**Appendix 3 - SaTH Service Evaluation Final Report**

|  |  |
| --- | --- |
| **Project Title** | |
| Trial of lateral flow devices for COVID/Flu A+B ±RSV | |
| **Date of Report** | 23/09/2024 |
| **Your Name** | Rebecca Kerrigan |
| **Evaluator Lead** (if different) |  |
| **Job Title** | Lead Biomedical Scientist |
| **Main Base/Place of Work** | Royal Shrewsbury Hospital |
| **Division** (delete as appropriate) | Clinical Support Services |
| **Department / Team** | Microbiology |
| **Name, Job Title, and Email**  **of Line Manager** | Adrian Vreede, Pathology Centre Manager  [adrian.vreede@nhs.net](mailto:adrian.vreede@nhs.net) |
| **Name, Job Title, and Email**  **of Service Manager** | Rebecca Kerrigan, Lead Biomedical Scientist  [rebecca.kerrigan@nhs.net](mailto:rebecca.kerrigan@nhs.net) |
| **Name and Email of Supervisor / contact point with SaTH**  (applicable only for students and external evaluators where no internal manager has been provided) | N/A |
| **Date closed** | 17th May 2024 |
| **Meeting to be presented at** | Pathology Governance and Assurance |

**Executive Summary**

We attempted to evaluate the use of dual/triple lateral flow devices to screen patients for winter viruses (COVID, Flu A and B, RSV). Lateral flow kits were sent to Ward 17 at Princess Royal Hospital and Ward 24 at Royal Shrewsbury Hospital. Instructions were given to staff on how to take the samples and complete the paperwork, and how to return samples and paperwork.

No samples or paperwork were returned to the Microbiology department during the trial period, therefore no analysis can be performed, and no conclusions on the effectiveness of either lateral flow device can be drawn.

The Microbiology department recommends that the Trust contacts the POCT team if a repeat trial is required.

**Keywords**

COVID, flu, influenza, PCR, lateral flow

**Background / Information**

We attempted to evaluate the use of dual/triple lateral flow devices to screen patients for winter viruses (COVID, Flu A and B, RSV).

The current screening method used by the Trust for winter virus testing is a COVID lateral flow. If this is positive, patients are cohorted with other COVID positive patients on a dedicated ward or bay. If the lateral flow is negative and there is clinical suspicion of a winter virus, a sample is taken and sent to the Microbiology laboratory for PCR. PCR testing is inherently more expensive than lateral flow testing.

We attempted to evaluate two different lateral flow devices (LFD) in order to determine if either is an adequate replacement for the single-target LFD currently used to screen patients for COVID. One of these LFDs is a dual test for COVID and Flu A+B, and the other is triple target device for COVID, Flu A+B, and RSV.

Having a rapid point-of-care test available on wards will improve the ability of clinicians and the Infection Control Team to cohort patients in a timely manner, reducing the amount of time patients wait to be sent to the correct sideroom, bay or ward. Further to this, there will be a cost reduction for the Trust as LFDs are less expensive than PCR; having LFDs available for targets other than COVID will lead to fewer PCR tests being requested.

**Aims and Objectives**

We hoped to determine the usefulness of two LFDs for possible use in the Trust for screening patients for winter viruses. Based on data collected, we hoped to be able to advise on the most appropriate LFD for the Trust to use during the next winter virus season.

**Methods**

Symptomatic patients who are having a LFD or PCR for COVID as part of their diagnosis were asked if they would like to take part in the evaluation. An information sheet and consent form/results sheet was designed. If the patient consented to taking part in the evaluation, they had the following samples taken as part of the trial:

1. A nasal swab for the COVID/Flu A+B LFD
2. A nasal swab for the COVID/Flu A+B/RSV LFD
3. A nasal swab for winter virus PCR testing

The LFDs were performed at the patient’s bedside as per the instructions for use provided for the wards and results were be recorded on the results sheet. This was sent to the laboratory with the sample for PCR testing. When the PCR result was available, it would have been entered into a table by laboratory staff and data will be analysed by a Senior BMS or the Lead BMS.

**Analysis and Results**

No results were returned to the Microbiology department for analysis over the duration of the trial.

**Discussion/Conclusions**

No conclusions can be drawn form this trial, as there were no results accompanying any samples returned to the department for analysis.

**Recommendations, dissemination and actions**

If the Trust would like to repeat the trial, we recommend contacting the POCT team to arrange a repeat.

This report will be disseminated to the Respiratory Matron, Clinical Lead and Operations Manager.