Patient Portal Use Associated with 21 Million Fewer Visit No-Shows in 2024

Team A: Kersten Bartelt, RN; Neil Sandberg; Dan Gantman

Team B: Louis Kazaglis, MD; Eric Barkley

Last updated 1 July 2025 • Check for updates at EpicResearch.org

Key Findings:

- Patients with an active patient portal account at the time of scheduling their appointment were 21.5 % less likely to no-show than those without an account, with a no-show rate of 6.2% for those with a patient portal account compared to 7.9% for those without.
- The greatest difference was seen among patients aged 50–64, with users having a 6.2% no-show rate compared to 8.7% of non-users.

Missed outpatient appointments, or no-shows, disrupt care continuity, reduce clinic efficiency, and impact availability for other patients. Digital tools, such as patient portals, might improve appointment adherence by enhancing communication and engagement.¹ MyChart, Epic's patient portal, allows patients to schedule and manage appointments, receive reminders, and access care-related information and is the patient portal assessed for this study.

We studied more than 1.6 billion face-to-face outpatient visits in 2024, comparing no-show rates for patients with and without an established patient portal account at the time the appointment was scheduled.

Overall, patients with an active patient portal had a no-show rate of 6.2%, compared to 7.9% for those without, as seen in Figure 1. Patients aged 50–64 saw the greatest percentage point difference (6.2% vs. 8.7%) followed by those aged 35–49 (7.8% vs. 9.9%). Younger patients had smaller gaps, with the smallest difference seen among 18–34-year-olds (9.3% vs. 10.9%).

No-Show Rates by Patient Age and Portal Usage

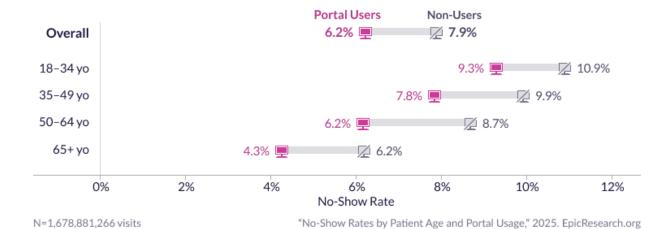


Figure 1. The rate of no-show appointments in 2024 by patient age and portal usage.



Converting this finding to a rate, approximately 1,700 fewer no-shows occurred for patients with portal accounts per every 100,000 scheduled visits. This equates to more than 21 million fewer no-shows in one year across the 1.26 billion scheduled visits among patient-portal users in 2024.

A sensitivity analysis accounting for other factors such as patient demographics, social vulnerability, appointment lead time, rate of no-shows in 2023, social drivers of health, insurance type, and number of recent visits showed similar patterns.

These data come from summarized metrics of organizations that use the Epic EHR to provide direct patient care. This study was completed by two teams that worked independently, each composed of a clinician and research scientists. The two teams came to similar conclusions. Graphics by Brian Olson.

References

1. Carini E, Villani L, Pezzullo AM, et al. The Impact of Digital Patient Portals on Health Outcomes, System Efficiency, and Patient Attitudes: Updated Systematic Literature Review. J Med Internet Res. 2021;23(9):e26189. Published 2021 Sep 8. doi:10.2196/26189

Data Definitions

Term	Definition
Study period	2024
Study population	Outpatient visits
Exposures	MyChart active at the time of scheduling appointment
Outcomes	Rates of visit being documented as a no-show

Table 1: No-Show Rates by Patient Age and Portal Usage

Population	Total Visits	No Show	No MyChart	No MyChart	MyChart Visits	MyChart	Percentage
		Rate	Visits	No Show		No Show	Point
				Rate		Rate	Difference
Overall	1,678,881,266	6.6%	422,573,034	7.9%	1,256,308,232	6.2%	1.7%
18-34 yo	248,855,944	9.6%	54,158,845	10.9%	194,697,099	9.3%	1.6%
35-49 yo	299,607,914	8.2%	57,926,954	9.9%	241,680,960	7.8%	2.1%
50-64 yo	428,042,794	6.7%	99,561,290	8.7%	328,481,504	6.2%	2.5%
65+ yo	702,374,614	4.8%	210,925,945	6.2%	491,448,669	4.3%	1.9%



Table 2: Additional Demographic Information

Population	Subgroup	Visits	No	No MC visits		MC Visits		Ratio
			Show Rate		MC NSR		NSR	
Sex	Male	1,035,059,644		229,350,323		805,709,321	6.6%	1.23
	Female	642,160,972		191,949,940	7.7%	450,211,032		
	Other	1,660,650		1,272,771	3.4%	387,879		
	Within 1 week	732,170,044		212,982,461	5.6%	519,187,583		1.07
	1 week - 1							
Lead Time	month	431,796,712				331,222,114		
	1-3 months	320,031,549	7.5%	67,694,049	10.3%	252,337,500	6.8%	1.52
	Over 3 months	194,882,961	6.5%	41,321,926	9.4%	153,561,035	5.7%	1.66
	Self Pay	124,852,349		49,025,288		75,827,061		
	Medicaid/			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	201270	7 0,0 27,0 0 2	200770	
Insurance	Medicaid Adv	123,661,127	12.1%	37,803,135	12.0%	85,857,992	12.1%	0.99
	Medicare/ Medicare Adv	523,367,052	5.0%	143,164,181	6.3%	380,202,871	4.5%	1.39
	Other	907,000,738	6.2%	192,580,430	7.0%	714,420,308	5.9%	1.17
	Unknown Risk	1,668,005,319	6.7%	421,285,958	7.9%	1,246,719,361	6.3%	1.26
SDOU Alcohol	Low Risk	10,160,665	0.3%	1,252,834	0.1%	8,907,831	0.3%	0.31
SDOH Alcohol	Medium Risk	12,838	0.0%	3,209	0.0%	9,629	0.0%	-
	High Risk	702,444	0.0%	31,033	0.0%	671,411	0.0%	-
	Unknown Risk	1,662,995,286	6.7%	420,973,602	7.9%	1,242,021,684	6.3%	1.26
SDOH	Low Risk	15,773,924	0.3%	1,589,960	0.1%	14,183,964	0.4%	0.24
Transportation	Medium Risk	1,563	0.0%	102	0.0%	1,461	0.0%	-
	High Risk	110,493	0.5%	9,370	0.0%	101,123	0.6%	-
Provider Type	non-PCP	1,473,858,939	6.8%	381,419,532	8.0%	1,092,439,407	6.4%	1.25
Trovider Type	PCP	205,022,327	5.8%	41,153,502	7.3%	163,868,825	5.4%	1.37
	No Partner	882,702,300	8.0%	267,373,845	8.9%	615,328,455	7.7%	1.16
Marital Status	Married/							
	Engaged/ Partner	796,178,966	5.1%	155,199,189	6.2%	640,979,777	4.9%	1.27
Ethnicity	Hispanic	26,979,634		8,492,078		18,487,556		
	Non-Hispanic			31,726,773		125,490,134		
	Other	1,494,684,725		382,354,183		1,112,330,542		
Race	Black	146,256,988		43,640,037		102,616,951		
	White	1,039,595,363			6.8%	812,017,606		
	Asian	63,780,528		15,768,569		48,011,959		
	Other	429,248,387			8.8%	293,661,716		
Past 2 Year Encounters	None	318,948,890		163,597,726	7.3%	155,351,164		
	1-4	433,423,789				317,031,005		
	5-9	337,307,572		62,405,004				



	10+	589,201,015	6.4%	80,177,520	7.7%	509,023,495	6.1%	1.26
Past 2 Year No- Show Rate	00-24%	1,354,731,128	6.6%	257,428,494	8.2%	1,097,302,634	6.2%	1.33
	25-49%	3,652,083	9.2%	942,996	11.3%	2,709,087	8.4%	1.35
	50-74%	993,555	8.9%	356,188	10.5%	637,367	7.9%	1.33
	75-100%	555,610	8.4%	247,630	9.3%	307,980	7.8%	1.20
SVI Percentile	Unknown	318,948,890	6.8%	163,597,726	7.3%	155,351,164	6.3%	1.15
	00-24%	1,354,731,128	6.6%	257,428,494	8.2%	1,097,302,634	6.2%	1.33
	25-49%	3,652,083	9.2%	942,996	11.3%	2,709,087	8.4%	1.35
	50-74%	993,555	8.9%	356,188	10.5%	637,367	7.9%	1.33
	75-100%	555,610	8.4%	247,630	9.3%	307,980	7.8%	1.20

