

A Journey Towards a Complete Digital Patient Experience in Radiology

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Background/Problem Being Solved

Apps now handle a variety of transactions that historically required a human touch, ranging from purchasing groceries to cars. Patients are embracing the digital world and there is opportunity to improve engagement throughout the delivery of radiology services.

Intervention(s)

In a phased approach, numerous steps in the process of radiology care delivery were enhanced with digital tools, from scheduling to report delivery. Some tools were newly developed while others were customization or implementation of available portal infrastructure.

Scheduling

An app was created to enable digital scheduling of most radiology appointments. A “frictionless” approach to scheduling was implemented to offer patients three convenient appointment times and locations based on a predicative algorithm. Custom radiology order notification texts and emails remind patients about unscheduled orders.

Preparing for Visit

Most paper questionnaires and screening forms were converted to electronic format that can be completed on the patient portal prior to arrival. For non-electronic orders, a tool allows patients to upload a picture of their prescription. Patients receive automatic notifications when insurance authorization is obtained.

Arrival

On the day of arrival, an SMS notifies the patient that they can use the app to check in when they arrive, allowing them to skip the front desk and complete outstanding forms on their mobile device. A texting

system was implemented with fixed messages linked to patient events to help avoid crowding in the reception area.

Result Delivery

The radiology report is posted to the portal immediately after it is finalized. It contains a link to an image viewer that also allows images to be shared. There is also a link to a pilot video report, if available.

Barriers/Challenges

Challenges included creating solutions to allow appropriate scheduling based on referrer and imaging center specific preferences, working around technical limitations, approaches to achieve standardization across a variety of sites, and change management.

Outcome

The app has been well received. In 2021, there was a monthly average of 7,991 app scheduled exams, 18,278 appointments with prepare for visit completed, 138,528 exam images viewed and 2,695 exams shared.

Conclusion/Statement of Impact

Development of digital tools can enhance the patient experience and provide an opportunity to perform tasks that could normally only occur during business hours or through interaction with a staff member. The digital experience allows more streamlined transitions through the radiology encounter. Many of these tools became especially useful during the pandemic.

Lessons Learned

In order to achieve success with digital solutions, it is critical to assemble a team of relevant stakeholders that can contribute to the design, implementation, and iteration. Augmenting existing

Keywords

Administration & Operations; Clinical Workflow & Productivity; Patient/Family Experience

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