

Optimizing Virtual Care at King Fahad Specialist

Hospital - Dammam: A PDSA Approach

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Introduction

In alignment with Vision 2030, Saudi Arabia's Ministry of Health (MoH) has prioritized telehealth initiatives to expand healthcare coverage and enhance accessibility across the Kingdom (Vision 2030, 2021). By focusing on virtual care, the goal is to ensure high-quality healthcare services are accessible to all, regardless of geographic location, thereby striving towards a comprehensive, efficient, and inclusive healthcare system.

The project will focus on the establishment and integration of virtual healthcare services at King Fahad Specialist Hospital - Dammam (KFSHD), which stands out as a leading specialized tertiary care hospital in the Eastern Province of Saudi Arabia (KFSHD, 2022). Given the challenges like the absence of a dedicated virtual healthcare unit, limited buy-in and governance issues, this project aims to optimize virtual care through strategic interventions guided by the PDSA cycle to enhance virtual care delivery.

Objectives

The primary objective of this project is to **integrate virtual healthcare services** within KFSHD, aiming to **enhance access to healthcare, patient satisfaction, and practitioner compliance**. Key performance indicators (KPIs) have been established to measure the success of this integration, focusing on two key areas:

- Increase virtual utilization:** The project aims to achieve a significant increase of 10% in virtual consultations compared to the current virtual service utilization within the next 12 months.
- Reduce practitioners' no-show rates:** Efforts will be focused on reducing practitioners' no-show rates to < 5% to improve compliance.

Methodology and Discussion

This project employed the Plan-Do-Study-Act (PDSA) cycle for continuous improvement in implementing virtual healthcare services at KFSHD (Moen, 2009). The project commenced in May 2023, with the following key steps:

Plan

- Establish a virtual healthcare unit.
- Assign a leader and form a multidisciplinary team.
- Develop virtual healthcare operation policies and protocols.
- Collect and analyze outpatient visits data from 2023; set specific utilization targets.

Do

- Implement training programs for healthcare practitioners.
- Use a virtual care support line and WhatsApp number for support and reminders.
- Designate a direct virtual back-office booking email and WhatsApp number to ensure a clear and quick booking system.
- Regular meetings with the virtual healthcare team and stakeholders to discuss initiatives and address concerns.

Study

- Distribute weekly utilization monitoring reports to center directors and department chairs.
- Share monthly reports with stakeholders to highlight performance against targets.
- Gather feedback from healthcare providers to identify areas for improvement.

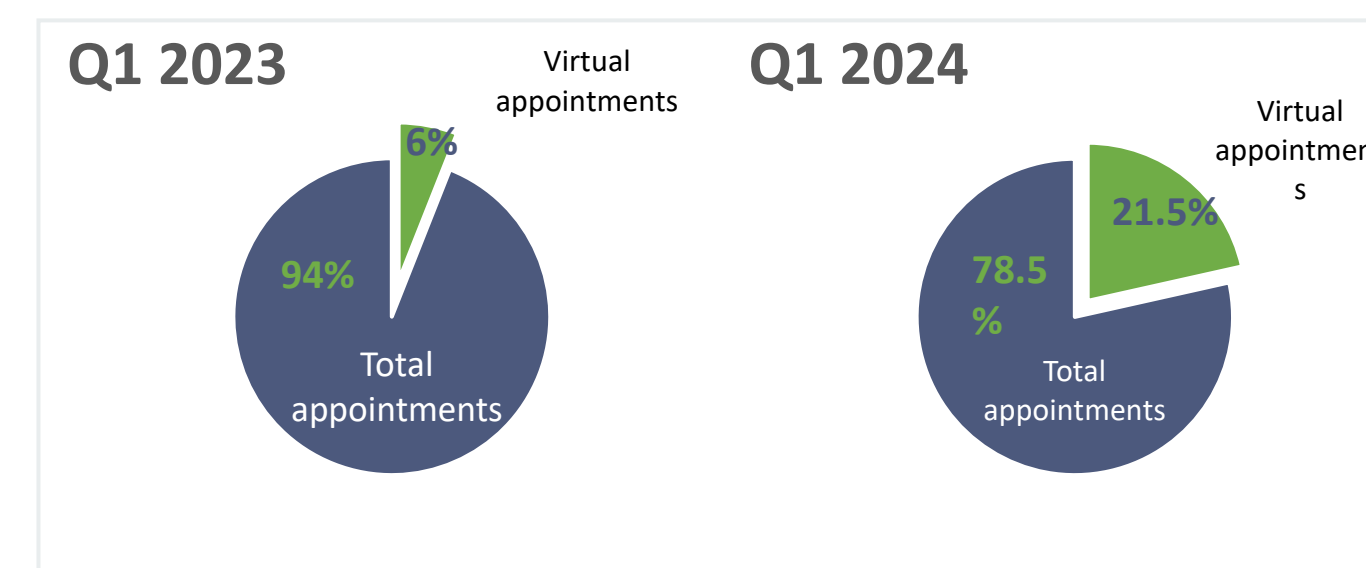
Act

- Utilize Smartsheet for data management and real-time tracking of KPIs.
- Implement innovative strategies for patient care continuity and post-admission follow-ups.
- Collaborate with the Clinical Nurse Coordinator (CNC) administration to capture CNC efforts and familiarize nurses with virtual healthcare processes and documentation.
- Ongoing enhancements to refine virtual healthcare services, including adjustments to hospital forms and adding features to the hospital's portal and HIS.
- Efforts are underway to integrate the HIS and the MoH platforms to enhance overall efficiency in virtual care delivery.

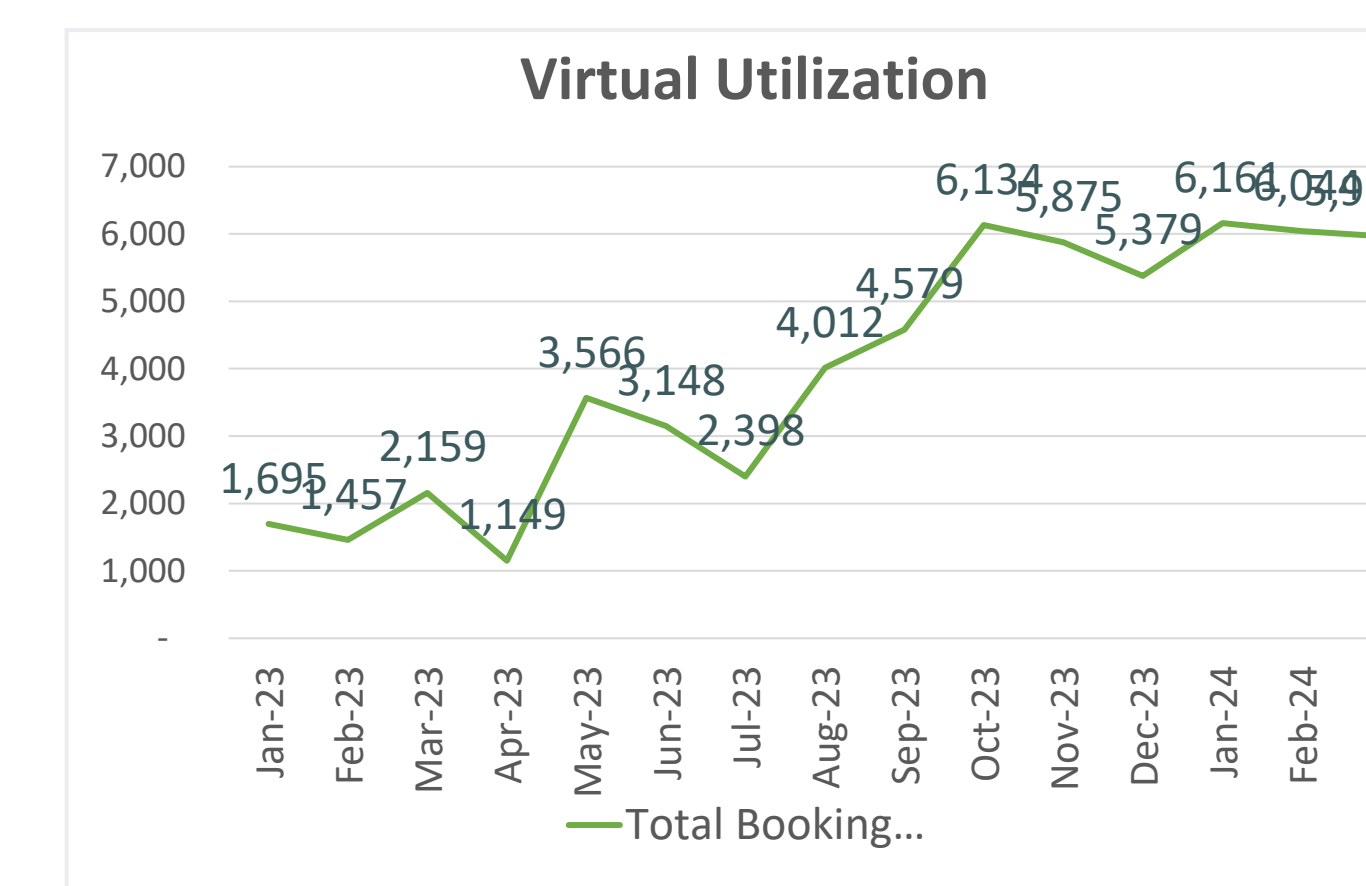
Results

The implementation of the PDSA cycle at KFSHD has significantly surpassed its initial objectives for integrating virtual healthcare services:

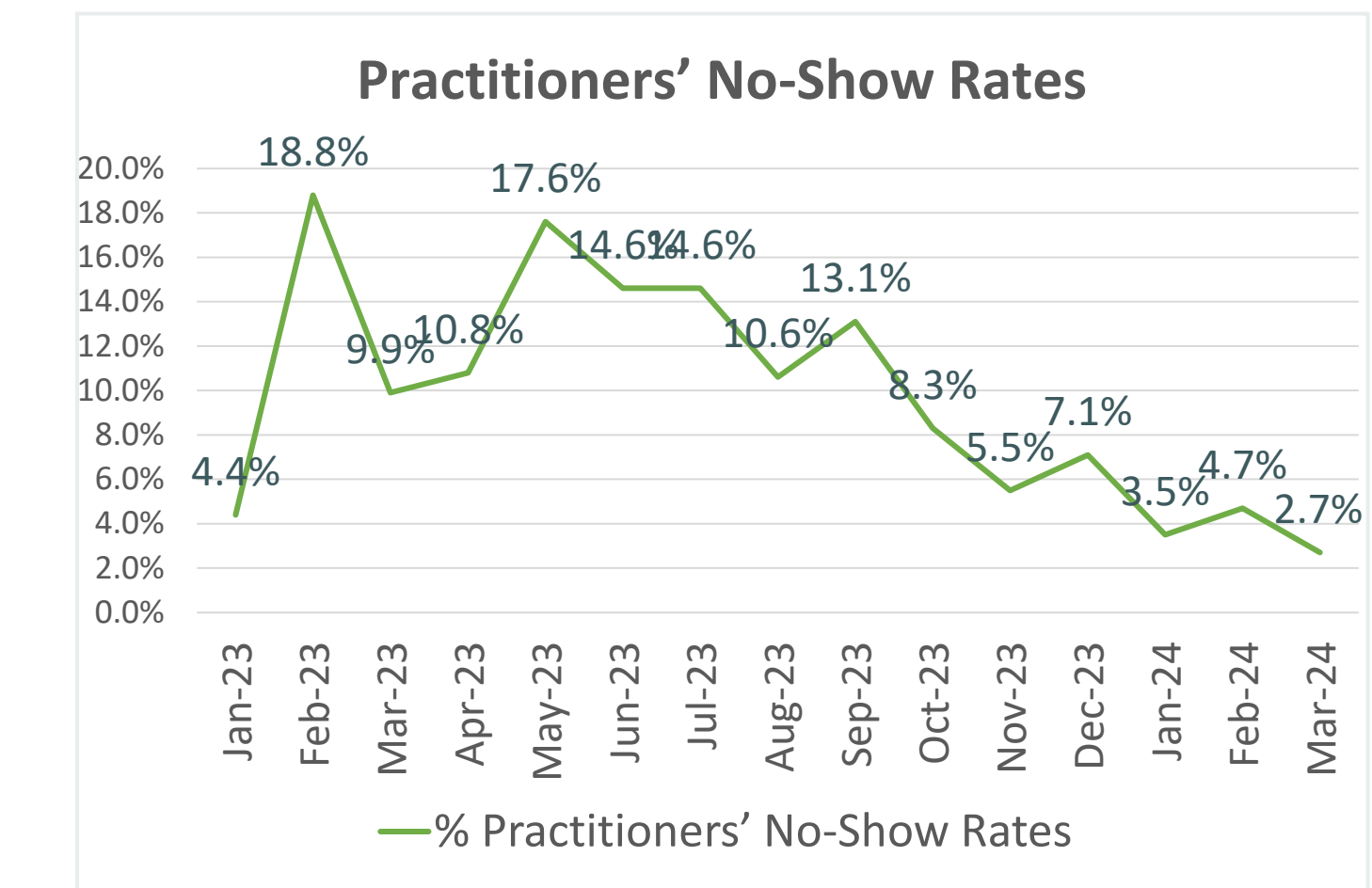
- Goal vs. Achievement:** Targeted a 10% increase in virtual consultations within the first year; **achieved a remarkable 15.5% increase.**



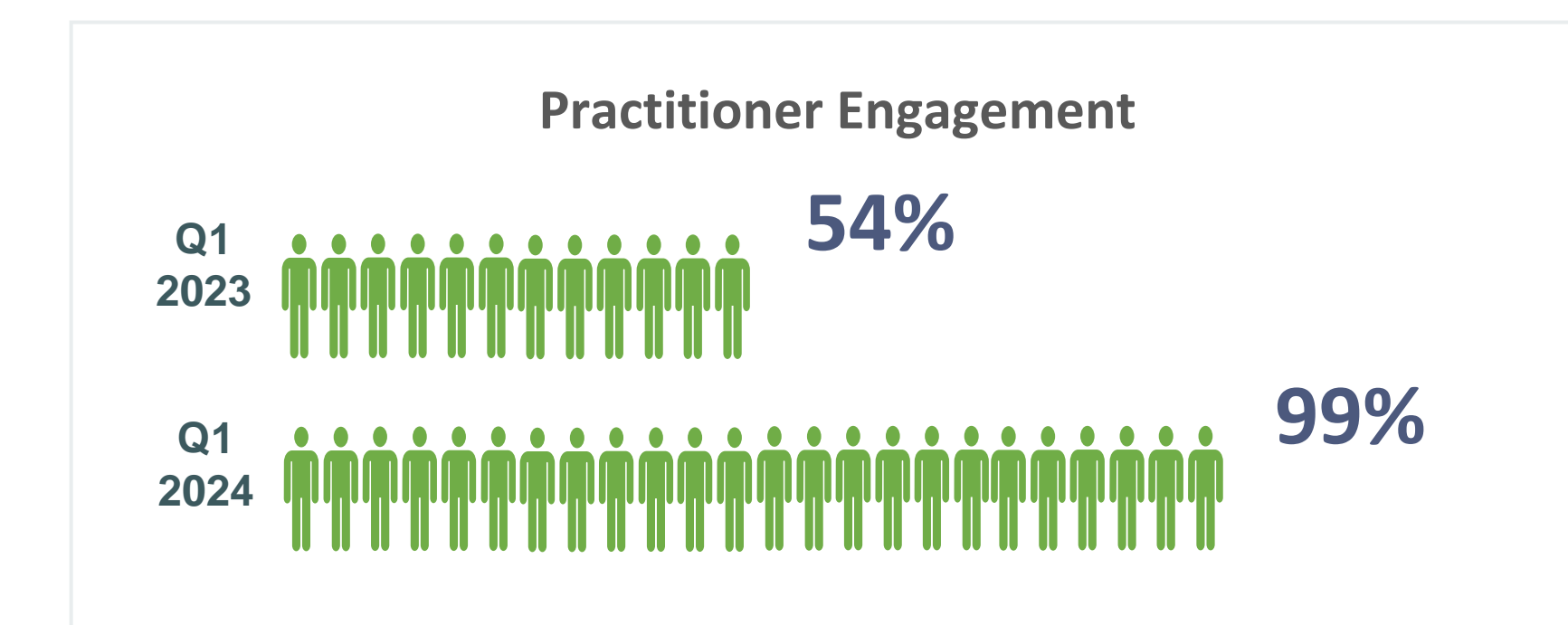
- Growth Over Time:** Virtual appointments escalated from 6% to 21.5% of total visits from Q1 2023 to Q1 2024.



The project also aimed to decrease practitioner no-show rates, which were a concern at 11% in 2023. Pleasingly, the PDSA cycle has yielded a significant reduction in this rate to 3.6% in Q1 2024. This improvement indicates a more efficient workflow and improved the hospital's compliance.



Additionally, the engaged healthcare provider rate has increased from 54% in the first quarter of 2023 to an impressive 99% in Q1 2024. This signifies a strong commitment from practitioners to virtual service delivery.



Conclusion and Future Directions

In conclusion, these strategic initiatives at KFSHD have significantly improved the efficiency and utilization of our virtual healthcare services, resulting in enhanced healthcare accessibility and practitioner compliance. Notable achievements include increased virtual care utilization and reduced no-show rates. The active engagement of healthcare practitioners and stakeholders, alongside continuous strategy refinement, has been key to these successes (Kho et al., 2020).

Future Directions: Looking ahead, KFSHD is committed to further advancing virtual services. Our future initiatives include:

- System Integration:** We are working on integrating the Hospital's HIS with MoH platforms to boost user experience and compliance.
- Dedicated Virtual Consultation Rooms:** Efforts are underway to establish equipped rooms to improve the environment for virtual consultations.
- Remote Practitioner Consultations:** We plan to introduce a system for remote consultations between practitioners to discuss new patient referrals. This will facilitate quicker decision-making and enhance collaboration among healthcare professionals.
- Automated Practitioner Reminders:** We will implement automated daily reminders to streamline workflows and ensure adherence to appointments.
- Comprehensive Research:** We plan to undertake a detailed study to evaluate the experiences of both patients and healthcare providers with our virtual services. This research will identify specific areas for improvement, allowing us to make targeted enhancements to our virtual care offerings.

As we move forward, KFSHD remains steadfast in its commitment to meeting the evolving needs of our patients and stakeholders.

References

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