What is the clinical and cost effectiveness of rapid antigen detection tests (RADTs) for Group A Streptococcal (GAS) infection in patients with acute sore throat in primary care?

**What is sore throat?**

Sore throat is a common condition and, in most cases, is due to a virus which means that antibiotics will not be helpful.

For people with particular bacteria causing their sore throat, antibiotics may be helpful in reducing symptoms and preventing complications.

**What are RADTs?**

It is important that antibiotics are used only when they are likely to be of benefit, so this advice statement looks at whether a test can help decide whether antibiotics may be needed.

Rapid antigen detection tests aim to identify those patients with sore throat who have Group A Streptococcal infection and may require an antibiotic.

The test involves the healthcare professional taking a throat swab. Results are available in about 5 minutes.

**What we did**

We looked for studies which measured the accuracy of the tests and also studies which measured whether using the tests as part of assessing patients led to fewer patients having antibiotics for sore throat.

**What we found**

One major study from the UK found that the use of a test in the GP practice was helpful in reducing antibiotic use by patients with particular symptoms when compared with usual care of offering a prescription to be collected if symptoms got worse.
However, in this particular study, the effect was no better than using a formal checklist of symptoms called FeverPAIN and, as the test cost more, it was not good value for money.

Patients found the test reassuring and feedback from healthcare practitioners was generally positive.

**What is our advice to NHSScotland?**

The use of RADTs reduces rates of antibiotic prescribing but, based on one study in a relevant UK context, these tests are not likely to be best value for money when compared with the use of existing symptom checklists to identify patients most likely to benefit from antibiotics.

**Future work**

Since most cases of sore throat are straightforward and get better without any treatment it is important to investigate if having such tests available would result in more people believing that they need to see a healthcare professional for every episode of this illness.

This plain language summary has been produced based on SHTG Advice Statement 011-18 (August 2018)