Nottinghamshire Healthcare NHS Foundation Trust improves data accuracy and patient care with new Observations app

MX

MX is a scalable and easy-to-use toolkit that puts you in control of your mobile app design, deployment and management. The toolkit allows you to create bespoke, cross-platform apps that can be used online or offline to improve your service delivery, security and integration.

Reduced clinical risk with accurate and real-time data

Improved appointment timekeeping and quality of care

Fully integrated with back-office system

Meets CQC requirements

NHS
Nottinghamshire Healthcare
NHS Foundation Trust

What challenge was Nottinghamshire Healthcare NHS Foundation Trust facing?

Nottinghamshire Healthcare NHS Foundation Trust is home to Forensic Services. This includes Rampton Hospital, a High Secure Mental Health hospital where patients require general observations to be performed at regular intervals throughout the day. These observation timeframes can range from once an hour to every five minutes.

The busy wards at these hospitals often have multiple clinicians observing the same patients throughout the day. During each observation clinicians would record their notes on paper and were not always able to update the main system or their colleagues in real-time. This fragmentation of patient notes on paper meant that not all observations were available for reference, resulting in overdue observations, repetition of work and the development of care plans that were not always as effective as they could have been.

The Trust wanted to mobilise this process and create a secure app for clinicians to use during their observations. This process aims to automate the transfer of data to the back-office system, improve appointment timekeeping and ultimately improve patient care.

What was its solution?

Using NDL's mobile working toolkit, MX, Nottinghamshire Healthcare successfully created an app and implemented it within the hospital. The Observations app replaces the paper alternative, allowing clinicians to electronically record their observations and automatically update the back-office system whilst on the move. This process has made patient data available in real-time, improving the quality and accuracy of care given to patients.

To improve appointment timekeeping, the app categorises upcoming General Observations using a traffic light system - green when there is no action necessary, yellow when an observation is upcoming and red when it is overdue. When an observation has been missed, the app forces the clinician to give a reason why, with an active responsive drop-down list containing pre-defined reasons to save time.

In addition, the Trust also created a battery level warning, to prevent devices shutting down and any partially inputted data being lost, and a Wi-Fi symbol to warn a user that they may be collecting data offline if the devices loses connectivity.

What benefits has it seen?

In the first month of the app going live, Nottinghamshire Healthcare processed 28,000 transactions and has since increased this to an average of 55,000 transactions each month. The Observations app has allowed clinicians to:

- Improve the quality and accuracy of care plans, developed using real-time patient data automatically submitted to the back-office and made available to all clinicians on the ward
- Improve productivity and timekeeping by providing a clear indictor of actions needed
- Improve patient care by ensuring care is undertaken at the right times
- Provide an audit trail for care they have undertaken with patients

Nottinghamshire Healthcare NHS Foundation Trust has over 55 wards, covering various levels of security, where they aim to implement mobile working in the future, these include; two Medium Secure Hospitals, Wathwood in Rotherham and Arnold Lodge in Leicester, and one Low Secure Hospital, Wells Road Nottingham. When complete, they will be using MX to process over three million records a month, leading to improved patient care.

Throughout the process of implementation, developers have received many requests and ideas from user of ways in which the app could be improved. With the use of MX, the development team has been able to take this feedback onboard and work with the clinicians to improve usability.

"Using the cost-effective MX solution we have built a mobile clinical app with an easy-to-use interface that provides the user with intuitive screens to alert them to when the next General Observation is required, and allows for the quick capture of clinical data to better inform clinical decisions"

Keith Vaughan
Principal Project Manager, Health Informatics Service (HIS)

For more information, visit **www.ndl.co.uk** or email **info@ndl.co.uk**