Case Study

HackensackUMC
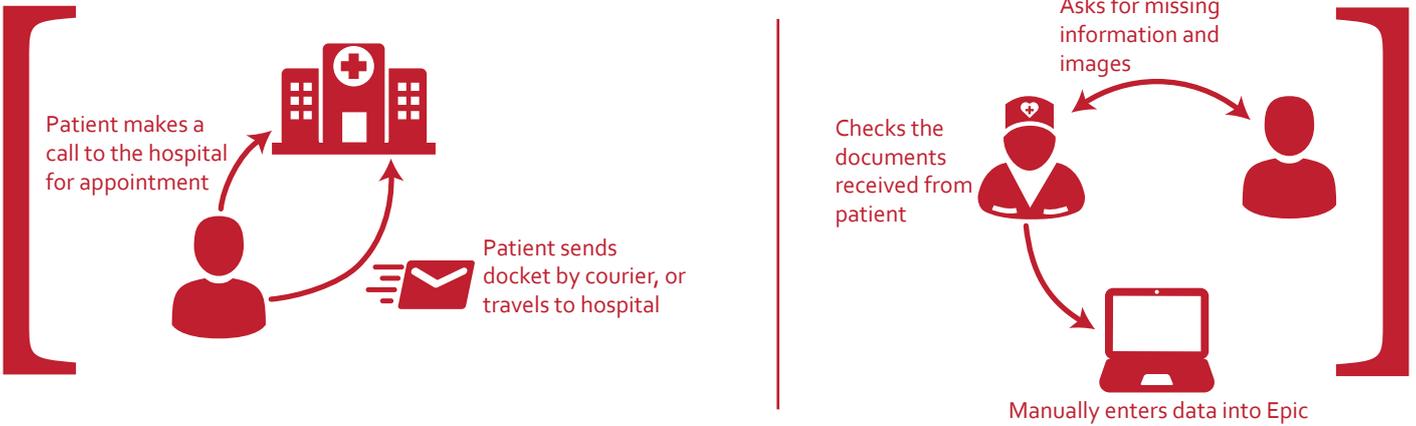
Forward from MphRx Helps HackensackUMC Improve Patient Experience Significantly

Hackensack University Medical Center (HackensackUMC), the flagship hospital of the Hackensack University Health Network, is a nonprofit, teaching and research hospital. With close to 800 beds, the hospital has grown to become the largest provider of inpatient and outpatient services in New Jersey. HackensackUMC has been one of Healthgrades America's 50 Best Hospitals for nine years in a row, and has received the Healthgrades Distinguished Hospital Award for Clinical Excellence several times.
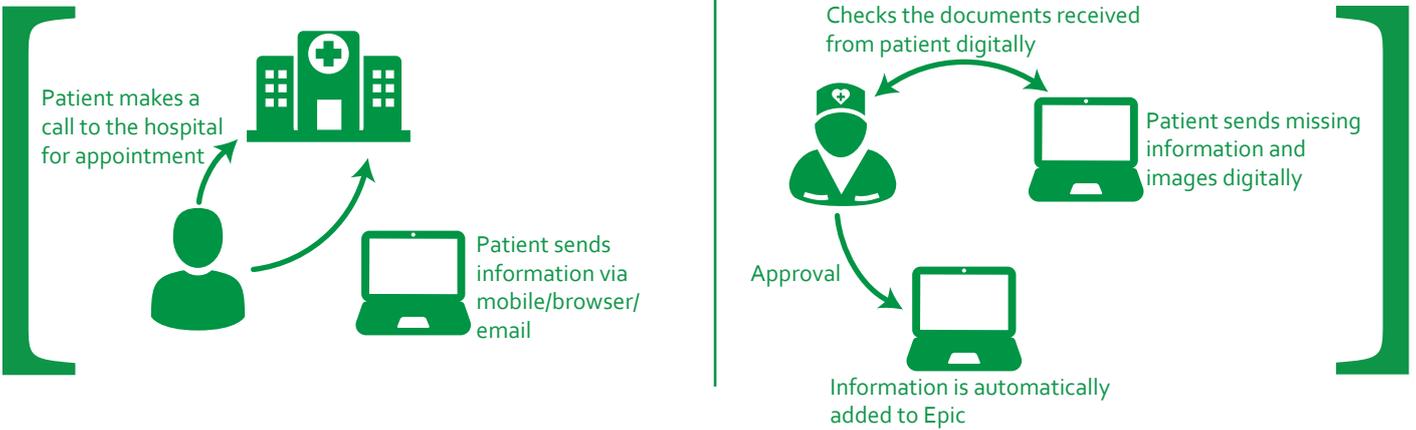
HackensackUMC has always been known to deploy the right technologies to enable better treatment for its patients. The medical center has deployed Epic software that spans clinical, access and revenue functions. The software works on industry interoperable standards while securing information for doctors as well as patients. However, the capture of a first-time patient's medical history was turning out to be challenging for HackensackUMC.

Old Process

Patient makes a call to the hospital for appointment

Patient sends docket by courier, or travels to hospital

Asks for missing information and images

Checks the documents received from patient

Manually enters data into Epic

Disadvantages

- May need multiple rounds of form filling, trips
- Takes too much of patient's time
- May not get timely care in case of critical patients

New Process Using Forward

Patient makes a call to the hospital for appointment

Patient sends information via mobile/browser/email

Checks the documents received from patient digitally

Patient sends missing information and images digitally

Approval

Information is automatically added to Epic

Advantages

- Saves time for everyone involved
- HIPAA compliant process, hence secure
- Doctors have faster access to patient's records, speeding up care process

Challenges

The accurate capture of a first-time patient's history was time consuming, and involved a lot of manual interventions from the clinical staff. The process frequently put the patient through multiple rounds of form filling or information sharing, involving travel to the hospital or sending medical dockets by post or courier. And most importantly, delays in the process could also jeopardize the patient's health by preventing them from getting timely treatment. HackensackUMC wanted a solution to address this.

The medical center was also committed to adopting Fast Healthcare Interoperability Resources (FHIR), a next-generation API based standard for exchanging health information, developed by the nonprofit organization Health Level Seven International. So they were looking for an application that supported FHIR.

Solution

MphRX is among the few healthcare application providers that already have a solution which supports the FHIR standard. MphRx's application, Forward, thus became the choice for HackensackUMC to capture a first-time patient's medical history. MphRx Forward is HIPAA compliant, encrypted with two-factor authentication, and can plug into many EMR solutions deployed in American hospitals.

How Does Forward Work?

Capturing data for a new patient: A patient can visit the website of the medical center and enter the information right there, uploading radiology images, photos of prescriptions, and other documents. He can also call up the hospital seeking an appointment. Once he is registered, he is sent an email with a questionnaire, and a PIN to his cellphone to ensure secure access. He fills up the form, and then the clinical staff reviews it to ensure that the data is complete, and that images and photographs are of acceptable quality. Post approval, the patient information is accepted into Epic and made available to the specialist.

Capturing data for a radiology exam or an existing patient: Forward can be programmed to automatically email a secure link to an intake form to a patient scheduling a radiology exam. Forms can be customized to collect data specific to the exam type and can be pre-populated with patient demographics for existing patients. An appointment scheduled by an existing patient can be programmed to automatically trigger emailing of a similar questionnaire.

Forward provides a wide variety of completely customizable forms that patients can access conveniently at home, paring down waiting time. These forms can be designed to capture information about a current condition,   medical histories as well as demographic and insurance information.

The system enables the updating of patient information without the inconvenience of filling up a hard copy form. All forms can be stored in Epic as structured reports, DICOM embedded PDFs or form response structured data, similar to EMR flow sheets.

MphRx Forward Features

1. **Customization:** Forward enables the doctors of HackensackUMC to design a customized questionnaire/form online for a specific specialty in just a few minutes.

2. **Supports email, browser and mobile:** The link to the form and questionnaires is shared over the hospital website or email and can be accessed on browser or mobile by the patient. Patients can open the online form, update the data and upload the documents (files from CDs from imaging providers or documents like clinical notes, lab results, etc.). The uploader requires no plugins.

3. **Security:** To ensure patient data security, the system supports a two-factor authentication. An OTP (one-time password) is sent through a text message.

4. **Supports images from smartphones:** Patients with smartphones can fill up the form on their mobile device and take pictures of the records and upload them.

5. **Smooth data handling:** The uploaded data is available to the hospital's team via a simple inbox interface, where they can review the information, update the status and send notifications back to the patient. The same data gets updated in Epic and is added to the patient's chart.

6. **Easy interoperability:** Forward is FHIR compliant, and can easily be integrated with various EMRs, PACS and RIS solutions.

Benefits

With the deployment of Forward, HackensackUMC sees the following benefits:

1. **Improved patient experience & reduced wait times:** The length of the entire medical history capture cycle is reduced, so the patient wait time is considerably less. Patients also don't have to come to the hospital to share the medical history.

2. **Improved productivity:** With quicker access to patient history, it becomes easy for doctors to prioritize critical patients that need immediate attention. The staff at the medical center doesn't have to spend time on manual data entry. They can use this time in more productive tasks and ensuring the data captured is accurate.

3. **Reduced chances of errors:** With an improved process, there is a lower risk of data inaccuracies and omissions due to human error.

4. **Low total cost of ownership:** Forward integrates with a hospital's existing systems without any need to switch to new systems, thus ensuring a low TCO.

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About MphRX

MphRx was founded by a group of serial entrepreneurs and launched in 2011 after applying the concepts of cloud technology including zero-install software, disaster recovery, business continuity and pay-per-use pricing through a flexible SaaS model to instantly transport diagnostic images, ultrasound videos, and reports on smartphones, tablets and other internet enabled devices without compromising quality. The MphRx Platform is an advanced solution that brings together healthcare records that are stored in different healthcare IT systems today. MphRx is vendor neutral and eliminates boundaries that divide IT systems and departments in a healthcare delivery process by integrating their data together.

Visit www.mphrx.com for more details

For queries and more information contact us at : info@mphrx.com