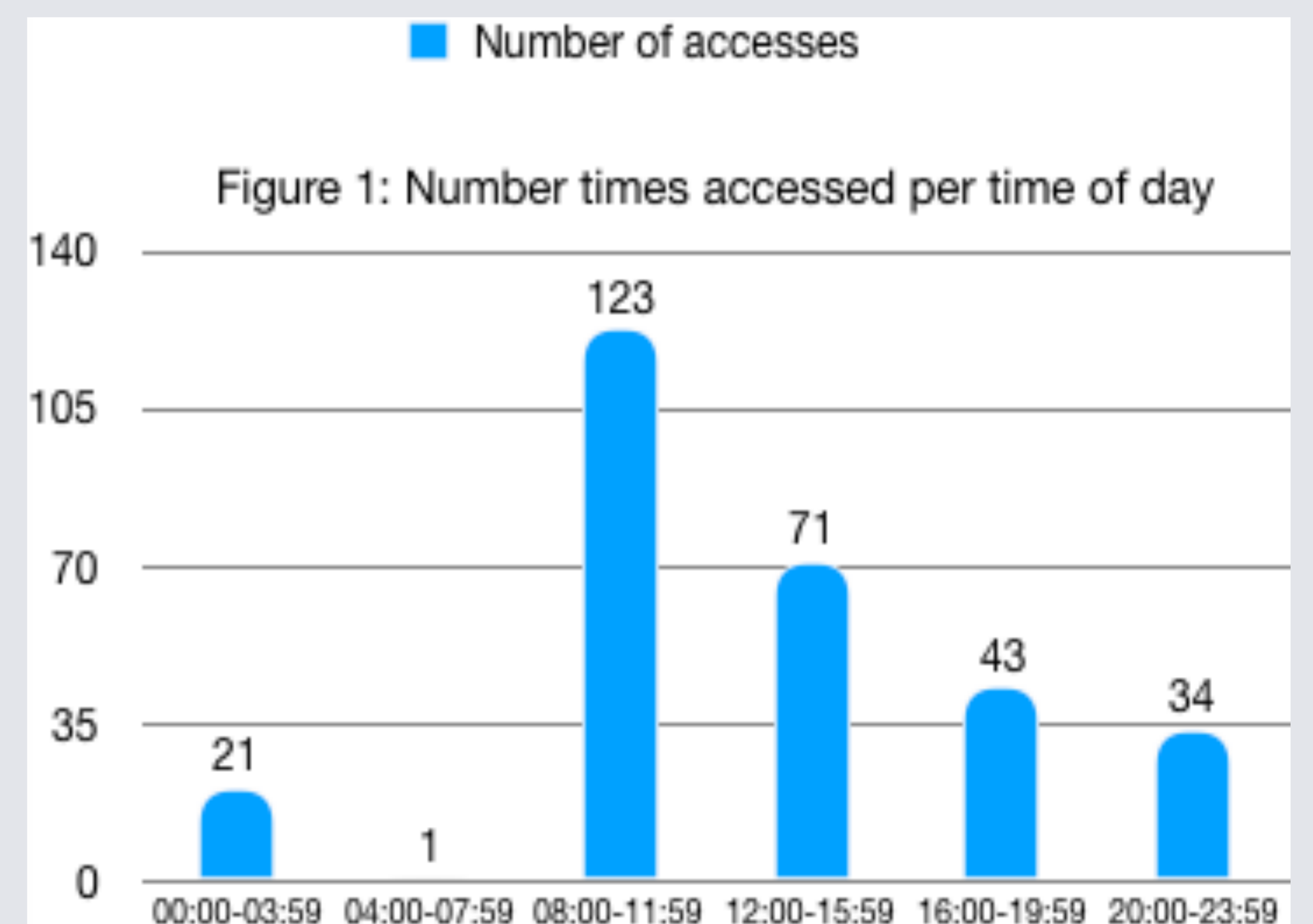
Demographic and engagement information was obtained for patients registered to the platform between 7<sup>th</sup> September 2020 and 25<sup>th</sup> January 2021. Engagement was assessed by analysing time spent on the PES, time of day it was accessed and device used. The patient demographics used for the comparison was their age (categorised into 5 groups: <40, 40-49, 50-59, 60-69 and ≥70) and gender.

## Results

A total of 47 patients were registered to the PES, 17 male and 30 female, of the 47, 30 (63.8%) had accessed their platform. Male patients had a higher rate of accessing the platform (70.5%) compared to female patients (60%). There was no difference in rates of accessing the platform between different age categories ( $p=NS$ ). The use of a computer was favoured by the older age groups (≥70 years 100%; 60-69 years 77%), as seen in table 1, whereas the youngest age group favoured the use of a phone (<40 years 85%). The oldest age groups spent longer on average per access when compared to the younger age groups ( $p<0.01$ ). Females spent less time per access compared to male patients but overall there was no difference in their level of engagement in terms of total time spent on the system ( $p=NS$ ). As per figure 1, the PES was accessed most frequently in the morning between 8 am and 12 pm and least frequently during the night between 4 am and 8 am.

Table 1: Age and device used for access

Age (years)	Phone (%)	Tablet (%)	Computer (%)
<40	85	0	15
40-49	79	4	17
50-59	69	5	26
60-69	23	0	77
≥70	0	0	100



## Conclusion

An online PES is an effective way of providing information and demonstrates high levels of engagement regardless of age or gender. A platform that can be used across a variety of internet ready devices is essential as older patient groups prefer using a computer and may not engage with an application based program only available on smart phone devices. Having information available from anywhere via any device is an effective way to reassure patients of what to expect and to provide advice for after the surgery.

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