Managing Common Infections

Consultation on draft guideline – Sore throat (acute): antimicrobial prescribing

18/07/17 - 14/08/2017

Stakeholder comments table

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
British Infection Association	Visual summary	general		It is unclear to me what this means: Attending rapidly (3 days or less) On looking it up I see it is presenting within 3 days but that is not clear on the document.	*Thank you for your comment. This has been amended to 'Attend rapidly (within 3 days after onset of symptoms)', which is in line with the terminology used in Little et al 2013.*
British Infection Association	Draft guideline	5	16	Attend rapidly (rather than attending rapidly on the visual summary) is used here and again is unclear what this means exactly.	*Thank you for your comment. This has been amended to 'Attend rapidly (within 3 days after onset of symptoms)', which is in line with the terminology used in Little et al 2013.*
British Infection Association	Draft guideline	general		We are surprised that there is no section on diagnostics or consideration of the role of throat swab or other tests in management of sore throat. It would be useful to have some opinion on need for/or not and the indication for throat swab.	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.
British Infection Association	Visual summary	general		There is no mention of features of epiglottitis in the "referral to hospital" section of the flow-chart	*Thank you for your comment. The committee discussed this term and agreed that clinicians should be aware that this is a medical emergency and should be aware of how to manage these people in practice. The committee advised that this term did not need to be included in the guideline.*
British Infection Association	Both documents	general		In general the BIA supports this guideline.	*Thank you for your comment.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	1	Self-care box	I am concerned about the wording 'no evidence for non-medicated lozenges'. Is there actually no evidence of an effect, or is it that no studies were found? If the latter, suggest rewording for clarity to 'no studies found'. If the former, suggest 'no evidence of effect was found'.	*Thank you for your comment. The wording in the visual summary has been amended to reflect your comment. The wording is aligned with that in the guideline.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	1	Bacterial cause box on far right	Suggest moving to within FeverPAIN score, and rewording as 'likelihood of bacterial infection with streptococci', as does not only test for Group A streptococci.	*Thank you for your comment. The visual summary has been updated and this box deleted. The guideline has been updated to include the Centor scoring system and the visual summary updated to accommodate this change.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	1	Score 4-5	Instead of suggesting immediate antibiotic, suggest 'immediate antibiotic, if severe symptoms, or 48 hour delayed antibiotic, if less severe symptoms'.	*Thank you for your comment. The recommendation wording has been amended to allow a back-up prescription for people with this score:*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				This recommendation is in line with how Dr Michael Moore actually recommends the FeverPAIN score is used.	*'Consider an immediate antibiotic prescription, or a back-up antibiotic prescription with advice.'*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	1	Evidence on antibiotics	It is currently stated that there is 'little difference to how long symptoms last'. I think it should be stated how much this 'little difference' is. Specify how much pain is reduced by.	*Thank you for your comment. Variability in studies in how pain was reported, and the highly subjective nature of pain prevents a meaningful estimate of improvement being made.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	2	Antibiotic choice	Why is the first-line antibiotic listed as Penicillin V instead of its generic name of phenoxymethylpenicillin? Phenoxymethylpenicillin is what is usually specified on prescriptions, and use of this term should avoid any confusion.	*Thank you for your comment. The wording has been changed to phenoxymethylpenicillin following your comment.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Sore throat (acute): antimicrobial prescribing – summary	2	Antibiotic dose	There seems to be a lack of consistency with the evidence presented in the antibiotics section. 1. Penicillin V is not recommended as a BD dose as well as a QDS dose, even though there is evidence for it from Lan et al, 2000. 2. In contrast, a BD dosing regimen for erythromycin in pregnancy is recommended when there is no quoted evidence for it? This appears to be a lack of consistency, against the evidence.	*Thank you for your comment. This was discussed further by the Committee who considered the evidence from the Lan study and the difficulties some people may have talking an antibiotic four times daily. The recommendation has been amended to include twice daily dosing of phenoxymethylpenicillin. The committee discussed that the BNF gives twice daily dosing as an option for erythromycin, and that the SPC simply states 'in divided doses'.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Guideline	5	9	The FeverPAIN score is validated in children 3 years and over. This has not been made clear in the guidelines. Younger children are **less likely** to have a bacterial aetiology and are **less likely** to	*Thank you for your comment. The committee discussed the risks of complications, noting that in developed countries the risk is very low, and there is no evidence that antibiotic treatment reduces the risk of complications. The committee agreed that the goal of*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				develop complications (and are thus less likely to require Abs – the use of the FeverPAIN guidelines may result in overuse of Abs in children under 3 years of age. Unfortunately, there is no validated scoring system available for this age group.	*treatment with antibiotics is to reduce duration of illness. No evidence was found that suggested bacterial infections were less likely in the very young. The committee also noted that communication challenges in children aged less than 3 make the accurate use of clinical scores difficult. The guideline cross-refers to the NICE guideline on managing fever in the under 5s.*
The British Society for Antimicrobial Chemotherapy (BSAC)	Guideline	4	1	We are concerned about the paediatric Ab recommendations for 3 reasons – i) the suspension is often poorly tolerated by children due to its taste, ii) adherence with a 4 times per day regimen is poor and iii) adherence with a 10 day Ab course is poor (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3669002/) We would like the GDG to consider the use of a better tolerated antibiotic in children unable to swallow tablets – amoxicillin is far better tolerated than pen V. Pen V tablets would be fine for children able to swallow tablets. However, we would also like the GDG to consider proposing a bd dosing regimen rather than a qds dosing regimen (Amoxicillin 40mg/kg twice daily suspension or for children able to swallow tablets; if age 6-12 years, **penicillin V** 500mg twice daily; if age >12 years, **penicillin V** 1 g twice daily) We would also like the GDG to consider proposing a shorter length of treatment in a area with	*Thank you for your comment. This was discussed further by the Committee, who agreed that phenoxymethylpenicillin can be given twice daily, and a duration of 5-10 days should be recommended (see recommendation 1.3.1).* *Regarding amoxicillin - a key aim in developing these guidelines is to reduce the risk of antimicrobial resistance – one way is to use of narrow spectrum antibiotics. Phenoxymethylpenicillin has a narrower spectrum of activity compared with amoxicillin, and more clinical trials in sore throat have used penicillin. The inclusion of twice daily dosing should help children take this antibiotic.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				extremely low rates of rheumatic fever - (http://www.cochrane.org/CD004872/ARI_the-effect-of-short-duration-versus-standard-duration-antibiotic-therapy-for-streptococcal-throat-infection-in-children)	
ENT UK	Consultation document	General	General	Concise Easily accessible	*Thank you for your comment.*
ENT UK	Consultation document	Hospital box	General	I would like to see a separate hospital box for absolute indication for referral to hospital – deterioration of condition resulting in sore throat associated with stridor or respiratory difficulty. This might seem an obvious action, but I think it is important to include it in the guidelines.	*Thank you for your comment. This was discussed further by the Committee, who felt such additional advice was not required as clinicians are expected to use their clinical judgement when implementing the guideline in practice.*
ENT UK	Consultation document	1	General	In addition to advice for immediate referral in acute stage, a box could recommend consideration of outpatient referral for consideration of tonsillectomy in recurrent cases. SIGN guidelines widely followed – reference could be put in on page 2 in same way as BNF references have been used	*Thank you for your comment. The guideline is only looking at acute sore throat and not recurrent or chronic episodes. Evidence for recurrent sore throat has been excluded. The guideline is focussing on managing common infections to reduce antimicrobial resistance and are not intended to cover the full pathway for managing sore throat (all causes) and all management options.*
ENT UK	Guidelines			I think these are very useful and well written guidelines for management of acute sore throat. There is no mention of recurrent acute sore throat and indications for surgery which are well described in the SIGN guidelines and could be referenced in a paragraph. Tonsillectomy has potential to reduce prescribing significantly.	*Thank you for your comment. The guideline is only looking at acute sore throat and not recurrent or chronic episodes. Evidence for recurrent sore throat has been excluded. The guideline is focussing on managing common infections to reduce antimicrobial resistance and are not intended to cover the full pathway for managing sore throat (all causes) and all management options.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
MSD Ltd				No comment	*Thank you for your response.*
NHS England				5) Diagnostic testing – this is not listed at all. There are several good rapid POCT for GAS detection and these may be of value in recurrent presentation, healthcare and community settings in which multiple cases are suspected. Culture and identification and ascertainment of antibiotic sensitivity is not mentioned	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.*
NHS England	General			**NICE Sore throat comments** 1) FeverPAIN – evidence of appropriate use for those under 5 years of age?	*Thank you for your comment. The RCT involving FeverPAIN included participants aged 3 and over. This was discussed further by the Committee, who agree that the study supported use of FeverPAIN in children aged 3 and over. The committee noted that Centor has not been validated in a paediatric population.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
NHS England				2) Treatment of sore throat cases with concurrent scarlet fever or invasive Group A Strep (GAS) within household or setting not considered or detailed	*Thank you for your comment. This was discussed by the Committee and the guideline amended to include scarlet fever as differential diagnosis. The treatment of scarlet fever or invasive group A strep is outside the scope of this guideline.*
NHS England				3) Link to invasive GAS guidance is not included	*Thank you for your comment. It is not clear which GAS guidance you are referring to.*
NHS England				4) If acute sore throat and Health care worker - query treat with antibiotics immediately and exclude from work for 24 h to prevent vulnerable patients – this is not listed and is important to prevent HCAI infections.	*Thank you for your comment. This was discussed by the Committee, who noted that approximately 20% of the general population are asymptomatic carriers of group A streptococcus, and that incubation period for tonsillitis/sore throat is between 2-4 days, meaning a person is contagious before they have symptoms The Committee agreed that routinely treating this population would not represent good clinical practice nor support the drive to reduce the inappropriate use of antibiotics to reduce antimicrobial resistance.*
NHS England	Guideline https://www.nice.org.uk/guidance/GID-APG10000/documents/draft-guidance **People with a sore throat caused by a streptococcal bacterial infection are more likely to benefit from**			• Use of rapid POCT or culture for strep are more likely to accurately identify strep A infection than a scoring system and the latter is not listed at all.	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
	antibiotics. Clinical scoring systems can help to identify people who are more likely to have a bacterial infection.				*guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.*
NHS England	Guideline **Withholding antibiotics is unlikely to lead to complications.**			• We have had unprecedented levels of scarlet fever in recent years and invasive infections with strep can be severe and fatal. The reduction in treatment for sore throat with strep infection may have a community affect resulting in an increased disease burden and increase in invasive disease. Strep can be carried asymptomatically – this may not result in high disease burden for the carrying individual but may result in increased onward transmission and further cases. The burden on community of infection is not considered, nor is the burden to cohabiting family members (elderly, new mums and infants at risk of severe infection). • What proportion of real strep cases in children will trigger the FeverPAIN scoring system?	*Thank you for your comment. This was discussed further by the Committee. Scarlet fever has been added to the guideline as a differential diagnosis. The Committee discussed the rates of group A streptococcus carriage across the general population and the incubation period for a streptococcal infection. The Committee agreed that routinely treating people with cohabiting family members at risk of infection would not represent good practice nor support the drive to reduce the inappropriate use of antibiotics to reduce antimicrobial resistance.* *The Committee noted that the RCT that looked at FeverPAIN included children aged 3 years and over. No studies were identified that reported FeverPAIN scores by that age group.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
NHS England	**People who are unlikely to benefit from an antibiotic (FeverPAIN score of** 10 **0 or 1) People who may be more likely to benefit from an antibiotic (FeverPAIN** 10 **score of 2 or 3)**			• What about Health care workers or contacts with invasive infection cases? – suggest addition to the following	*Thank you for your comment. The Committee discussed the rates of group A streptococcus carriage across the general population and the incubation period for a streptococcal infection. The Committee agreed that routinely treating this population would not represent good practice nor support the drive to reduce the inappropriate use of antibiotics to reduce antimicrobial resistance.*
NHS England	Guideline			**People who are systemically very unwell, have symptoms and signs of a more serious illness or condition, or are at high-risk of complications, are healthcare workers or contacts of known invasive GAS case**	*Thank you for your comment. The Committee discussed the rates of group A streptococcus carriage across the general population and the incubation period for a streptococcal infection. The Committee agreed that routinely treating this population would not represent good practice nor support the drive to reduce the inappropriate use of antibiotics to reduce antimicrobial resistance.*
NHS England	Guideline **Complications of sore throat caused by a GABHS infection are generally 15 rare in adults and children. Complications**			• Complications listed are not comprehensive, do not include scarlet fever, invasive infection, severe streptococcal infection. Line 29 – suggest consider recent data by Mearkle et al., 2017 on NNT with invasive infection and contacts	*Thank you for your comment. This was discussed further by the Committee.* *Scarlet fever has been added to the guideline as a differential diagnosis* *The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
	can be suppurative (including 16 quinsy [peri-tonsillar abscess], acute otitis media and acute sinusitis) or 17 non-suppurative (including acute rheumatic fever and acute 18 glomerulonephritis; European Society for Clinical Microbiology and 19 Infectious Diseases Sore Throat Guideline).			• Diagnostic testing – this is not detailed appropriately. There are several good rapid POCT for GAS detection and these may be of value in recurrent presentation, healthcare and community settings in which multiple cases are suspected. Culture and identification and ascertainment of antibiotic sensitivity is not mentioned and may be clinically useful in cases of recurrent acute sore throat • The number of recurrences and recommendations for tonsillectomies are not listed.	*this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.* *A link to the NHS England Interim Clinical Commissioning Policy on tonsillectomy has been added to the evidence review.*
NHS England	Evidence review https://www.nice.org.uk/guidance/GID-APG10000/documents/evidence-review			• Safety netting does not link to invasive disease or mention household/community contacts with iGAS Laboratory testing of throat swabs and determination of sensitivity is not listed even	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				for cases not responding to treatment and with documented resistance in GAS.	*this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.* *iGAS is outside the scope of this guideline on acute sore throat. A link to the PHE GAS page has been added to the background in the evidence review.*
Neonatal and Paediatric Pharmacists Group (NPPG)	General	General	General	NPPG welcomes the development of this guidance as an important step in reducing unnecessary prescribing of antimicrobials for throat infections.	*Thank you for your comment.*
Neonatal and Paediatric Pharmacists Group (NPPG)	Guideline	17	box	The current BNFC suggested course length for clarithromycin or erythromycin is 10 days (https://bnfc.nice.org.uk/treatment-summary/oropharyngeal-bacterial-infections.html). If the evidence reviewed by the committee suggests that a 5 day course is	*Thank you for your comment. NICE agrees that consistent messages are needed for related guidance. NICE and the BNF/BNFC are working together to ensure information is consistent between the 2 organisations going forward.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				sufficient for clarithromycin and erythromycin, NPPG would be keen to see a consistent evidence-based recommendation on course length across these NICE guidelines and the BNF / BNFC of 5 days.	
Neonatal and Paediatric Pharmacists Group (NPPG)	Visual summary	General	General	Question 4. The visual summary is clear and concise. As a busy healthcare professional I like to be able to glance quickly at this sort of document to find the information I need. I feel that there is sufficient information for a healthcare professional to follow through the recommendations. Technical medical terminology (e.g. coryza) is used in the visual summary which may make it less understandable for members of the public.	*Thank you for your comment. The term coryza has been defined in the guideline and the visual summary. The visual summary is aimed at prescribers although it may be useful to help in discussions with the person about their treatment options.*
NHS Sheffield CCG	Guideline	1	10	With reference to 'FeverPAIN' The consultation recommends the use of FeverPAIN to assess the sore throat and whether or not the symptoms merit the use of antibiotics. However, NICE CKS still refers to the use of the traditional CENTOR score for this purpose. I would call for a consistent national approach to the assessment of sore throat to avoid any confusion.	*Thank you for your comment. NICE is working with the clinical knowledge summaries developer to ensure they are updated to reflect the latest NICE guidance when published.* *Following further discussions the committee has agreed that Centor and FeverPAIN should be included in the guideline.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Royal College of General Practitioners		**General**:		This is a sensible piece of guidance and is clear with good evidence to support its recommendations. The advice is clearly aimed at reducing inappropriate prescribing of antibiotics. This will give GPs (particularly newer/younger GPs and GP Registrars) much needed support for withholding antibiotics when they are unlikely to help. The delayed script guidance is clear and sensible and will reduce prescribing.	*Thank you for your comment. This is helpful in supporting our novel approach to presenting the guideline recommendations.*
Royal College of General Practitioners		**General**:		**The use of throat swabs** are not mentioned in this guidance at all. If the committee do not feel that they have a role to play in identifying those for whom an antibiotic may help it would be helpful to state this explicitly. This would reduce potential costs.	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					looking at diagnostic tests for streptococcal sore throat.
Royal College of General Practitioners		**General**:		Some GPs are concerned that in some quarters the Feverpain score has resulted in automatic antibiotic prescription. This is a self-limiting condition and treatment just reduces pain for a couple of days - this has to be set against the enormous problems of antibiotic resistance. There is a strong argument to say that we should not use antibiotics except if the person is systematically unwell, because of the risk of antibiotic resistance. For example, this sort of scheme https://www.theguardian.com/commentisfree/2016/nov/15/sore-throats-pharmacies-nhs seems to think it is evidence based - but the antibiotic take up was enormous. There are concerns **that the protocolisation of risk management will make for thoughtless prescribing**. Some GPs feel **the guidance should strongly discourage automatic prescribing for high fever pain scores and should see prescribing as the exception and not the rule, even with strep infections.**	*Thank you for your comment. We agree with your comments that this is a self-limiting infection and we are aiming to minimise the use of inappropriate antibiotics. A key message in the recommendations is that 'symptoms can last for around 1 week – most people will get better within this time without treatment, regardless of cause (bacteria or virus).' The committee was aware of the risk of 'thoughtless' prescribing using clinical scoring systems (including FeverPAIN and Centor) could lead to but was also aware of the benefits of reducing variation in practice. This issue was discussed further by the Committee who agreed that clinical judgement was essential when identifying which people should receive antibiotics. The recommendations have been amended based on your comment. The recommendations in section 1.1 wording have been amended and rearranged to highlight the self-limiting nature of the condition and to support the prescriber and person when a back-up or no prescription is offered.*
Royal College of General Practitioners		**General**:		A standard patient information leaftlet in accessible format would be helpful	*Thank you for your comment. NICE does not produce patient information leaflets however we are looking for examples from*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					organisations that would help support guideline implementation that could be considered for NICE endorsement. These would then be linked to the guideline tools and resources page. *There will be a tab on the guideline homepage which will include brief information aimed at the general population.*
Royal College of General Practitioners		2	12	Can the committee consider inserting the words **"consider offering**" at the start of this line when advising about the use of deferred antibiotics. This gives the doctor much more flexibility in the discussion with the patient about the best way forward. There are many subtle factors that may steer a doctor away from issuing a deferred script despite a patient scoring 2 or 3 on FeverPAIN. For example, if a patient reported that they were beginning to feel significantly better but scored 2 on FeverPAIN, many GPs practice would be to avoid issuing a deferred prescription. Please allow a degree of flexibility – it will reduce unnecessary prescribing	*Thank you for your comment. This wording has been amended following further discussion by the committee to allow greater prescriber flexibility.*
Royal College of General Practitioners	Guideline	3	3,4	This is a strong recommendation. Taking account of the balance between benefit and harms from antibiotics (similar numbers in both groups), could this be changed to: **Consider immediate antibiotics if symptoms severe or a short-delayed strategy (48 hrs) following discussion with the patient**. We are concerned that for	*Thank you for your comment. This wording has been amended following further discussion by the committee. A back-up prescription is now a treatment option for these patients.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				patients who are not prescribed antibiotic but subsequently develop complications, this recommendation may pass liability to clinician.	
Royal College of General Practitioners		5	15	The word "**p**urulence" is used in the draft guidance when the FeverPAIN score instead uses the phrase "**P**us on tonsils". The latter would be much clearer for doctors using the guidance. **THIS IS AN IMPORTANT POINT AS THE SCORING SYSTEM BECOMES MUCH LESS EFFECTIVE IF IT IS NOT USED CORRECTLY**	*Thank you for your comment. The definition of 'pus on tonsils' has been added to the FeverPAIN score for clarity.*
Royal College of Paediatrics and Child Health	General	-	-	We are happy with this sensible and improved guideline.	*Thank you for your comment.*
Royal College of Physicians and Surgeons of Glasgow	Full	General	General	The Royal of College of Physicians and Surgeons of Glasgow welcomes the NICE Guideline Sore throat (acute): antimicrobial prescribing. Our expert reviewer commended the guidelines. The strategy of reduction in unnecessary antibiotic usage and in consequent antibiotic resistance levels is genuinely important. The scientific basis for recommendations seems comprehensive, and the recommendations are sound. Where the evidence base is patchy or missing, the committee have	*Thank you for your comments. The committee will be producing research recommendations where there are gaps in the evidence that warrant future research.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				resorted to their clinical experience. It was felt that there is a lot of quality research behind the recommendations.	
Royal College of Physicians and Surgeons of Glasgow	Full	General	General	Our reviewer raises the difficulty in shifting the current socio-medical culture towards one of reserving antibiotics for strict indications. He raises the cases of young adults presenting to GPs with minimal disease who are reassured and then go on to fatal meningococcal septicaemia which has received widespread press coverage. Success in reduction of antibiotic usage was achieved in Germany, whilst in contrast France, and particularly Spain, show worrying resistance levels which reflect an antibiotic permissive public culture.	*Thank you for your comment. NICE hope that the guidelines will help health professionals explain the importance of minimising inappropriate antimicrobial use for the general population. The guideline aims to highlight the benefits and risks of antimicrobial use for each common infection by including a section in the guideline on 'People who are systemically very unwell, have symptoms and signs of a more serious illness or condition, or are at high-risk of complications'. It is important that prescribers provide people with safety netting advice as appropriate in line with their clinical judgement.* *NICE will produce tools to support shared decision making with the person which will be accessible on the information for the public tab on the guideline homepage on the NICE website.*
Royal College of Physicians and Surgeons of Glasgow	Visual summary	General	General	The Visual Summary is compact and has good `visual flow`. It is a useful mechanism for explaining such decisions to patients, especially if they are sceptical. However the context is one of consultations lasting 10 mins, whilst the clinical problem of sore throat can present in epidemic form [esp. influenza A].	*Thank you for your comment. NICE will produce tools to support shared decision making with the person which will be accessible on the information for the public tab on the guideline homepage on the NICE website.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Royal College of Physicians and Surgeons of Glasgow	Summary	5		Our Expert reviewer had difficulty with the FeverPAIN score. The document notes the main symptoms of an acute sore throat are pain on swallowing, headache, cough, malaise, fever and reduced fluid intake. However the score as described in the summary • Fever • Purulence • Attend rapidly (3 days or less) • Severely Inflamed tonsils • No cough or coryza Our reviewer considered fever is given too much prominence. This should be replaced by pain as a feature in each symptom with fever becoming the last symptom to assess. This of course affects the acronym.	*Thank you for your comment. The committee was aware that in practice most people with present with general symptoms of upper respiratory tract infection. The FeverPAIN criteria are designed to specifically identify those symptoms and signs that are more likely to be associated with a bacterial sore throat. As the FeverPAIN acronym is written in the guideline is consistent with that in the included evidence.* *Neither FeverPAIN nor Centor use pain as a scoring criteria. However the FeverPAIN tool (linked to from the guideline) asks the scorer to report the severity of the throat pain. The committee felt this would help guide the decision whether to prescribe or not.*
Royal College of Physicians and Surgeons of Glasgow	Summary	5		Page 13 of the guidance states "They were aware that FeverPAIN was developed in a UK primary care setting in 2013, although further external validation has not been carried out." The validation of this score does not appear optimal.	*Thank you for your comment. The committee discussed the evidence for FeverPAIN, noting that it has been investigated in a UK-based RCT that used patient-orientated outcomes, although an external validation study has not been carried out. The committee agreed that FeverPAIN and Centor can be used to guide treatment in people with sore throat.*
Royal College of Physicians and Surgeons of Glasgow	Summary	5		It is noted that in the Fever/PAIN link "the attend rapidly" symptom is described as length of illness. If it is purely left as length of time to see GP, how can this be reconciled	*Thank you for your comment. This was discussed further by the Committee and the wording has been amended in line with the Little et al 2013 study- 'Attend rapidly (within 3 days after onset of symptoms)'. The*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				with the current and increasing difficulty obtaining a GP appointment within three days? Our reviewer also points to the arbitrary allocation of single points with different symptoms.	*committee noted that the guideline reflects how participants in Little et al 2013 were scored. The guideline has been amended to include Centor and FeverPAIN scoring systems.*
Royal College of Physicians and Surgeons of Glasgow	Full And visual summary	13		Our reviewer fully agrees with the comments in the summary "On average the number of people improved with antibiotics is similar to the number getting adverse effects from the antibiotics" which is discussed further on pages 10-13. This cogent point needs to be more prominent in the Visual Summary to raise awareness to the GP and the patient. It is recommended that **"**Possible adverse effects include diarrhoea and nausea" in the 4th column, 2nd para under `Evidence on antibiotics is strengthen and put in a more prominent position	*Thank you for your comment. The Evidence on antibiotics box has been expanded to state: 'Withholding antibiotics is unlikely to lead to complications'.*
Royal College of Physicians and Surgeons of Glasgow	Full			In view of the recent literature where completion of courses of antibiotics was not recommended, this needs to be included and discussed/	*Thank you for your comment. The commentary by Llewelyn et al. (2017) was not an RCT or a SR and so would not meet the criteria for inclusion for the evidence review.*
Royal Pharmaceutical Society	Question 1. *Which areas will have the biggest impact on practice and be challenging to implement? Please say for whom and why.*			-Moving to greater use of no prescription or delayed antibiotics -Embedding FeverPAIN in practice where Centor has been used for many years	*Thank you for your comment. Your comments will be considered by the NICE implementation team when devising the implementation plan for the guidelines. The guideline has been updated to include FeverPAIN and Centor as scoring tools.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Royal Pharmaceutical Society	Question 2. *Would implementation of any of the draft recommendations have significant cost implications?*			-Using less antibiotics may have small cost savings - The biggest cost savings can be achieved by diverting people away from GPs in the first place and for them to visit community pharmacies. This will be even more beneficial to the health economy if it is linked in to a national community pharmacy minor ailments scheme.	*Thank you for your comment. This was discussed further by the Committee and a reference to community pharmacists and self-care has been added to the guideline following your comment. NICE is unable to make recommendations linking to a national community pharmacy minor ailments scheme as evidence for these schemes was not searched for and is outside of the scope.*
Royal Pharmaceutical Society	Question 3. *What would help users overcome any challenges? (For example, existing practical resources or national initiatives, or examples of good practice.)*			-Resources to support self-care such as the TARGET leaflets (GP, out of hours and community pharmacy versions) or the Patient.co.uk leaflets. -Inclusion of recommendations in local education sessions for GPs and pharmacists to support better collaborative working and pharmacy integration.	*Thank you for your comment. Your comments will be considered by the NICE implementation team when devising the implementation plan for the guidelines.* *NICE is looking for examples from organisations that would help support guideline implementation that could be considered for NICE endorsement. These would then be linked to the guideline tools and resources page. This would include local educational tools that are developed to support guideline implementation.*
Royal Pharmaceutical Society	Visual summary Question 4. *We will be producing a visual summary of recommendations for each guideline topic and would like your comments.*			-Useful to provide a visual summary but not sure that having links to other NICE documents within it is helpful unless specific section of other guideline is included.	*Thank you for your comment. NICE will consider this when developing the visual summaries.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Royal Pharmaceutical Society	Visual summary			-Who is the intended audience for the visual summary? E.g. Prescribers, all healthcare professionals, patients	*Thank you for your comment. The visual summary is an overview of the guideline recommendations- it is intended for prescribers It includes a prescribing table to support shared antimicrobial prescribing decisions in line with a health professional's own clinical judgement. This information is included on the NICE antimicrobial prescribing guideline homepage here.*
Royal Pharmaceutical Society	Visual summary			-It might be good to add a link to the FeverPAIN desktop calculator https://ctu1.phc.ox.ac.uk/feverpain/index.php	*Thank you for your comment.* NICE has added a link to the FeverPAIN desktop calculator in the visual summary'
Royal Pharmaceutical Society	Visual summary			There is little content aimed at the public to provide clear and consistent messages e.g. information on self-care medicines, seeking help from healthcare professionals and where patients need to go when (e.g. community pharmacy for minor ailments).	*Thank you for your comment. NICE is not planning on producing patient information leaflets however we are looking for examples from organisations that would help support guideline implementation that could be considered for NICE endorsement. These would then be linked to the guideline tools and resources page.* *There will be a tab on the guideline homepage which will include brief information aimed at the general population.*
Royal Pharmaceutical Society	Guideline 5. *For the guideline: Are there any recommendations that will be a significant change to practice or will be difficult to implement?*			-Use of FeverPAIN rather than Centor scoring, stopping unnecessary prescribing for patients with low scores, managing patient expectations. Would be good to include the sensitivity and specificity for FeverPAIN as only quote Centor currently. -Is FeverPAIN validated for community pharmacy?	*Thank you for your comments. This was discussed further by the Committee, who noted that the percentage of people with a bacterial infection is presented for each FeverPAIN score band, although the authors of the main study in FeverPAIN (Little et al 2013) do not report sensitivity and specificity for this score. The committee noted that FeverPAIN is not appropriate for use in community pharmacy as the evidence is based in a population of patient who are attending their GP practice. The guideline has been updated to include Centor and FeverPAIN. This antimicrobial prescribing*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					guideline is intended for use by prescribers, as discussed on the NICE website: https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/antimicrobial-prescribing-guidelines
Royal Pharmaceutical Society	*What are the key issues or learning points for professional groups?*			-Ensuring message about most sore throats not requiring antibiotics gets to all health and care staff, patients and the public.	*Thank you for your comment about the key issues, these will be considered when devising implementation plans for the guidelines.*
Royal Pharmaceutical Society				Antibiotic choices: -PHE includes pen V 1g bd as an option, so would be good idea to standardise whether included or not -For pen V dose ranges in children – need advice on which to use in which circumstance. -For clarithromycin not sure giving a dose range is very helpful since there is no definition for 'severe infection'. -For erythromycin in pregnancy also not helpful to give dose range without quantifying when you would give the higher dose.	*Thank you for your comment. This was discussed further by the Committee, who agreed that phenoxymethlypenicillin can be given twice daily, and a duration of 5-10 days should be recommended. The committee agreed that the doubled dose would be used in more serious infections (for example, pneumonia) and would not be suitable for sore throat. This dose has been removed from the dose table.*
Royal Pharmaceutical Society		General		-Community pharmacists are not mentioned but make an important contribution to managing sore throat by providing self-care advice, over-the-counter medicines and triaging patients to reduce unnecessary GP appointments and ensuring those with severe infection seek medical assessment. This is particularly the case with their role in winter health, and how	*Thank you for your comment. The committee discussed this further and wording has been added to the committee discussion box on self-care in the guideline. Wording has been added to reflect the potential benefits of avoiding GP appointments if people access self-care and seek advice community pharmacists and other health professionals.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				this fits in with minor ailment schemes, vaccinations and self-care advice – supporting appropriate use of antibiotics, as well as NHS resource use. If patient behaviour is to be changed around attitude and use of antibiotics, this needs to be done alongside appropriate use of NHS resources (i.e. not going to the GP for sore throats in the first place).	
Royal Pharmaceutical Society		General		-Does this guideline cover immunocompromised patients, or a group of lower risk immunocompromised patients only? It would be helpful if this was explicitly stated.	*Thank you for your comment. The guideline population is specified in the scope and includes all patients (except those children in the first 72 hours of life). Where antimicrobial choice would differ for specific populations (including people who are immunosuppressed) this will be specified in the guideline with a clear rationale detailing why. There are no recommendations in the sore throat guideline that specifically discuss people who are immunosuppressed as there management would not differ.*
Royal Pharmaceutical Society		General		-In line with NICE NG63 there needs to be patient information safety netting for this	*Thank you for your comment. NICE agrees with your comment. The intention is that these guidelines will be used by health professionals in conjunction with existing NICE guidelines on antimicrobial stewardship. NICE interactive flowcharts (NICE pathways) will bring relevant guidelines together.*
Royal Pharmaceutical Society		General		-We would suggest that a better description of a 'delayed antibiotic prescription' would be 'back up antibiotic prescription' as 'delayed' suggests a delay in treatment rather than treatment not being needed.	*Thank you for your comment. The wording has been amended to this following your comment.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Royal Pharmaceutical Society		General		-Dosing in Children. Currently you have doses published in the guideline. Paediatric doses change regularly, so we suggest that it may be better to refer to the BNFC rather than publish explicit doses? If you are publishing doses, how often will the guideline be updated to take dose changes into account?	*Thank you for your comment. This was discussed further by the Committee who noted that doses in the BNF cover a wide range of infections (for example, in phenoxymethylpenicillin a single dose covers oral infections, tonsillitis, otitis media, erysipelas and cellulitis. The wide range of doses given in the BNF (and BNFC) may not be suitable for sore throat. The committee agreed that doses should be included in the guideline, and these should be informed by the BNF and the individual summary of product characteristics.*
Royal Pharmaceutical Society	Visual summary			-Would it be possible to signpost to the relevant TARGET leaflets on the right hand side with 'self-care'.	*Thank you for your comment. NICE can only refer to resources produced by external organisations that have been through the NICE endorsement Programme. The TARGET leaflets that have been endorsed will be on the tools and resources tab on the guideline homepage.*
Royal Pharmaceutical Society	Visual summary			-We would suggest that under 'Evidence on Antibiotics' there should be reference to resistance.	*Thank you for your comment. NICE will add general text on antimicrobial resistance to the antimicrobial prescribing guidelines homepage because this is relevant to all guidelines.*
Scottish Antimicrobial Prescribing Group	1. *Which areas will have the biggest impact on practice and be challenging to implement? Please say*			Changing from Centor scoring to FeverPAIN. Although some GPs will already have done so when PHE guidance changed there will be many GPs still wedded to Centor. Main difference is the point for early presentation which may be open to significant bias based on patient pain threshold and ability to access services.	*Thank you for your comment. The committee agreed that FeverPAIN is supported by a UK RCT and noted that this scoring system is already used by some prescribers in the UK. The guideline has been amended to include Centor and FeverPAIN.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
	for whom and why.				
Scottish Antimicrobial Prescribing Group	2. *Would implementation of any of the draft recommendations have significant cost implications?*			Reducing the number of antibiotic prescriptions may have small cost savings and changes in public behaviour may reduce GP consultations for sore throat if patients visit community pharmacy as first port of call.	*Thank you for your comment. This was discussed further by the Committee and a reference to community pharmacists and self-care has been added to the guideline following your comment.*
Scottish Antimicrobial Prescribing Group	3. *What would help users overcome any challenges? (For example, existing practical resources or national initiatives, or examples of good practice.)*			Resources to support self-care such as the RCGP leaflet (GP, OOH and Community pharmacy versions) or the Patient.co.uk leaflets.	*Thank you for your comment. NICE is looking for examples from organisations that would help support guideline implementation that could be considered for NICE endorsement. These would then be linked to the guideline tools and resources page. This would include local tools or resources that are developed to support guideline implementation.*
Scottish Antimicrobial Prescribing Group	Visual summary 4. *We will be producing a **visual summary of recommendations** for*			**General comments** Useful to provide a visual summary but not sure that having links to home page of other NICE documents within it is helpful unless specific section of other guideline is included.	*Thank you for your comments. The visual summary is an overview of the guideline recommendations, intended for use by prescribers. It includes a prescribing table to support shared antimicrobial prescribing decisions in line with a health professional's own clinical judgement. This information is*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
	each guideline topic and would like your comments.			It is unclear who the intended audience is for the visual summary? E.g. Prescribers, all healthcare professionals, patients. From the content appears to be for prescribers but other staff and patients are key partners in improving practice. For the public it does not have enough information on self-care medicines or seeking help from healthcare professionals. The terminology is not public friendly and has too high a reading age. A much simpler version would be helpful for the public and should include specific recommendations targeted at patients.	*included on the NICE antimicrobial prescribing guideline homepage here.* *NICE is looking for examples of patient information from organisations that would help support guideline implementation that could be considered for NICE endorsement. These would then be linked to the guideline tools and resources page.* *There will also be a tab on the guideline homepage which will include brief information aimed at the general population.*
Scottish Antimicrobial Prescribing Group	Visual summary			**Diagnosis/Scoring** Suggest adding a link to the FeverPAIN desktop calculator https://ctu1.phc.ox.ac.uk/feverpain/index.php Most users will only look at the one page 'visual' and wont drill down go to all the evidence links, so may be helpful so add a footer on the visual to say Centor scores similar pickup or a Centor score conversion. The flowchart does not include considering an IM test (Infectious Mononucleosis /Glandular Fever), for severe sore throat and systemically unwell. This would be important for some patient groups.	*Thank you for your comment. The desktop calculator includes additional questions that are not part of the FeverPAIN criteria. Furthermore, the guideline has been updated and now recommends using FeverPAIN or Centor* *The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				Against the scoring it has quite definitive statements i.e. 'Do not offer…' 'Offer… should this be less strong? Use 'Consider..' making it clear that this is a risk assessment tool to support treatment decision rather than a prescriptive guideline. Some prescribers are quite guideline focused and it is important that this doesn't override clinical judgement. GPs who are using FeverPAIN have concerns that many patients end up in the Delayed Prescription category. It is therefore important that the delayed approach is not necessarily the 'giving of a prescription' but can be done in a variety of ways (and there is a study that shows it doesn't matter how you do it). It should be more about considering a delay in treatment with supporting education on 'worsening symptoms' since risk of bacterial infection is still only up to 40% at this point. Many GPs are quite sceptical about the delayed approach and tend to think patients just take the antibiotics if a prescription is given (although appreciate this is not necessarily shown in studies). A Delayed prescription is used sometimes as a kind of 'get out clause' by prescribers when they feel the	*and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.* *The visual summary provides an overview of the guideline recommendations for prescribers; clinicians are expected to use their clinical judgement as with the implementation of all NICE guidelines.* *The wording used in the recommendations is supported by the strength of the evidence underpinning it. Information on the wording of guideline recommendations can found in the Developing NICE guidelines the manual.* *NICE has included the term backup prescribing in the NICE glossary which includes details of the different approaches that could be used.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				patient will not accept no prescription. Should the statement about 80% resolve within 1 week without antibiotics and the risk/ benefit be more prominent as some patients might not even need to be scored? This is in the full guideline but not everyone will read it and just rely on the visual summary.	*This wording has now been added to the guideline recommendations to give more prominence and states that 'most people will get better within this time without treatment, regardless of cause (bacteria or virus).'*
Scottish Antimicrobial Prescribing Group	Visual summary			**Antibiotics** PHE also offers pen V 1g bd as an option, which helps to improve compliance. Important to have consistency as PHE guidance used across the UK. For clarithromycin not sure giving a dose range is very helpful since there is no definition for 'severe infection' where the increased dose is recommended. If the infection is not severe why would you give antibiotics anyway? Similarly giving a range for erythromycin in pregnancy is not that helpful - there's nothing to quantify when you would give the higher dose.	*Thank you for your comment. This was discussed further by the Committee, who agreed that phenoxymethylpenicillin can be given twice daily, and a duration of 5-10 days should be recommended. The committee agreed that the doubled dose would be used in more serious infections (for example pneumonia) and would not be suitable for sore throat. This dose has been removed from the dose table.*
Scottish Antimicrobial Prescribing Group	*For the **guideline**:* • *Are there any recommend ations that will be a*			As in comment 1, moving from Centor to FeverPAIN will be a significant change if not already implemented. Use of delayed prescriptions is still not common practice and some prescribers are sceptical as they	*Thank you for your comment. NICE will use these comments when considering the implementation plans.* *NICE is exploring the development of an additional tool to explain the different approaches that can be taken when*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
	significant change to practice or will be difficult to implement? If so, please give reasons why. • *What are the key issues or learning points for professional groups?*			think patients just take the antibiotics anyway. Increasing the 'no prescription' approach may be difficult for patients to accept. Key learning points are: • Most sore throats do not require treatment with an antibiotic – use symptomatic relief with patient education and safety netting. • Use FeverPAIN score to inform clinical decision making. • Consider delayed prescription if diagnosis and/or severity of infection is unclear.	*implementing a delayed prescribing approach.* *NICE will use these comments when considering the implementation plans for the guidelines.*
Scottish Antimicrobial Prescribing Group	Guidance	General		There is no mention of community pharmacists providing self-care advice and triaging patients to reduce unnecessary GP appointments and ensure those with severe infection seek medical assessment. The guidance appears to be aimed at prescribers but would be helpful to aim at whole health and care team and to have a patient version.	*Thank you for your comment.* *The guidelines are aimed at all prescribers (including non-medical prescribers) and other health professionals who may care for people with sore throat. The evidence underpinning the recommendations includes patients who are seen in the GP practice setting and not in community pharmacies, therefore the guideline is based on recommendations for this group of people.* *The committee discussed the importance of involving other health professionals in the care of people with self-limiting infections. Particularly the role of the community pharmacist given their accessibility to people and ability to advise on self-care. The wording of the guideline has been amended to reflect this.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
Scottish Antimicrobial Prescribing Group	Guidance	2	22	Is it reasonable to wait 3-5 days until starting a delayed prescription if symptoms do not improve? Most prescribers would suggest after 48-72 hours.	*Thank you for your comment. The committee has discussed your comment and agreed that the delayed time should be when approximately 70-80% of people would get better on their own. Evidence from a SR comparing antibiotics with placebo (Spinks et al. 2013) found that 44% of people treated with placebo were symptom free by day 3, increasing to 82% by day 7. Note- these times relate to time since symptoms began, not time since initial consultation.*
Scottish Antimicrobial Prescribing Group	Guidance	3	9-10	If referring to another NICE guideline it would be helpful to include specific section or page where the relevant information is rather than having the reader scan the document to find it.	*Thank you for your comment. The guideline has been updated to remove the reference to respiratory tract infections (self-limiting).*
Scottish Antimicrobial Prescribing Group	Guidance	3	16-18	Should it be highlighted that teenagers and young adults are the group most at risk of complications?	*Thank you for your comment. This was discussed further by the Committee who noted that the risk of complications with sore throat is very low. The majority of studies included in the evidence review reported complication rates as an outcome. These studies did not suggest a higher rate of complications in teenagers and young adults.*
Scottish Antimicrobial Prescribing Group	Guidance	5	10	Suggests FeverPAIN only used by prescribers but should it also be promoted for triage of patients by community/ practice pharmacists and nurse practitioners?	*Thank you for your comment. The population considered in community pharmacies is different to the evidence population included in this guideline i.e. people presenting to GP practices.* *The guidelines are aimed at all prescribers (including non-medical prescribers) and other health professionals who may care for people with sore throat. The evidence underpinning the recommendations includes patients who are seen in the GP practice*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					setting and not in community pharmacies, therefore the guideline is based on recommendations for this group of people.
Sekisui Diagnostics, LLC	Guideline	12	13-17	The committee comments on the study by Cohen et al. 2016 being graded as very low quality evidence. However, it should be noted that there's a sizable list of peer reviewed studies published in international journals which consistently demonstrate the high utility and/or sensitivity and specificity of Rapid Antigen Detection Tests (RADTs). This data has not been considered by the guidelines committee. A review by the committee of the available literature is highly recommended. Two of the studies cited in Sekisui's response (Llor et al. 2014 & Mazur et al. 2014) provide strong examples of how other countries are implementing successful guidelines to reduce inappropriate antibiotic prescriptions. With regards to quality of evidence; the PRISIM study (Little et al 2013) only uses **211** patients to determine the sensitivity of FeverPAIN. This number just met the minimum criteria of the study. FeverPAIN has very limited evidence to support its utility outside of this study, and requires further evaluation before claims can be established. The regulatory requirements for clearing and approving RADT for sale are based on showing a significant	*Thank you for your comment. The remit of this guidance is managing common infections; whilst NICE is not specifically looking at diagnosis where the evidence supports this from the included evidence this will be documented in the evidence review. The quality of the evidence was assessed using GRADE for all include studies. The committee noted that the RCT involving FeverPAIN focussed on patient orientated outcomes, not the presence of bacteria - this is very important in self-limiting infections.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				statistical volume of samples to base performance claims, to which is not seen in the PRISM study. . For instance the data used to support the Food and Drug Administration (FDA) 510k clearance of OSOM® Strep A is based on a multi-centre evaluation of **639** throat swabs. Additional evaluation is further required to then achieve Clinical Laboratory Improvement Amendments (CLIA) waiver. Overall, RADT have shown robust evidence of performance in both pier reviewed articles and clinical trial data to which the committee should consider.	
Sekisui Diagnostics, LLC	Guideline	13	Bullet "2-3"	The reduction of antibiotic usage is a valued and important goal; it's also important to consider the consequences in the under treatment of patients for whom antibiotics would have been designated. This may lead to an increase in transmission, hospitalizations, and health complications, time off work and/or school, patient discomfort, and longer symptom duration to which may lead to increase healthcare costs.	*Thank you for your comment. The Committee discussed the rates of group A strep carriage across the general population and the incubation period for a strep infection. Because of this treatment with antibiotics is unlikely to reduce transmission rates. The committee agreed that the goal of treatment with antibiotics in score throat is to reduce symptom duration, not eradicate a strep infection. The committee noted evidence from a systematic review by Spinks et al. (2013) that suggested antibiotics only reduce the duration of illness by around 16 hours. The Committee also discussed that evidence suggested that treating with an antibiotic does not reduce the complication rates.*
Sekisui Diagnostics, LLC	Guideline	13	Bullet "6"	The current Sore throat guideline recommends using the FeverPAIN score to determine whether antibiotics are to be prescribed. For	*Thank you for your comment. This was discussed further by the Committee and the recommendation has been amended- a delayed antibiotic is now a treatment option*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				a FeverPAIN score of 4 or 5, all patients in this category are recommended to receive antibiotics. However, due to the likelihood that this patient group harbours streptococci bacteria at 62-65% of the time the resulting 35-38% of the patients in this group would be negative for the streptococci bacterium. Therefore, they would be inappropriately receiving antibiotics, which is counter to the overall guideline strategy. In fact, when a highly sensitive (95%) rapid test is used, the risk of only 5% of patients falsely receiving antibiotics is drastically less than the proposed guideline method and the benefit to patients needing treatment is greatly increased. This argument is supported by recent clinical studies looking at antibiotic prescription and rapid test use. The Happy Audit Study (Llor et al. 2014) showed a drastic reduction of antibiotic use with the performance of a primary care test with respiratory tract infection. In a second study which had a pediatric focus, the positive predicate values of a modified Centor score of 4 (48%) were compared to that of a RADT (98%) for Group A Strep detection in children (Mazur et al. 2014) in order to determine to the prescription of antibiotics for positive patient samples. The study	*for people with a FeverPAIN score of 4 or 5. The remit of this guidance is managing common, diagnosis of strep infection is beyond the scope of the guidance. The study by Little et al. (2013) is included in the review because it is an RCT that investigated treatment with antibiotics using patient-orientated outcomes.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				clearly showed that the RADT had superior performance and positive predictive value over the modified Centor score, which led to a more efficient use of penicillin. The study concluded that empiric antibiotic therapy in children with a score of 4 in MCS would result in the significant overtreatment of those with nonstreptococcal pharyngitis. In the recent publication; "Improving Antibiotic Prescribing for Uncomplicated Acute Respiratory Tract Infections," provided by the Agency for Healthcare Research and Quality, it was noted that "the combination of rapid strep test with a clinical score (FeverPAIN or a scale based on the presence of the number of predefined symptoms) used as a decision rule was superior to the decision rule alone in reducing overall antibiotic prescribing."	
Sekisui Diagnostics, LLC	Guideline	14	Bullet 1	Sekisui Diagnostics strongly feels that the use of a highly sensitive RADT is a more accurate testing method compared to the adoption of the FeverPAIN method alone, (with a FeverPAIN scores of 4 or 5) when triaging patients that present with acute pharyngitis. By using a more sensitive method, a higher efficiency will be achieved for antibiotic prescriptions. The FDA cleared OSOM® Strep A test reports a clinical sensitivity of 96.0% (95%CI, 96.6-99.0%) in	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				detecting Group A Streptococcal antigen from patient throat swabs. As indicated from the PRISM study which evaluated 5 RADT's, the OSOM® Strep A test was the most consistently sensitive rapid antigen detection test (RADT) with a sensitivity of 95%. (Lasseter et al. 2014). The OSOM® Strep A test is a more sensitive method in detecting Group A Streptococci in patient samples than the proposed FeverPAIN method, as the FeverPain method would not differentiate between viral and non-viral cases. This would lead to the over prescribing of antibiotics for sore throats caused by viral infections. Therefore, Sekisui Diagnostics recommends the continued use of the more sensitive rapid immunoassay method to ensure more efficient antibiotic prescriptions and does not support the proposal to replace rapid testing with the FeverPAIN method. Furthermore, Sekisui Diagnostics recommends the inclusion of rapid immunological testing with a FeverPAIN score of 2 or 3 as indicated in the Little et al. 2013 study. Moreover, the readily available information based on the sensitivity and specificity of rapid immunoassays provides information for patient management	*testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				decisions to the GPs with the aim to reduce the spread of infection within communities, as opposed to the view of a delayed prescription strategy for antibiotics.	
Sekisui Diagnostics, LLC	Guideline	General	General	Sekisui Diagnostics clearly agrees with the NHS guideline's goal to reduce inappropriate antibiotic use in patients presenting with acute pharyngitis and believes there should be a multifaceted approach that can include multiple clinical strategies including point of care diagnostic tests, education, communication, and overall commitment from physicians and manufacturers.	*Thank you for your comment. The guideline is not specifically looking at diagnostics and focusing on the appropriate management of common infections. Where diagnostic information is found in the included studies this is documented in the evidence review and guideline as appropriate. NICE agrees that to ensure the guidelines are implemented a combination of approaches need to be used included education, communication and commitment from all.*
The Medicines Management Partnership	Guideline, evidence and visual Summary	General	General	The document fails to consider important elements of Strep A infection. This organism is responsible for a series of infections in addition to a sore throat including scarlet fever and invasive disease. Both of these conditions are reportable so we have reasonable data on incidence compared to sore throats. During 2014 the UK experienced a significant rise in the incidence of scarlet fever which has been maintained over recent seasons. Similar rises have been seen in other countries. The incidence of invasive disease is also at a high and we experience some 70-80 outbreaks in the UK each year. The mortality in this condition may be as high as 16%.	*Thank you for your comments.* *NICE is aware of the National Innovation Accelerator work on 'Sore Throat Test and Treat', however the population considered in community pharmacies is different to the evidence population included in this guideline i.e. people presenting to GP practices. NHSE have provided responses on this guideline during stakeholder and have not raised this as a concern.* *The guidelines are aimed at all prescribers (including non-medical prescribers) and other health professionals who may care for people with sore throat. The evidence underpinning the recommendations includes patients who are seen in the GP practice setting and not in community pharmacies, therefore the guideline is based on recommendations for this group of people.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				The guidance takes the view that people with strep A infection will gain a small benefit from treatment with an antibiotic, but fails to highlight the point that 24hrs post treatment no viable organisms are found in the throat. Without antibiotic treatment patients will remain infectious for two weeks and risk passing the infection on to another person who may contract or develop a more serious form. Although the research in this area is limited, studies suggest that in 43% of families with an index case there is a second associated infection and residential institutions for children have a high rate of transmission. Running though this guidance should be the drive to reduce the spread of strep A infections through the appropriate use of antibiotics. And the reduction of inappropriate antibiotics. At this point in time no isolates of strep A have been found resistant to penicillin. It is also important to add that this guidance seems to be very highly targeted to General Practice. Strep A sore throat test and treat service was supported by the NHS Innovation Accelerator following the publication of a community pharmacy feasibility study. This	*Please note the NICE guideline – Patient group directions (MPG2) does not advocate the routine use of PGDs for supply of antimicrobials stating in recommendation 1.1.10:* *'Do not jeopardise local and national strategies to combat antimicrobial resistance and healthcare‑associated infections. Ensure that an antimicrobial is included in a PGD only when:* *•clinically essential and clearly justified by best practice guidance* *•a local specialist in microbiology has agreed that a PGD is needed and this is clearly documented (see recommendation 1.3.2)* *•use of the PGD is monitored and reviewed regularly (see recommendations 1.6.4 and 1.8.5).*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				service has been taken through the innovation network and we are waiting for final decisions on implementation. This guidance should at least recognise that service provision may be supported by community pharmacists using PGDs or as independent prescribers. Studies in the US where RADT in community pharmacy is common place show that this is the most cost effective way of managing sore throats – see Am J Manag Care. 2012 Apr 1;18(4):e145-54.	
The Medicines Management Partnership	Guidance	1	7	Basing the guidance on FEVERPAIN scoring is supporting the overuse of antibiotics.	*Thank you for your comment. Evidence from the Little et al. (2013) suggested that FeverPAIN was associated with lower antibiotic use compared with delay antibiotic prescribing alone (37% vs 46%, p=0.02). In addition to this, the NICE guideline recommends a back-up prescription as an option for people with the highest FeverPAIN score; in the study by Little these people received an immediate prescription. This should reduce antibiotic prescribing further. The guideline also recommends Centor as a scoring tool to guide treatment. We are not clear from the comment what the suggestion that FeverPAIN will lead to antibiotic overuse is based on.*
The Medicines Management Partnership	Guidance	1	7	The key messages are confusing. I agree that most sore throats are viral, are self-limiting and require symptomatic relief only. I also agree that patients with strep A sore throat would benefit from antibiotics, but that is to support	*Thank you for your comment. The Committee discussed the rates of group A strep carriage across the general population and the incubation period for a strep infection. The Committee agreed that the treatment goal for most antibiotics in sore throat would be to reduce the duration of*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				their care AND to reduce the spread of infection, unless we are going to suggest not going to work or school for two weeks while contagious.	*symptoms, not to eradicate group A strep. The committee discussed that the complication rate with sore throat is very low, meaning prevention of complications through eradication of group A strep is no longer a primary treatment goal in England. Reduction of symptom duration would be the goal of antibiotic treatment.*
The Medicines Management Partnership	Guidance	1	7	Clinical scoring systems do help to identify patients with strep A infections, but they are not very accurate where an antigen test would actually provide greater accuracy in this diagnosis. Saying antibiotics are not needed for most people is confusing, having clearly stated that most infections are viral and will not require antibiotics and then a small proportion are bacterial and caused by strep A and antibiotics would improve symptoms and reduce transmission.	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.* *The Committee discussed that most people will get better within 1 week without antibiotic treatment, regardless of cause (bacteria or*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					virus). The committee noted the incubation period for tonsillitis and agreed that antibiotic treatment is unlikely to reduce transmission.
The Medicines Management Partnership	Guidance	1	7	Complications of sore throat are rare – this statement is accurate within the UK. However, the reduction in incidence of rheumatic fever and similar problems is thought to be due to better prevention and the early use of antibiotics. If this guidance reduces the use of antibiotics there is no evidence that the incidence of rheumatic fever will remain low. Delayed prescriptions may simply mean that people with active and transmissible strep A infections are passed back into the community.	*Thank you for your comment. This was discussed by the Committee, who noted the rates of group A strep carriage across the general population, and the incubation period for a strep infection. No evidence was identified that suggested an increase in rheumatic fever rates in areas where delayed prescribing is common.*
The Medicines Management Partnership	Guidance	1	7	I am unable to find evidence on the actual incidence of sore throat in the UK, but anecdotal comments suggest that the incidence is rising.	*Thank you for your comment.*
The Medicines Management Partnership	Guidance	1	10 etc	The title of this section is misleading. You say people that are unlikely to benefit from an antibiotic – where you really mean people who are unlikely to have a bacterial infection. In fact 18-20% of these patients are likely to have a strep A sore throat.	*Thank you for your comment. This was discussed by the Committee. The wording was selected because the evidence states that most people with a sore throat will get better without antibiotics, irrespective of bacterial or viral cause.*
The Medicines Management Partnership	Guidance	2	1	You should consider offering advice on reducing transmission.	*Thank you for your comment. The Committee discussed the rates of group A streptococcus carriage across the general population and the incubation period for a streptococcal infection. The Committee agree that reducing transmission of group A streptococcus was not a treatment goal for antibiotics in sore throat.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
The Medicines Management Partnership	Guidance	2	10	People who are more likely to benefit from an antibiotic is really saying people who have a higher chance that it is bacterial. What you are actually saying is that between 34% and 40% of these patients are likely to have a strep A sore throat. In the BMJ paper 46% of patients issued delayed prescriptions actually had them dispensed. Clinicians frequently comment on the difficulty in issuing delayed prescriptions and there are published studies showing a reduction in patient satisfaction through using delayed prescriptions. In this group of patients we should be considering using a point of care strep A test to confirm the presence of strep A antigen to drive a more definitive answer to antibiotic or not antibiotic. Please note that part of the reason for using antibiotics is to reduce transmission. There is little sense in making people who are infectious wait 24-48 hours for an effective treatment.	*Thank you for your comment. The wording of the recommendation reflects the evidence that most people's symptoms will resolve within a week, even those with a bacterial infection. There are several different approaches to implementing a 'back-up' (delayed) prescription which allows prescribers flexibility in their approach.*
The Medicines Management Partnership	Guidance	2	19	Please consider offering advice about reducing transmission. Consider that up to 40% of these patients may have a strep A infection and could transfer their infection to others.	*Thank you for your comment. The Committee discussed the rates of group A strep carriage across the general population and the incubation period for a strep infection. The Committee agree that reducing transmission of group A strep was not a treatment goal for antibiotics in sore throat. The committee discussed that the incubation period for bacterial tonsillitis is*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					between 2 and 4 days, meaning the person had been infective during this period.
The Medicines Management Partnership	Guidance	3	1	People with a high chance of bacterial infection. Even FEVERPAIN is not perfect . What you are really saying that between 62% and 65% of these patients are likely to have a strep A infection. Your recommendation that these should be given an antibiotic assumes that in up to 65% of cases this is an appropriate use of an antibiotic and in up to 35% of cases the antibiotic is prescribed inappropriately.	*Thank you for your comment. This was discussed further by the Committee, who noted the natural history of sore throat, that most people get better without treatment, including people with a strep A infection. Therefore presence of strep A is not a straight indication for an antibiotic.*
The Medicines Management Partnership	Guidance	10	1	Although antibiotics play a very important role in reducing infectivity and transmission there is no evidence submitted around medicalisation. In some studies the use of antibiotics appeared to encourage reattendance.	*Thank you for your comment. Re-attendance rates for subsequent infections (assuming the initial infection had fully resolved) is outside the scope of this guideline. The NICE guideline Antimicrobial stewardship: changing risk-related behaviours in the general population covers making people aware of how to correctly use antimicrobial medicines (including antibiotics) and the dangers associated with their overuse and misuse.*
The Medicines Management Partnership	Guidance	10	7	The guidance rightly acknowledges the benefits of antibiotics in patients with a positive throat swab. In general throat swabs are not recommended – not because they are not accurate – but mainly because they take too long to return results and the clinician has usually been forced to make a decision before the results have been returned.	*Thank you for your comment. The guideline is not specifically looking at diagnostics and focusing on the appropriate management of common infections. Where diagnostic information is found in the included studies this is documented in the evidence review and guideline as appropriate.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				In many countries the throat swab has been replaced by the rapid antigen test. Tests such as the OSOM test used within the published community pharmacy feasibility study have very high sensitivity and selectivity and can produce a result within a few minutes. I would recommend that you include evidence simply showing the effectiveness and timeliness of these tests in the identification of strep A antigen in the throat.	
The Medicines Management Partnership	Guidance	11	12	Delayed antibiotics. Although thought to be a sensible approach it is not an easy one. Studies have shown that it has not been implemented well eg http://bmjopen.bmj.com/content/6/11/e011882 This evidence should be presented in balance. In many situations where a delayed prescription is difficult using a rapid antigen test to provide an definitive answer may simplify the options to no antibiotics or antibiotics and reduce the uncertainty	*Thank you for your comment. The committee agree that there are several options for implementation a delayed prescription. NICE is exploring the development of an additional tool to explain the different approaches that can be taken when implementing a delayed prescribing approach. The recommendations on antibiotic prescribing have been amended to allow a no antibiotic strategy in people with a FeverPAIN score of 2-3.*
The Medicines Management Partnership	Guidance	11	28	The primary endpoint in this study was symptom severity. The score and the score plus RADT produced a significant improvement in symptom severity. The duration of moderately bad symptoms was actually superior in the group using the score and RADT. There was a reduction in antibiotic use in the	*Thank you for your comment. The remit of this guidance is managing common, diagnosis of strep infection is beyond the scope of the guidance. The study by Little et al. (2013) is included in the review because it is an RCT that investigated treatment with antibiotics using patient-orientated outcomes. The 2011 paper by Llor et al was identified in the search, but was not prioritised at it did not report clinical*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				score and the score plus RADT groups. The authors conclude: Our results suggests that across a range of practitioners and practices, use of either a simple clinical score or a clinical score with a rapid antigen test is likely to moderately improve symptom control and reduce antibiotic use. Use of the clinical score combined with targeted use of a rapid antigen test provided similar benefits but with no clear advantages compared with use of a clinical score alone. Please consider using this study Br J Gen Pract. 2011 May; 61(586): e244–e251. Published online 2011 Apr 26. doi: 10.3399/bjgp11X572436 Where the use of RADT significantly reduced the inappropriate prescribing of antibiotics. And this J Antimicrob Chemother. 2008 Dec;62(6):1407-12. doi: 10.1093/jac/dkn376. Epub 2008 Sep 11. Where the use of RADT also reduced the use of inappropriate antibiotics.	*outcomes (it reported Abx prescribing but did not discuss duration / severity of symptoms). The RCT that considered FeverPAIN was conducted in the UK and reported patient orientated outcomes. The Maltezou et al. 2008 study was not an RCT and therefore did not meet the inclusion criteria of the review.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline review	4	1	**Choice of antibiotic for paediatrics – exclusive phenoxymethylpenicillin recommendation** In paediatric practice although phenoxymethylpenicillin is the gold standard antibiotic for management of sore throat (narrow spectrum etc) there are occasions where compliance is likely to be an issue with the QDS dosing / timing regarding food / administration at school etc. If compliance is suspected to be an issue occasionally amoxicillin is recommended as an alternative, although I appreciate the issues surrounding amoxicillin and glandular fever.	*Thank you for your comment. This was discussed further by the Committee, who agreed that phenoxymethylpenicillin can be given twice daily, and a duration of 5-10 days should be recommended. The committee also noted that amoxicillin has a broader spectrum of activity compared with phenoxymethylpenicillin.*
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline review	4	1	**Antibiotic dosage for paediatrics** Whilst I appreciate that the evidence for BD dosing of phenoxymethylpencillin has been noted to be weak, practically it would hugely improve compliance within the paediatric cohort and a number of paediatric centres are looking at this. In other parts of the world e.g. Australia this is routine practice with total daily dosage being divided in two. PHE guidance currently recommends BD dosing for adults. No dosing listed for children < 1 month of age – assume the expectation is that these children be referred?	*Thank you for your comment. This was discussed further by the Committee, who agreed that phenoxymethylpenicillin can be given twice daily, and a duration of 5-10 days should be recommended. The committee agreed that it would be difficult to diagnose a child under 1 month of age with a sore throat and it is unlikely that they would be treated solely for this infection. The committee agreed that the doubled dose would be used in more serious infections (eg pneumonia) and would not be suitable for sore throat. This dose has been removed from the dose table.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				For clarithromycin what is the definition of 'severe infection'?	
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline review	4	1	**Antibiotic course length – 10 days** Whilst I appreciate that the current evidence continues to support the recommended 10 day course length this remains a huge issue in paediatric practice (particularly within secondary care) in terms of ensuring compliance. Phenoxymethylpenicillin suspensions require reconstitution prior to administration – all brands currently available in the UK have a 7 day expiry once reconstituted. A dosage of 5ml (250mg or 125mg) QDS requires 2 x 100ml bottles to be supplied. However both bottles are not able to be reconstituted at the time of supply as this will mean the second bottle expires before then 10 day course has been completed. Consequently paediatric ED departments have a number of different strategies to deal with this: 1) In hours – antibiotics provided via outpatient prescription usually supplied via pharmacy – 2 bottles supplied 1 x reconstituted, 1 x dry powder for reconstitution – parents are given instructions on how to reconstitute second bottle	*Thank you for your comment. This was discussed further by the Committee, who noted the practical challenges and agreed that phenoxymethylpenicillin can be given twice daily, and a duration of 5-10 days should be recommended.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				after first bottle has been completed 2) Out of hours – antibiotic often provided direct from ED using over-labelled packs – either 2 bottles supplied 1 x reconstituted, 1 x dry powder for reconstitution – parents given a leaflet with instructions on how to reconstitute alternatively 1 bottle supplied reconstituted and parents told to attend GP for further supplies – consequently I would imagine a number of children only receive 5 days treatment and do not attend GP for further supplies to complete 10 day course	
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guidance review	5	13	Use of FeverPAIN score instead of Centor scoring will be a change to practice – although Centor scoring was never validated for use in paediatrics and was therefore used with caution. FeverPAIN score only validated in children over 3 years of age?	*Thank you for your comment. The RCT that investigated FeverPAIN included participants aged 3 years and older. The guideline has been amended to include the Centor scoring system.*
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline	general	general	Question 1: Which areas will have the biggest impact on practice and be challenging to implement? • Challenge from prescribers who are familiar with Centor score moving over to feverPAIN. • Increasing use of delayed prescriptions	*Thank you for your comment. We will use these comments when considering our implementation plans.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline	general	general	Question 2: Would implementation of any of the draft recommendations have significant cost implications? There may be cost reductions if delayed prescriptions are implemented properly. Cost of antibiotic syrups is often cited as a problem. Penicillin V is significantly more expensive than amoxicillin syrup and GPs will often report that this (coupled with compliance with QDS dosing) as a reason for using amoxicillin instead. It would be helpful to consider evidence of pen V vs amoxicillin.	*Thank you for your comment. This was discussed further by the Committee who considered that the majority of studies were in phenoxymethylpenicillin and that amoxicillin has a broader spectrum of activity. In line with the principles of good antimicrobial stewardship the committee agreed that the narrower spectrum phenoxymethylpenicillin should be recommended.*
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Visual summary	general	general	Question 4: We will be producing a visual summary of recommendations for each guideline topic and would like your comments. • Is the intended audience the prescriber? This could be used as a visual when discussing with patients to explain why abx are not required Is there anything you would improve about it? • Some of the self care advice could be added into this • It is not clear what constitutes a "severe infection" to warrant a	*Thank you for your comment. NICE will use these comments when considering the implementation plans.* *The Committee discussed doubling the dose of antibiotic and agreed that this would generally not be required for people with a sore throat. The dose recommendations have been amended.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				higher dose of clarithromycin/erythromycin	
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline	General	General	Question 5: For the guideline: • Are there any recommendations that will be a significant change to practice or will be difficult to implement? If so, please give reasons why. Changing from Centor to feverPAIN is a significant change to practice. Also changing the habit of unnecessary prescribing will be a challenge.	*Thank you for your comment. NICE will use these comments when considering the implementation plans.*
UK Clinical Pharmacy Association – Pharmacy Infection Network Group	Guideline	3-4	21, 1	Choice of antibiotic: "Twice daily dosing of penicillin V is not recommended" but is reported in PHE document https://www.england.nhs.uk/south/wp-content/uploads/sites/6/2014/06/PHE-Primary-Care-Guidance-for-Gateway-2.pdf. This dosing is often used in practice to improve compliance. Consider that this could be a second line option if compliance is considered an issue e.g. in school age children etc. PHE guidance also refers to dose of 1g QDS in severe infections. Dose for clarithromycin/erythromycin in severe infection stated but not penicillin V. Clarithromycin has a dose for severe infection but no definition of what severe infection is. Likewise with erythromycin – when would the higher dose be used?	*Thank you for your comment. This was discussed further by the Committee who considered the evidence from the Lan study and the difficulties some people may have talking an antibiotic four times daily. The recommendation has been amended to include twice daily dosing of phenoxymethylpenicillin. The dose for severe infection has been removed from the guideline.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				Dose ranges given for children – would be helpful to have advice on when to use higher dose	
Una Health Ltd	Guideline	11-12	(11)31-(12)1&2.	There seems to be a perceived benefit in avoiding the use of accurate Rapid Antigen Testing in favour of a clinical score despite evidence which suggests there are inherent risks. Is it wise to promote a relatively unproven score when it may actually contribute to infection spread (FeverPain Score 2-3 34-40% sensitivity; delayed prescription) and unnecessary antibiotic use (FeverPain Score 4-5 62-65% Sensitivity; Immediate Antibiotics). Surely this contradicts all attempts to reduce antibiotic resistance? Based on this, where is the advantage over prescribing antibiotics based on an accurate and objective RAT which could be delivered within the GP appointment using a test like OSOM Strep A?	*Thank you for your comment. The remit of the managing common infections programme is to produce clinical, syndrome specific antimicrobial prescribing guidelines. NICE recognise the importance of diagnostics for tackling antimicrobial resistance and have existing publications in this area, such as diagnostics guidance (procalcitonin testing for diagnosis and monitoring sepsis and tests for rapidly identifying bloodstream bacteria and fungi) and Medtech innovation briefings (including Quikread Go for CRP testing in primary care and Alere Afinion CRP for C-reactive protein testing in primary care). Where a NICE diagnostics guidance has been published relating to an antimicrobial prescribing guideline, a link to this will be included in the guideline. Additionally, a NICE and Department of Health research project looking at methods to better assess the costs and benefits or new antimicrobials and diagnostics is underway (report due April 2018). In relation to sore throat, a multi-Medtech innovation briefing is underway looking at diagnostic tests for streptococcal sore throat.* *The committee discussed the rates of group A streptococcus carriage across the general population, and the incubation period for a streptococcal infection. The committee felt that given the 2-4 day incubation period the risk of spread was not reduced by antibiotics.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
					No evidence was identified that suggested treating with antibiotics would prevent transmission of streptococcus A.
Una Health Ltd	Guideline	13	Bulletpoint 5	It would be more appropriate to recommend further research surrounding the use of the FeverPain score if it has not been externally validated. If using this score is the sole diagnostic method for Strep A as recommended in the guideline then there must be robust supporting evidence. This evidence must prove that this method has significant benefits over alternative methods.	*Thank you for your comment. The guideline has been updated to include Centor as an alternative clinical scoring system.*
Una Health Ltd	Evidence Review	21	27-35	With reference to the Little et al paper, this paper does not compare FeverPAIN or RAT to laboratory methods for detection of GAS. Otherwise, as a sensitivity of 62-65% in FeverPain 4-5 patients would suggest, how can we be sure that using either method isn't producing false positives, in which we would still be prescribing antibiotics to patients unnecessarily.	*Thank you for your comment. The remit of this guidance is managing common, diagnosis of strep infection is beyond the scope of the guidance. The study by Little et al. (2013) is included in the review because it is an RCT that investigated treatment with antibiotics using patient-orientated outcomes.* *The guideline has been updated to include the Centor scoring system.*
Una Health Ltd	Guideline	General	General	I believe that this guideline is out of date, and out of touch with innovative new pathways. It does not resolve the impact on GP of managing sore throat appointments, and is too focused on traditional healthcare pathways. Considering the National Innovation Accelerator is championing RAT to identify GAS in non-traditional access points	*Thank you for your comment. The Department of Health has referred to NICE to develop suite of clinical, syndrome specific guidelines for managing common infections. Implementation of the guidelines will be considered during development, including working with the BNF, Clinical Knowledge Summaries and GP practice software providers.*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				such as pharmacy and wider CCG, shouldn't this be reviewed as part of the guideline? Collaboration between GP and wider primary care has to be a priority to reduce burden during winter season.	*NICE is aware of the National Innovation Accelerator work on 'Sore Throat Test and Treat', however the population considered in community pharmacies is different to the evidence population included in this guideline i.e. people presenting to GP practices. NHSE have provided responses on this guideline during stakeholder and have not raised this as a concern.*
Una Health Ltd	Guideline	General	General	Routine rapid antigen testing for GAS is prevalent in the EU, what evidence can they share about the impact and the burden on healthcare providers? Has best practice been reviewed?	*Thank you for your comment. NICE is aware of the National Innovation Accelerator work on 'Sore Throat Test and Treat', however the population considered in community pharmacies is different to the evidence population included in this guideline i.e. people presenting to GP practices. NHSE have provided responses on this guideline during stakeholder and have not raised this as a concern*
Royal College of Nursing	General	General	General	The Royal College of Nursing welcomes the opportunity to comment on the Antimicrobial prescribing: sore throat (acute) draft guideline.	*Thank you for your comment.*
Royal College of Nursing	General	general	General	**Dosing**: for the dosing of penicillin V, the higher dose schedule quoted in the BNF is given for the younger paediatric doses (ages 0-12) but not for the older paediatric or adult doses. This could be a conscious decision but we would like to raise this as it is an inconsistency with the rest of the doses recommended which are as per the BNF.	*Thank you for your comment. This was discussed further by the Committee and the recommendation has been amended- the doubled dose has been removed.*
Royal College of Nursing	General	general	General	**Advice around delayed prescriptions**. We are unclear if the guideline gives sufficient information for GPs to understand	*Thank you for your comment. NICE is exploring the development of an additional tool to explain the different approaches that*

ORGANISATION NAME	DOCUMENT	PAGE NO.	LINE NO.	COMMENTS	DEVELOPER'S RESPONSE
				what is meant by a delayed prescription. We believe it would be helpful to have advice or a link to some information about issuing a delayed prescription advice.	*can be taken when implementing a delayed prescribing approach.*
Royal College of General Practitioners	General	General	General	The DESCARTE prospective cohort study in UK general practice has just been published on line by the BJGP and may need to be considered as part of this guidance.	*Thank you for your comment. The study is a cohort study so would not meet the criteria for inclusion within the evidence review. The duration of treatment for phenoxymethylpenicillin was discussed by the committee who agree the duration of treatment should be 5-10 days.*