Oxford AHSN case study

Date: Q1 2019/20

Programme/Theme: Strategic and Industry Partnerships

Title: The Oxford AHSN assists Fujifilm in real-world evaluation of point of care flu test

Overview summary

A new point of care test for the detection of flu is in the process of being commissioned by Buckinghamshire Healthcare after a winter evaluation in the Acute Medical Unit (AMU) at Stoke Mandeville Hospital. The test was developed by Fujifilm Medical Systems and is based on silver-amplified lateral flow technology in a simple cartridge with an automated reader. The test requires minimal hands-on time and sample preparation making it ideal for use in a busy department.

The Oxford AHSN assisted in the setting up of the real-world evaluation, pulling the key clinical stakeholders together for initial meetings, drafting the protocols and data collection procedures alongside the trust’s lead microbiologist and the AMU staff who would be using the test, organising training and logistics and helping with day-to-day queries.

The test enabled clinicians to quickly and easily diagnose and treat patients with flu, often resulting in a shorter stay in hospital, and saving around £200 per patient tested. The test was only run in small unit in the emergency medicine department, but once commissioned use will be extended to the emergency department for use at the ‘front door’ of the hospital.

Challenge identified and actions taken

Flu patients have a significant impact on A&E services during winter when the number of cases rises, leading to increased pressures on an already stretched service and longer waiting times. Patients with flu tend to stay longer than average, and are isolated where practical, which makes flexible use of the available beds more difficult.

Fujifilm Medical Systems originally had difficulty accessing emergency department clinicians to perform a real-world evaluation study, as well as sourcing project management resource, in order to gather the clinical evidence required to create a business case for their point of care flu test (the AG1 DriChem analyser).
The Oxford AHSN provided in-depth support to the company, assisting with evaluation, project management, commercialisation and procurement. As a result Fujifilm was able to set up their first real-world evaluation in the UK in the acute medical unit at Stoke Mandeville Hospital (Buckinghamshire Healthcare NHS Trust). The Oxford AHSN provided a single point of contact for Fujifilm and the NHS trust, drafting protocols and giving day-to-day support.

The original reader for the test was unable to connect to the electronic patient record (EPR) which meant that all results had to be manually recorded and transferred. This was not ideal in a busy department and made it less likely to be commissioned in comparison to other tests on the market. The Oxford AHSN fed these concerns back to the company and this guided them in designing and manufacturing a reader that could be connected to the EPR system making it a more desirable system.

**Impacts / outcomes to date**

All nurses using the test agreed that it helped a lot with management of infectious patients and reduced the impact of flu that is usually seen on the unit, as well as reducing pressures on other departments if patients were transferred. Other similar studies have shown cost savings in the region of £200 per patient tested, as well as showing that POC flu testing can reduce the length of stay by half.

Buckinghamshire Healthcare is now in the process of commissioning the test for the AMU and emergency departments at Stoke Mandeville Hospital. This will be Fujifilms’s first adoption site in the UK. The evidence and business case generated from this real-world evaluation is expected to drive further sales and implementation in other NHS trusts.

**Supporting quotes**

“As a senior clinician, every winter I had responsibility for the management of patient flow across the hospital. The point of care test for flu was a game changer. The rapid identification of those patients actually with flu helped streamline their management - and in some cases saved lives. It also allowed us to better manage the placement of patients, preventing overcrowding and using isolation more efficiently.”

Guy Rooney, Medical Director, Oxford AHSN (and former Medical Director, Great Western Hospitals NHS Foundation Trust, Swindon, until June 2019)

“Point of care flu testing is of great help in managing the winter pressures that are placed on emergency departments, and further down the care pathway. It allows for speedier treatment decisions, especially outside standard lab hours, and allows for more efficient patient management.”

Ashley Aitken, Senior Programme Manager, Oxford AHSN
Future plans

The Fujifilm test is in the process of being procured, and should be in place for winter 2019/20. Stoke Mandeville data will be put through our budget impact model to determine potential wider cost savings.

NHS England priorities addressed

- Care and Quality
- Funding and Efficiency
- Health and Well Being
- Driving Economic Growth

Start and end dates

2017-ongoing

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