Sore Throat Test & Treat Service

NHS Innovation Accelerator
What is the Sore Throat Test & Treat Service?

• The Sore Throat Test & Treat Service is designed to support with the diagnosis and treatment of sore throats in the pharmacy using point of care testing coupled with the appropriate provision of antibiotics via a Patient Group Direction (PGD)

• A study conducted in 2007 estimated that there are 1.2 million GP appointments for sore throats in England each year\(^1\). Research shows that approximately 60\(^%\)\(^2\) of these result in the prescribing of antibiotics. Our pilot found that only 10\(%\)\(^3\) of patients who accessed the service tested positive for Streptococcus A (Strep A) and therefore antibiotics would be an appropriate treatment option.

• Such a service could play a significant part in reducing the pressure to prescribe antibiotics, helping to reduce the emergence of resistance, and further the aims of antibiotic control programmes. The service would create quick and easy access to care from a trained healthcare professional, which could reduce pressure on GP workload

Aims of the Sore Throat Test and Treat Service (STTT)

The STTT service was developed with the input and advice from a clinical advisory board (doctors, pharmacists) as well as a consultant microbiologist.

The objectives were to:
- Provide access to timely and appropriate treatment and advice
- Reduce the number of people seeking GP appointments for sore throats and the number of people prescribed antibiotics
- Deliver a high quality service that is easily accessible.
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• An NHS England initiative delivered in partnership with all 15 Academic Health Science Networks across England and hosted at UCLPartners

Selects
• Best in world, evidence based innovations ready to scale

Recruits
• Highly skilled, passionate individuals able to lead innovation(s) nationally and internationally

Offers
• Bespoke, tailored support to enable innovations to spread rapidly
The pharmacy network – accessible to patients

84%

of adults visit a pharmacy at least once a year\(^1\)

1.6m

visits take place daily, of which 1.2 million are for health-related reasons\(^1\)

14

The average number of times adults in England visit a pharmacy each year\(^2\)

89%

of the population live within a 20 minute walk of a community pharmacy, which is 4.4% higher compared to GP practice\(^3\)

99.8%

of people who live in the most deprived areas have access to a pharmacy within a 20 min walk\(^3\)

“What will be different for me”

• **Patients** - If I’ve got a sore throat I’ll go to the pharmacy, they’ll test me if necessary and offer me appropriate treatment and/or advice

• **Doctors** – I’ll only see patients with severe sore throat and/or complications – I’m not wasting my time

• **Pharmacists** – I’m providing a quality clinical service to patients, and taking pressure off colleagues elsewhere in the NHS system

• **Commissioners** – I’m spending taxpayers’ money wisely on a cost effective, quality service for the population I serve. I am also diverting demand away from GP surgeries, that I know are under a lot of pressure.
Current patient pathway

Patients with sore throat symptoms → GP

1.2m¹

GP → Community pharmacy

Symptomatic treatment & advice provided → Antibiotics dispensed

0.75m²


Future patient pathway

Patients with sore throat symptoms

GP

Community pharmacy

Symptomatic treatment & advice provided

Antibiotics supplied only where necessary

*complications / severe symptoms

Patient journey: the service includes 3 main steps

1. Patient with sore throat symptoms seeks advice at the pharmacy counter
2. Symptoms of bacterial throat infection are evaluated using a recognised clinical assessment
3. Depending on the results of the clinical assessment, the patient is offered the throat swab test

Where the throat swab test is not offered, patient is given OTC advice or referred to GP if appropriate.

- **Throat swab test:** Rapid Antigen Test to detect Strep A bacteria
  - **Positive:** Bacteria present
    - Pharmacist offers antibiotic via PGD, advice, and/or OTC products as appropriate
  - **Negative:** Probable viral infection
    - Self-help advice and OTC recommendations only
Pilot Results\textsuperscript{1}

- 367 patients from 35 pharmacies in London and Leicestershire had initial Centor questions
- The service was effective in narrowing antibiotic use to <10% of those presenting and most of those were young adults
- Of those patients that responded, 92% would be likely or extremely likely to recommend the service to friends and family

\begin{itemize}
  \item 367 patients had initial Centor questions
  \item 41% (149 patients) had a throat swab test
  \item Overall rate of positive Strep A test: 10% (36 patients)
\end{itemize}

Commissioning

- We would look for the service to be commissioned to any community pharmacy within a locality, in order that the correct level of coverage can be provided.
- The cost of the service is around £20 on average per patient, dependant upon commissioning specifics and volumes.
- We have developed all of the training and implementation protocols required to get the service up and running with minimal need for local adjustments.
- There is a requirement for some training of pharmacists and pharmacy assistants.
- We see this service as a natural complement to current services commissioned to community pharmacy, specifically locally commissioned Minor Ailments Services.
For more information

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GP pressure around prescribing antibiotics for sore throat

- Analysis of data from between 1999 to 2011, published in 2014, looking at prescribing data for sore throats across 537 GP practices in the UK, found that¹:
  - Antibiotics were prescribed in around 60% of cases from 1999 to 2011¹

- Of 1,767 participants in the English Capibus Ipsos MORI survey²:
  - 25% reported having a sore throat in the last 6 months up to January (sore throat season)²
  - 26% reported asking their GP or nurse for an antibiotic in the previous year (for any condition), and almost all of these (97%) were prescribed one²

The UK 5 year antimicrobial resistance strategy recognises the role of point-of-care diagnostics to identify where antimicrobials are required, as well as to reassess the appropriateness of the diagnosis and treatment.³

Pilot Method

- 20 community pharmacies in central London (from Oct 2014) and 15 across Leicestershire (from January 2015) to April 2015 provided the service.
- Trained pharmacy staff assessed the patient’s presenting condition using the Centor scoring system\(^2\) followed by a point of care (POC) test where appropriate.
  - Centor is a 4-point validated method that helps to identify likelihood of bacterial infection in adults with a sore throat.
- A throat swab was taken from patients meeting 3 or all 4 Centor criteria.
- The swab was tested for group A streptococci using the OSOM® Strep A Test (5 minute results, 96% sensitivity; 98% specificity).
- Antibiotic provided under a PGD.
  - First choice - phenoxy methylpenicillin tablets (500 mg four times a day for 10 days)
  - Or clarithromycin tablets (250 mg twice daily for 5 days).

**Pilot Results**

**Hard to reach groups:**

- Men in the 35–44 year group were heavily represented yet are the group most difficult for primary care services to reach.

- Patients from the least deprived areas (Carstairs -4 to -1) represented over half (76/137, 55.5%) of patients paying for the service and 75/202 (37.1%) of patients accessing the non-payment component.

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Potential Public Health Impacts

- The principal benefit of this type of service would be in saving unnecessary antibiotic usage in potentially large numbers of community patients.
- The service demonstrated that around two-thirds of patients who would have seen their GP did not need to do so.
- If this was extrapolated to the 1.2 million consultations that GPs see annually for sore throats, then an additional 800,000 patients could be potentially seen within community pharmacy.
- Such a service could help reduce the emergence of resistance.
- Looking at only those who were not showing signs of a bacterial infection (Centor score 1 or 2), about half would have gone to the GP if the service hadn't been available.