



Rapid POCT for Flu – Crisis Management in NHS Fife

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Background

- Respiratory viral PCR testing since 2008
- Winter season:
 - Routine – 1 batch daily (21 specimens max)
 - Not performed on Sunday
- New platform = 7 day service
 - Results >4 hours
 - Not tested out of hours

Winter 2017-18

- >97% bed occupancy
- Increase in patients with flu-like symptoms
- Cannot discharge or move patients until “flu status” is known
- Molecular department under pressure
- Anticipated increase in flu → approached Cepheid (POCT Flu testing)
- Approached NHS Fife Senior Management with proposal

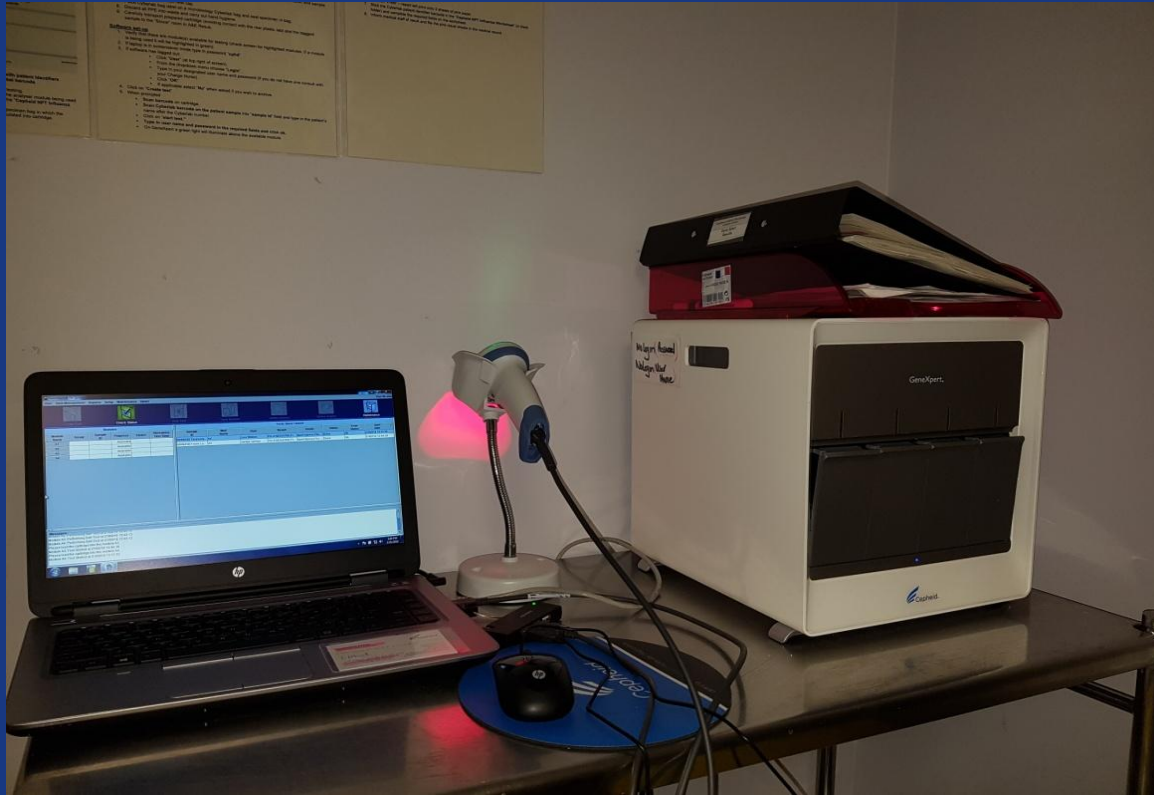
Solution = POCT rapid flu test?

Barriers



- No previous experience of POCT testing – Questions posed...
- Cost – expensive
- Research, procurement and verification = normally lengthy process
- UKAS Accreditation (POCT = ISO 22870)
- Tangible benefits not identified (NHS Scotland not tariff based)
- No real benefit to lab (was not fully POC)
- Extra/less work for staff?

Cepheid GeneXpert in situ



POCT flu testing went live on Friday
12/01/18 at 4pm!



Benefits

- Rapid result:
 - Supports clinical decisions
 - Patient flow
 - Reduction in antiviral prescribing
 - Reduction in terminal scrubs
 - Improved safety
- Value of a negative results
 - = High impact support to A&E and AU
- Reduced pressure on lab

Data – Duplicate testing

- 159 duplicate tested :

2 false positive Flu A

1 false positive Flu B

1 false negative Flu A

1 false negative RSV

1 false positive RSV

= No significant clinical impact on patients

Data

| | Number of samples tested by: | |
|-------------------|------------------------------------|-----------------------------|
| | Lab based Respiratory Viral PCR | POCT GeneXpert rapid Flu |
| 15/12/17-11/01/18 | 935 | N/A |
| Flu A % positive | 38% | N/A |
| Flu B % positive | 4% | N/A |
| RSV % positive | 10% | N/A |
| 12/01/18-22/03/18 | 829 | 657 |
| Flu A % positive | 9% | 12% |
| Flu B % positive | 14% | 17% |
| RSV % positive | 2% | 5% |

Key elements for success

- Effective leadership organisation and commitment
- Team working
- Foresight for requirement of POCT in peak season
- Good communication – verbal and written

Sustainability

- Intangible to tangible evidence
- Now have an existing model for other POCT
- UKAS accreditation for POCT
- Was not fully “POC” (LIMS connectivity required)
- Acceptance to build into future winter planning
- Baseline for future development
- Precedent set to break out of our own silos

Summary...

Fifers don't make a drama out of a crisis!



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