Implementing Rapid Diagnosis of Respiratory Infections in Primary Care: Evaluating the Role of ID NOW Molecular Point-of-care testing in a Pilot Model

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BACKGROUND

In response to NHS England's strategy to improve urgent care delivery in community settings, Symphony Healthcare Services piloted a General Practice Urgent Assessment Service within the South Somerset West Primary Care Network for 19 weeks from January-July 2024[1] ; the multidisciplinary service delivered 1482 appointments to 1351 patients[2] and offered enhanced diagnostics with same-day X-ray, blood gases and ECG. Additionally, in line with the government strategy to combat antimicrobial resistance[3], point of care (POC) respiratory testing using ID NOW™ Instrument was piloted, and evaluated to establish whether POC supports clinical decision making in primary care

METHOD

- Patients with acute respiratory presentations: Influenza A&B and Covid-19 molecular assays
- Patients with sore throat and FeverPAIN score ≥3: throat swab for Group A streptococcus assay
- Mixed methods evaluation undertaken comprising clinician and patient surveys, service data, and stakeholder feedback

TEST	FREQUENCY	PERCENTAGE POSITIVE %
Strep A	97	40
Influenza A	28	14
Influenza B	28	0
Covid-19	15	0

RESULTS

Patient Experience

99% appreciated immediate results, 95% trusted the test outcomes, and 49% felt testing supported appropriate care decisions. One-third of patients indicated they would have otherwise sought further GP appointments or attended emergency departments

Clinician Management Behaviours

ID NOW™ Instrument results influenced treatment decisions in 46% of cases, often altering the initial management plan. Strep A testing was the most frequently used and impactful, particularly during winter outbreaks. Clinicians estimated that among 97 patients tested with ID NOW™ Instrument, 23 were considered to have avoided hospitalisation due to timely intervention

Financial Implications (source: Health Innovation South West)

Molecular POC tests x125 at £26.88 per test: £3360

Saved prescriptions: £434.91

ED attendances avoided: 4 x £291 = £1427

Environmental Impact

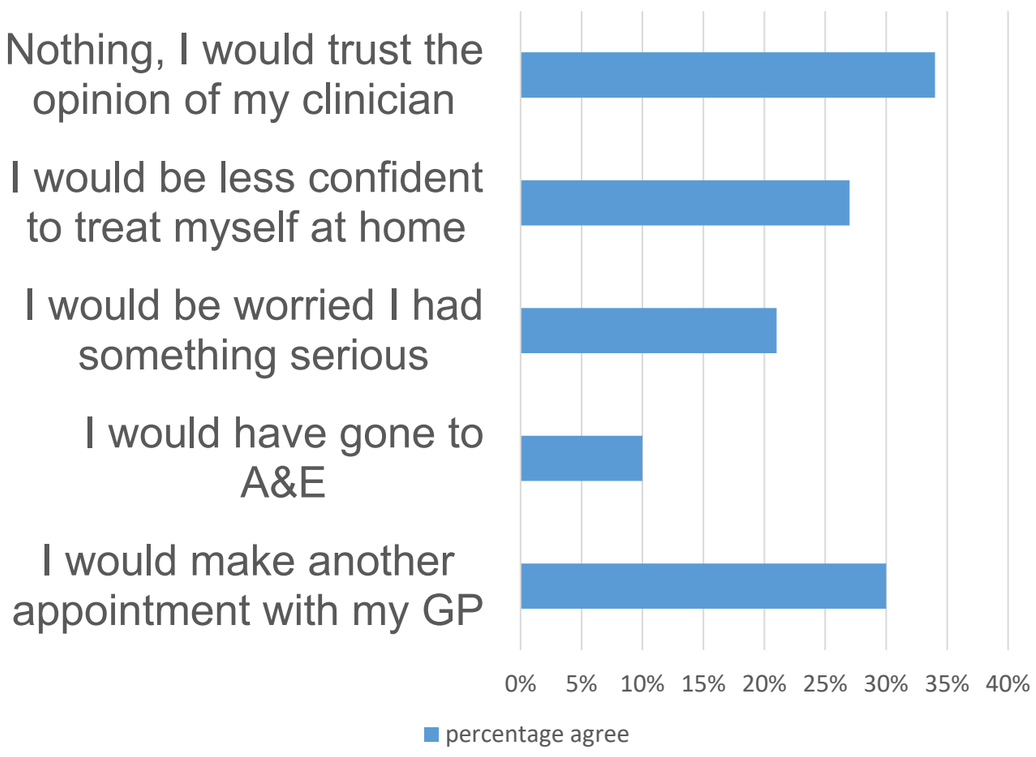
21 unnecessary antibiotic prescriptions avoided, saving 210kg CO_2e[4]

Prevented active drug metabolites entering wastewater

Reduce packaging and waste

Contribute to slowing antimicrobial resistance

Patient view: what they would have done if point of care testing unavailable



CONCLUSIONS

Symptoms of viral and bacterial respiratory infections often overlap, making accurate diagnosis challenging. The integration of ID NOW™ Instrument point of care testing within an acute primary care hub significantly enhanced clinical decision-making, reduced unnecessary antibiotic use, and potentially prevented emergency department attendance

The rapid turnaround of results supported timely and appropriate care, improved patient confidence, and contributed to system efficiency

These findings highlight the value of deploying rapid diagnostic tools such as ID NOW™ Instrument in community urgent care settings to improve outcomes and reduce pressure on secondary care services

REFERENCES

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