

Strep A (group A streptococcus) testing for sore throats

A training package for community pharmacists and their teams on:

- Testing for the presence of Strep A in patients presenting with sore throats
- The management of sore throats

Antibiotic resistance

“Antibiotic treatment based only on positive rapid test or throat culture results can reduce unnecessary use of antibiotics for treatment of pharyngitis [sore throat]”¹

- Research has found that patients associate antibiotics with having a ‘real illness’ and that they look up symptoms before a GP consultation so they know what to say to get antibiotics²
- 25,000 people die every year across Europe from infections resistant to antibiotics³
- There have been no new classes of antibiotics in 30 years³

References

1. McIsaac WJ *et al.* Empirical validation of guidelines for the management of pharyngitis in children and adults. *JAMA*. 2004;**291**:1587-1595
2. Wellcome Trust. Exploring the Consumer Perspective on Antimicrobial Resistance 2015. Available at: www.wellcome.ac.uk/stellent/groups/corporatesite/@policy_communications/documents/web_document/wtp059551.pdf Access date: August 2016
3. Public Health England. Protect yourself, your family and friends against the spread of antibiotic resistance. Become an Antibiotic Guardian Version 2, last updated September 2015. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/465963/AntibioticGuardian_3-fold-leaflet_FINAL.pdf. Access date: August 2016

Sore throat – facts and figures

90% of sore throats resolve without antibiotics¹

- Patients with sore throats commonly visit their GP¹ and around 1.2m consultations a year are for sore throats²
- In a study of treatment of acute pharyngitis in 537 GP practices in England, antibiotics were prescribed in 62% of cases, despite usually resolving with no intervention¹
- In a survey of 1,767 people, 58% of respondents had had a respiratory infection in the past six months³
- Strep A are bacteria that can be treated with antibiotics⁴
- Strep A causes 15-30% of sore throats in children and 5-15% in adults⁴

References

1. Hawker JJ, *et al.* Trends in antibiotic prescribing in primary care for clinical syndromes subject to national recommendations to reduce antibiotic resistance, UK 1995-2011: analysis of a large database of primary care consultations. *J Antimicrob Chemother* 2014;**69**:3423–3430
2. Proprietary Association of Great Britain. Making the case for the self care of minor ailments. August 2009. Available at: <http://www.selfcareforum.org/wp-content/uploads/2011/07/Minorailmentsresearch09.pdf>. Access date: September 2016
3. McNulty C *et al.* Have the public's expectations for antibiotics for acute uncomplicated respiratory tract infections changed since the H1N1 influenza pandemic? A qualitative interview and quantitative questionnaire study. *BMJ Open* 2012;**2**:e000674
4. Kalra M G *et al.* Common questions about streptococcal pharyngitis. *Am Fam Physician* 2016;**94**(1):24-31

Centor score

The Centor score can be used to identify patients who may have a Strep A throat infection^{1,2}

Table: Centor score¹

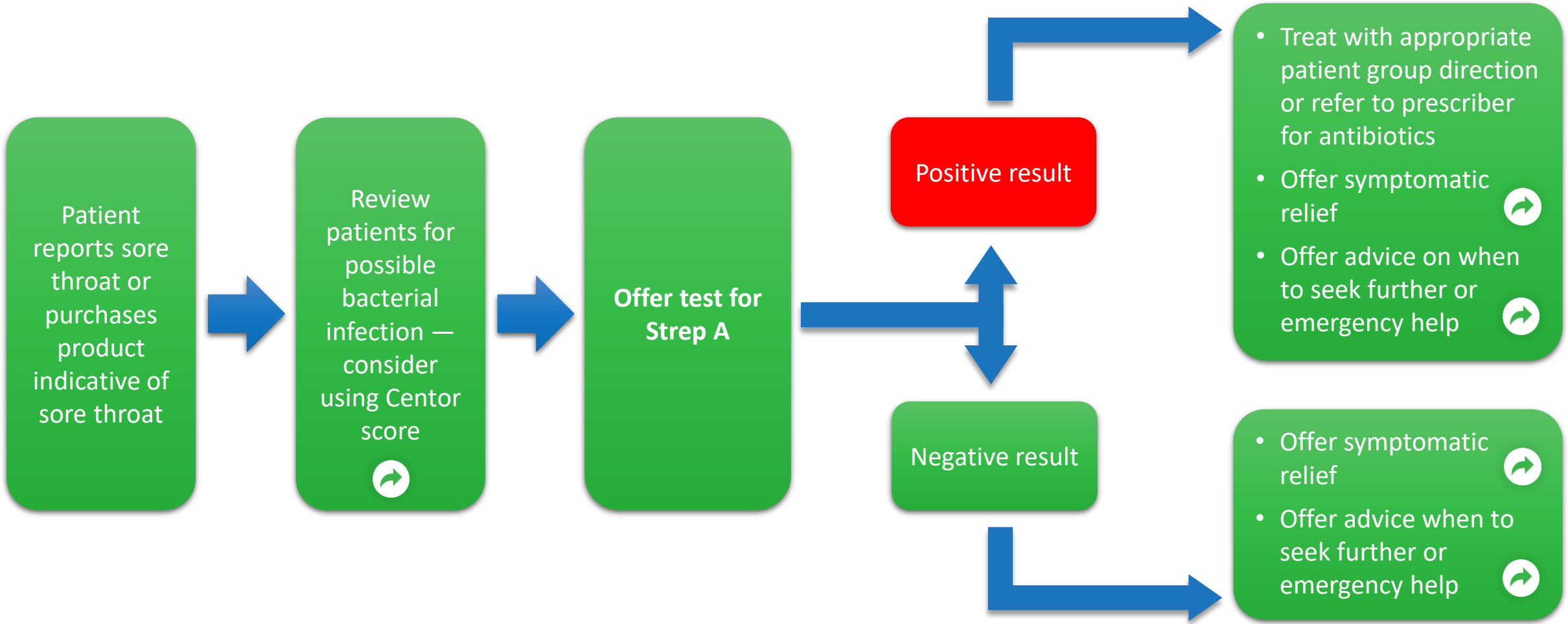
Criteria	Points
Tonsillar exudates	1
Tender anterior cervical adenopathy	1
Absence of cough	1
History of fever (>38.0C)	1

- Patients receive a point if the criteria described is met¹
- The points are added up to give a patient an overall score of 0 and 4¹
- A score of 3-4 suggests that the person may have Strep A (40-60% chance) and benefit from antibiotic treatment²

References

1. Aalbers J *et al.* Predicting streptococcal pharyngitis in adults in primary care: a systematic review of the diagnostic accuracy of symptoms and signs and validation of the Centor score. *BMC Medicine*. 2011;9:67
2. NICE CKS. Sore Throat – acute. Last revised July 2015. Available at: <http://cks.nice.org.uk/sore-throat-acute>. Access date: August 2016

Patient presenting with sore throat



Pharmacy-based Strep A testing

Pharmacy-based Strep A testing could reduce the number of GP appointments for sore throats¹

In a trial of pharmacy-based Strep A testing:¹



Of **367** patients reporting to a pharmacy with a sore throat, **149** were eligible for throat swab testing



24.2% of those swabbed tested positive for group A streptococci



43.7% (n=222) of patients suffering from a sore throat would have visited their GP had the pharmacy service not been available

Reference

1. Thornley T *et al.* A feasibility service evaluation of screening and treatment of group A streptococcal pharyngitis in community pharmacies. *J Antimicrob Chemother* 2016;doi:10.1093/jac/dkw264

Efficiency of the OSOM[®] Strep A test

The OSOM[®] Strep A test is a quick acting test with high specificity¹

- Conventional identification procedures for Strep A take 24 to 48 hours or longer²
- The OSOM[®] Strep A test detects viable or non-viable organisms directly from a throat swab, providing results within 10 minutes¹
- The OSOM[®] Strep A test has a specificity of 97.8% compared with positive culture tests (95% CI 96.6-99.0%)¹

References

1. Sekisui diagnostics. Osom Strep A Test 141E information leaflet 2015
2. Spellerberg B. *et al.* Laboratory Diagnosis of Streptococcus pyogenes (group A streptococci) 2016

Conducting the OSOM[®] Strep A test¹

The test involves taking a swab of mucus from the back of a persons throat

- 1 Take swab from the tonsils and/or back of the throat (avoid teeth, gums, tongue or cheek surfaces).
- 2 Add three drops of Reagent 1 (pink) and Reagent 2 in to the test tube (the solution should turn light yellow).
- 3 Place swab in the tube immediately and vigorously mix the solution by rotating the swab forcefully against the swab at least ten times.
- 4 Let tube stand for one minute.
- 5 Express as much liquid as possible from the swab by squeezing the sides of the tube as it is withdrawn.
- 6 Place the absorbent end of the test stick in the sample in the tube and leave for five minutes.
- 7 Read the results.

References

1. Sekisui diagnostics. Osom Strep A Test 141E information leaflet 2015

Results of the OSOM[®] Strep A test¹

Positive



Negative



References

1. Sekisui diagnostics. Osom Strep A Test 141E information leaflet 2015

Offer symptomatic relief

A number of over-the-counter medicines can help relieve a sore throat

- Taking paracetamol and ibuprofen for the pain¹
- Lozenges or pastilles
- Anaesthetic throat sprays
- Linctus
- Drinking plenty of cool or warm fluids (not hot drinks)¹
- Eating cool, soft foods¹
- Avoiding smoking and smoky places¹
- Gargling salty water¹



Reference

1. NHS Choices. Sore Throat. Last reviewed July 2016. Available at: <http://www.nhs.uk/conditions/Sore-throat/Pages/Introduction.aspx#treatment>. Access date: August 2016

Offer advice on when to seek further help

Most patients with a sore throat have self limiting infections. Consider referring patients if they have the following:¹

- Severe symptoms
- Symptoms that last longer than a week
- Frequent infections that lead to a sore throat
- Patients with a compromised immune system (e.g. those with HIV or on chemotherapy)

Reference

1. NHS Choices. Sore throat. Last reviewed July 2016. Available at <http://www.nhs.uk/Conditions/Sore-throat/Pages/Introduction.aspx>. Access date: August 2016

Offer advice on when to seek emergency help¹

Very rarely, a sore throat can be a sign of a serious problem. Refer patients to emergency services if they have the following:

- Severe symptoms that are getting worse
- Difficulty breathing
- Stridor (high-pitched sound while breathing)
- Difficulty swallowing
- Drooling

Reference

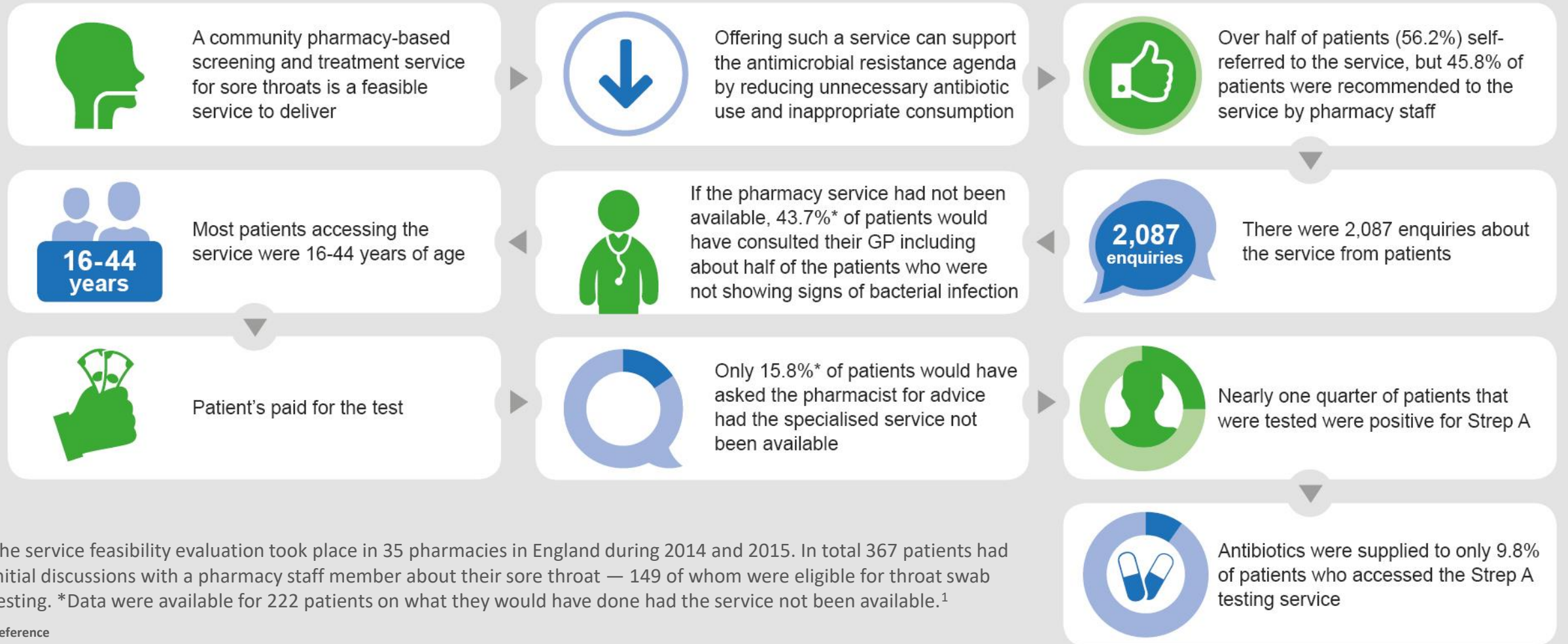
1. NHS Choices. Sore throat. Last reviewed July 2016. Available at <http://www.nhs.uk/Conditions/Sore-throat/Pages/Introduction.aspx>. Access date: August 2016

Community pharmacy and sore throats

- Community pharmacy teams can reduce pressure on GPs by offering tests for Strep A throat and advising on the self care of sore throats
- Testing for Strep A could reduce unnecessary antibiotic use
- Pharmacy staff can help patients manage their sore throat with appropriate self care advice and the sale of suitable products

Why do Strep A testing in community pharmacies?

A service feasibility evaluation in 35 pharmacies in 2014 and 2015



The service feasibility evaluation took place in 35 pharmacies in England during 2014 and 2015. In total 367 patients had initial discussions with a pharmacy staff member about their sore throat — 149 of whom were eligible for throat swab testing. *Data were available for 222 patients on what they would have done had the service not been available.¹

Reference

1. Thornley T *et al.* A feasibility service evaluation of screening and treatment of group A streptococcal pharyngitis in community pharmacies. *J Antimicrob Chemother* doi:10.1093/jac/dkw264

Connect2Pharma

Connect2Pharma provides a unique portal that allows healthcare companies to support community pharmacies directly in the delivery of advanced clinical services.

The portal is built based on **'Parcels of Care'**.

A **Parcel of Care** may contain any or all of the following elements:

- Diagnostic test that can be performed in the pharmacy or by the patient in their own home
- Chargeable professional services
- Enhanced retail opportunities (driving link sales)

All are supported by pharmacy materials to promote the services and a suite of education materials to train pharmacy staff.