

# Factors Associated With Patient Portal Engagement in Otolaryngology

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## Background

- Patient portals (PP) are important tools for improving patient experience and increasing patient engagement in their care.<sup>1</sup>
- Patient portal use has been increasing<sup>2</sup>, but this has not been uniform across demographic groups.
- Prior work across specialties has shown disparities in patient portal usage with respect to age, gender, race, and insurance status.<sup>3-5</sup>
- This has not been studied in ENT specifically, and not since rapid post-Covid expansion of patient portal use.

## Methods

- Retrospective analysis of data from Epic: all Loyola otolaryngology outpatient clinic visits from December 2018 through December 2022.
- 19 attendings, 3 APNs, 7 ambulatory locations.
- Appointment scheduling method: in person/phone vs. portal.
- Univariate and multivariate analysis of factors associated with portal use for scheduling:
  - Age, gender, race, primary language, insurance status, PCP status, ENT subspecialty.

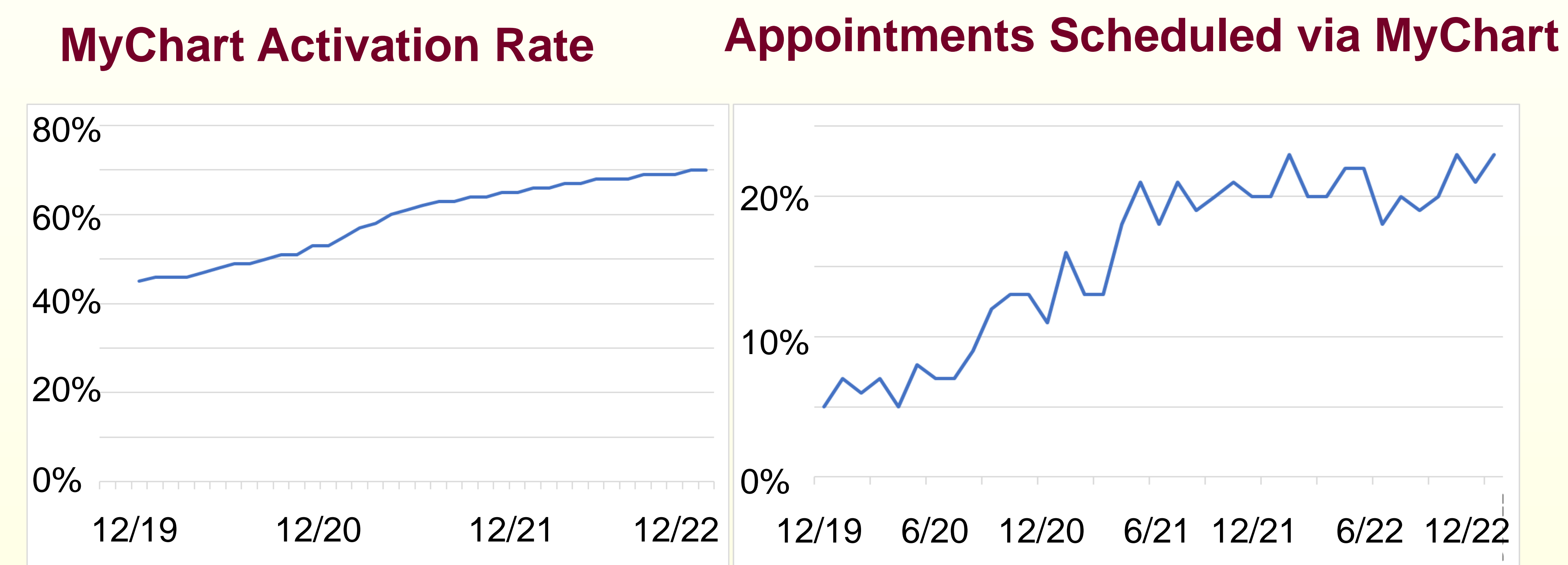
## Results

221,611 total clinic visits, 7.5% scheduled via patient portal

- Pre-Covid: 1.9%
- Post-Covid: 10.7%

49,462 unique patients, 15.9% scheduled at least one visit via portal

- Pre-Covid: 3.5%



## Univariate analyses of MyChart appointment scheduling

Age	Scheduled via portal	Total	Percentage	
<18	682	5,591	12.2%	$\chi^2=250.0$ , $p<0.0001$
18-64	5,366	27,962	19.2%	
>65	1,826	16,127	11.3%	
Sex	Scheduled via portal	Total	Percentage	
Male	3,216	22,803	14.1%	$\chi^2=97.9$ , $p<0.0001$
Female	4,629	26,659	17.4%	
Primary Language	Scheduled via portal	Total	Percentage	
English	7,437	44,557	16.7%	$\chi^2=250.0$ , $p<0.0001$
Non-English	359	4,622	7.8%	
PCP	Scheduled via portal	Total	Percentage	
Loyola	4,301	16,605	25.9%	$\chi^2=1752.2$ , $p<0.0001$
Non-Loyola	2,992	27,914	10.7%	

## Multivariate logistic regression: Odds of scheduling via MyChart:

- Males less likely to schedule via PP than females (OR .80,  $p<0.01$ )
- Patients with non-English primary language less likely to schedule via PP (OR .53,  $p<0.01$ )
- Age under 18 and over 65 less likely to utilize PP for scheduling (ORs .89, .59,  $p<0.01$ )
- Patients without a Loyola PCP less likely to schedule via PP (OR .46,  $p<0.01$ )
- More likely in head and neck and laryngology clinics, less likely in sinus clinic ( $p<0.01$ )
- Patients with Medicare more likely than those who are commercially insured (OR 3.8,  $p=0.03$ )

## Conclusions/Future Directions

- Patient portal engagement has significantly increased between 2018 and 2022.
- Portal engagement varies across demographics with less utilization among males, patients under 18 and over 65, non-English primary language, patients with outside PCPs, and patients with commercial insurance.
- Enhance opportunities to guide outreach and education to patients to make PP more uniformly accessible within the communities.
- Content changes in the patient portal may increase patient engagement across all demographics, and ultimately may improve accessibility, efficiency and quality of care.

## References

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