

The Price of Silence: Impact of No-Shows in Radiological Research

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Background

Patient No-shows refer to instances where potential subjects fail to attend their scheduled research appointments without prior notification to the research facility. These occurrences result in missed opportunities for data collection, misutilization of time, resources, and personnel.

Aims

- To highlight the reasons and significant impacts of No-shows on the radiology research process.
- To enumerate potential mitigation strategies to enhance patient engagement and compliance in research studies.

Methods

A review of relevant literature was conducted to gather insights into the issue. The findings were analyzed to identify potential factors affecting no-show rates, their impact, and mitigative strategies that can be used to improve no-shows.

Results

Impact of No-Shows:

No-shows in radiology research pose a multifaceted challenge, negatively impacting research progress, resource allocation, and ultimately patient care. These effects can be:

- **Delays in data collection and analysis:** Missed appointments disrupt the flow of data collection, hindering the timely completion of studies and delaying the development of new diagnostic and therapeutic technologies.

Table 1: Potential factors affecting no-shows in research

Patient - related	<ul style="list-style-type: none"> • Anxiety and fear • Childcare responsibilities • Language barriers • Forgetfulness • Lack of responsibility
Scheduling - related	<ul style="list-style-type: none"> • High lead time for appointments • Appointments during work hours • High wait times
Other	<ul style="list-style-type: none"> • Transport issues • Parking space unavailability • Bad weather conditions • Miscommunication • Insufficient compensation • Type of radiological exam

- **Incomplete datasets:** No-shows lead to incomplete datasets, reducing the statistical power of research studies. This limits the ability to establish robust correlations or draw meaningful conclusions and the validity and generalizability of findings.
- **Wasted resources:** No-shows strain healthcare systems by wasting valuable time and resources allocated for research appointments. This leads to increased costs and diverts resources away from other, more critical areas of healthcare.
- **Delayed patient access to advancements:** Research findings in radiology often translate into improved diagnostic accuracy and patient care. No-shows hinder the timely development and implementation of these advancements, potentially delaying or even denying patients access to cutting-edge treatments and technologies.

Mitigation Strategies

Potential strategies to mitigate no-shows and their impact are:

- **Wave Scheduling** – scheduling patients in specific time slots rather than at fixed times, leads to flexibility for patients and shorter wait times.
- **Strategic Overbooking and Waitlisting** - intentionally scheduling more appointments than the available capacity, taking into account historical no-show rates maximizes appointment utilization.
- **No-Show predictive models** - leveraging machine learning algorithms and historical appointment data to predict the likelihood of a patient not showing up for their scheduled appointment and implementing targeted interventions such as personalized reminders, additional follow-up communication and rescheduling incentives improves no-show rates and maximizes resource utilization.
- **Cancellation phone lines** – establishing separate cancellation phone lines gives the subject courage and comfort to cancel bookings which enables the researchers to plan accordingly.

Conclusion

No-shows in radiology research demands attention and proactive measures to enhance patient engagement and compliance. Improved scheduling strategies, strategic overbooking, using machine learning to predict no-shows, personalized reminders etc., are potential solutions. Minimizing no-shows accelerates the progress of radiological science, and ultimately improves patient care.

References

- Marbough D, Khaleel I, Al Shanqiti K, et al. Evaluating the Impact of Patient No-Shows on Service Quality. Risk Manag Healthc Policy. 2020;13:509-517. Published 2020 Jun 4. doi:10.2147/RMHP.S232114
- [How top Radiology Centers are reducing no-show appointments and recovering revenue in 2024](#)