

## Online Appointment Booking: A Case Study Comparing Patient No-Shows Between Appointments Booked Online Versus Other Booking Methods

Appointments booked through an Online Appointment Booking (OAB) solution that automates the sending of email appointment reminders are associated with reduced rates of no-shows.

An analysis of 33 sites that implemented OAB in the Ontario Health West region was conducted to evaluate the impact of OAB on patient no-shows. There was a statistically significant difference in patient no-shows with OAB (11,200 appointments included in the analysis) versus no-shows using other booking methods such as phone appointments (351,620 appointments included in the analysis) p<.001, with appointments booked through OAB showing a lower proportion. Below are detailed results from 2 primary care clinics with a higher number of OAB appointments (**Figure 1 and 2**) among the sites that were analyzed:

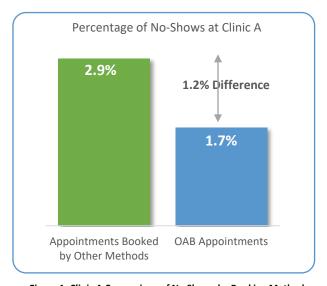


Figure 1: Clinic A Comparison of No Shows by Booking Method

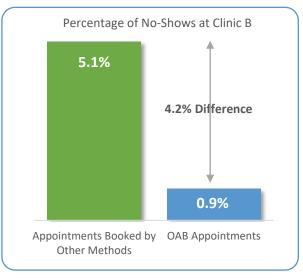


Figure 2: Clinic B Comparison of No Shows by Booking Method

**Table 1** below estimates the number of no-shows avoided and potential billing loss averted in Clinic A and B. The calculations take into account OAB conversion rates of 50% and 90% for an average of 360 appointments per month for a clinician, with an average billing cost of \$40 per appointment.

Table 1: Potential No-Shows and Billing Loss Averted

	Clinic A		Clinic B	
Percent of appointments booked online	50%	90%	50%	90%
Number of No Shows Avoided Per month/per clinician schedule	2	4	8	14
Potential Billing Loss Averted per month/per clinician	\$80	\$160	\$320	\$560

Given that the healthcare system is currently experiencing a number of challenges, it is critical that tools are implemented that can alleviate these pressures by facilitating patients to receive the care they need from their primary care team. Averting no-shows ensures patients are seen in a timely manner and clinicians are adequately compensated.

## Background

A patient no-show means that a patient has failed to come into the clinic for a scheduled appointment without providing any notification. Recent studies in Canada have reported no-show rates of up to 25%. Missed appointments increase healthcare burden by decreasing immediate availability to clinical appointments and increasing overall wait times, which is especially critical during a time when there is increased pressure on the Ontario healthcare system.

## Impact of Patient No Shows







Misuse of clinic resources by the potential to increase staff overtime and patient wait times.<sup>2</sup>



Delay in patients getting healthcare services at an appropriate time.

There are many reasons why patients miss their appointments. Forgetting and miscommunication are the two most common reasons, with access to transportation and other commitments also contributing factors. <sup>1,3</sup> Studies have found that shortening the wait time between the initial appointment booking and the actual appointment will help reduce no-shows because patients are sensitive to time delays. <sup>2</sup> Adding automated email reminders can also help to adjust patient behaviours. Previous research has found that telephone reminders can reduce no-show rates from 20.99% to 7.07%. <sup>4</sup>

Also, empowering patients to self-schedule their appointment is another strategy that can reduce no-show rates. A survey study shows a 53% relative reduction in no-show rates when patients use an online patient portal with a scheduling function compared to non–portal users.<sup>5</sup>

"An added bonus [to OAB] is that there have been very little [...] no-shows with our online booked appointments. Patients are able to cancel and reschedule with ease. And the reminders that are emailed to them, reinforce their appointment time and date, to ensure awareness."

- Kindra Murphy, SRS Medical

If you have any questions or would like further information on this case study, contact communications@ehealthce.ca.

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