UTI in children – Scope consultation

14 February – 11 March 2005

National Institute for Clinical Excellence

Organisation	Status	Order no.	Section	Comments	Response
Action for Sick Children	SH				This organisation was approached, but did not respond.
Addenbrooke's NHS Trust	SH	1	4.3a	Non specific symptoms in children less than one year/ Failure to thrive.	Thank you for your comment.
Addenbrooke's NHS Trust	SH	2	4.3a	In older children – as above and/or fever, rigor, vomiting, loin pain, history of dysuria and frequency.	Thank you for your comment.
Addenbrooke's NHS Trust	SH	3	4.3b	Clean catch or supra pubic aspirate. If possible – two clean catches before starting antibiotics.	The advice given will be based on evidence wherever possible. Where this is not available a consensus statement will be developed.
Addenbrooke's NHS Trust	SH	4	4.3b	Bag urine not advisable.	
Addenbrooke's NHS Trust	SH	5	4.3c	Dipstix – Both Leucocyte and nitrites positive – sensitivity 88%.	The different methods of making the diagnosis of UTI will be evaluated as part of the guideline development process.
Addenbrooke's NHS Trust	SH	6	4.3c	Gram stain – sensitivity 93%.	
Addenbrooke's NHS Trust	SH	7	4.3c	(Groelick and Shaw 1999).	
Addenbrooke's NHS Trust	SH	8	4.3d	If septic, fever with rigors or other systemic symptoms, not tolerating oral antibiotics.	The evidence for when to treat, what antibiotic to use, what route to use (IV or oral) and how long to treat for will be examined, and guidance developed following the evidence.
Addenbrooke's NHS Trust	SH	9	4.3d	Antibiotic choice – will depend on local microbiology advise and policy.	
Addenbrooke's NHS Trust	SH	10	4.3d	IV antibiotics – if less than one year with confirmed pyelonephritis, and in older children, if not tolerating oral antibiotics or septic.	
Addenbrooke's NHS Trust	SH	11	4.3d	Duration of antibiotics is variable, but our policy would be to continue IV antibiotics until apyrexial for 24 hours. Oral antibiotics – 7-10 day course.	
Addenbrooke's NHS Trust	SH	12	4.3d	Please see local protocol for investigations – based on policy of renal unit, Nottingham Children's Hospital.	Thank you for your comments.

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Airedale General Hospital – Acute Trust	SH	1	General	Is the age range right? Will it limit the research results too much? Is there a need to include all prepubertal children / girls mainly.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Airedale General Hospital – Acute Trust	SH	2	4.1.1a	I would favour the criteria being Previously no known significant underlying uropathy. This is because doing investigations may well find such a problem. This is addressed in 4.1.2c already I suppose so perhaps it's just the wording that's not clear to me.	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
Airedale General Hospital – Acute Trust	SH	3	General	Also, should we look at Cranberry juice?	Thank you for your comment. The guideline will consider it in relation to the evidence.
Airedale General Hospital – Acute Trust	SH	4	4.3b	Should we say if 2 urine samples are needed to confirm diagnosis.	The advice given will be based on evidence wherever possible. Where this is not available a consensus statement will be developed.
Airedale General Hospital – Acute Trust	SH	5	4.3g	Needs expanding. Which radiological investigations? Will these vary depending on age or severity of UTI. Is renal USS all that is needed? Is it as useful as MCUG and DMSA? What F.U is needed if a renal/urological anatomy is found? Is finding reflux more important than finding real scars?	These questions will be addressed as part of the GDG process. The answers will be influenced by evidence for effective interventions that are influenced by the test results.
Airedale General Hospital – Acute Trust	SH	6	4.3j	How long should follow up be if renal scars are found? What F.U is needed.	The Renal NSF Part 2 (January 2005) advises that all adults with CKD levels 1–3, which would include renal scarring but not UTI or VUR without scarring, should have follow-up (usually in primary care) of BP and proteinuria, and possibly some blood tests too.
Anglesey Local Health Board	SH				This organisation was approached, but did not respond.

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Association for Continence Advice (ACA)	SH				This organisation was approached, but did not respond.
Association of Breastfeeding Mothers	SH				This organisation was approached, but did not respond.
Association of Paediatric Emergency Medicine	SH				This organisation was approached, but did not respond.
Association of the British Pharmaceuticals Industry (ABPI)	SH	1	General	The ABPI welcomes this guideline development into urinary tract infection in children, an important but often neglected area. We have no specific comments to make on this scope.	Thank you for your comment.
Bard Limited	SH				This organisation was approached, but did not respond.
Barnet PCT	SH				This organisation was approached, but did not respond.
Barts and the London NHS Trust – London	SH	1	3e	**It is suggested that** acquired renal scarring may lead to… (There is a big leap between sentence one regarding treatment delay and sentence two – a review of the evidence for this assertion and of the evidence for technologies altering outcome is the nub of the thing.)	Thank you for your comment. The aim of the guideline is to evaluate the strength of evidence for the current view that UTI leads to renal scarring and its consequences.
Barts and the London NHS Trust	SH	2	3f	has placed a heavy burden on NHS primary and secondary care resources**, is unpleasant and costly for children and families, and is not evidence based.** (I would subsume stigma within unpleasant and costly. Multiple attendances, iv lines and urinary catheters strike me as more immediate complaints.)	Thank you for your comment. The words in the scope will be amended.
Barts and the London NHS Trust	SH	3	4.3g	**When to review existing imaging including ante-natal imaging.** The need for imaging should be viewed in the context of existing information which is currently ignored. In particular ante-natal imaging is generally buried within maternal notes. There is little coordination between management protocols	Prevention of UTI in children found to have persistent uropathy after birth following antenatal ultrasound scans is outside the scope.

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				for ante-natal hydronephrosis and for UTI in children. 4.3g then becomes 4.3h etc.	
Bedfordshire & Hertfordshire NHS Strategic Health Authority	SH				This organisation was approached, but did not respond.
Birmingham Children's Hospital	SH				This organisation was approached, but did not respond.
Birmingham Heartlands & Solihull NHS Trust	SH				This organisation was approached, but did not respond.
British Association for Accident and Emergency Medicine	SH				This organisation was approached, but did not respond.
British Association for Paediatric Nephrology	SH	1	1. Title	Should refer to all children ie age to 16 years.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has also been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
British Association for Paediatric Nephrology	SH	2	1. Title	Correct diagnosis is critical to the whole clinical issue and "diagnosis" must be part of the title and scope of the document.	The title will be amended to reflect the comments of the stakeholders.
British Association for Paediatric Nephrology	SH	3	3	Clinically, as well as identifying those whose symptoms or ill health are caused by UTI (rather than some other diagnosis), one also needs to try to identify those at highest risk of long term damage, those who have underlying renal tract abnormalities and those likely to have initial or ongoing renal damage.	Thank you for your comment. The aim of this guideline is to evaluate the evidence of risks and benefits of identifying those with or at risk of developing long-term damage. This is influenced by the evidence of effectiveness of interventions such as re-implantation or prophylaxis and will form part of the work of the Guideline Development Group (GDG).
British Association for Paediatric Nephrology	SH	4	3b	Rates of UTI in children are lower in UK than some other countries (eg Scandinavia) suggesting there may be under diagnosis in UK.	Thank you. This observation is one of the factors that have prompted this guideline.
British Association for Paediatric Nephrology	SH	5	3d	First & second sentences are true but third sentence " It is therefore often not possible to confirm the diagnosis" is illogical. If entry into the	We agree – diagnosis will be covered in the guideline. The Scope has been amended to ensure clarity.

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				guideline is the diagnosis of UTI then it is essential that the diagnosis is made correctly and the guideline should therefore focus on this as one of its main aims. It is possible to confirm the diagnosis and practitioners & parents need guidance about how best to do this. There is published evidence of under diagnosis of UTI in the very young which can be improved (four fold) with education & practical help. Over diagnosis is also a problem (some published evidence, some clinical experience) and contributes to over investigation & waste of resources. You have to get the diagnosis correct or the whole of the rest of the guideline falls down.	
British Association for Paediatric Nephrology	SH	6	3e	Need to emphasise the two aims of treatment of acute symptoms and prevention of long term problems are both equally important. The first is numerically a big clinical problem with many cases, the second is a big clinical problem because of the long term nature of the ill health and the long term costs.	Thank you for your comments, which will be taken into account when the scope is revised.
British Association for Paediatric Nephrology	SH	7	4.1.2	Groups not covered - Need to ensure those with vesicoureteric reflux (VUR) **are** included as this is very common and UTI is a frequent presenting problem. They could be classified as having underlying urinary tract abnormality.	Thank you for your comments. We recognise that a large number of children with UTI have VUR. These will be included in the guideline if it is discovered following investigations after UTI.
British Association for Paediatric Nephrology	SH	8	4	Children with UTI may or may not be “sick” some will present with poor weight gain or non specifically off colour. Need to ensure these are included. The guideline needs to address improving public/parental/nursery, as well as health professional, awareness of symptoms which could indicate UTI especially in the very young.	Thank you for your comments. The guideline will address all symptoms associated with UI. Your second point should be considered during implementation.
British Association for Paediatric Nephrology	SH	9	4.3b	urine collection - This bit is crucial to the whole guideline. Needs to address the real detail of practical considerations, parental involvement in	The advice given will be based on evidence wherever possible. Where this is not available, a consensus statement will be

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				this etc.	developed.
British Association for Paediatric Nephrology	SH	10	4.3c. Tests	Again absolutely crucial. Need to look at all tests including consulting room ones like dipsticks & microscopy as well as laboratory ones. Long "established" criteria used by labs like bacterial growths of more than 10^5/ml being significant need to be re examined by re examination of the original literature on this (Kass criteria increasingly seen as inappropriately interpreted). Transportation of specimens, timing, temperature, bottles used all need examining as these can all influence the final laboratory report.	The different methods of urine collection and other issues related to making the diagnosis of UTI will be evaluated as part of the guideline development process.
British Association for Paediatric Nephrology	SH	11	4.3d	Use of hospitals not confined to admission, also used in some places to confirm or refute a GP diagnosis. Use of ambulatory or day assessment wards may be important.	The evidence and practical aspects of hospital visit or admission will be considered in relation to making the diagnosis and receiving treatment.
British Association for Paediatric Nephrology	SH	12	4.3d	The role of the post-treatment urine test to confirm adequate treatment – timing etc.	The value of the post-treatment urine test will be assessed.
British Association for Paediatric Nephrology	SH	13	4.3f and k	The role of non-pharmacological /lifestyle measures to prevent further infections eg cranberry products, treating constipation, increasing fluid intake etc. Investigation & treatment of "dysfunctional voiding" which is clinically quite common. Role of anti-cholinergic medication.	These points will be incorporated into the clinical questions and search for evidence, and reflected in the clinical pathway. These issues should be addressed by the guideline development process.
British Association for Paediatric Nephrology	SH	14	4.3g	Investigations need to assess structure & **function** of urinary tract. Need to address when investigations take place & where & by whom eg an ultrasound scan in a tertiary paediatric nephrology unit by a radiologist with a research interest in the problem will have a different rate of detection of scars than a US done in an average district hospital. Need to ensure guidelines are applicable to the majority.	Thank you for your comment. The importance of assessing function will be included in the scope. This point can be considered during the guideline development process. It is also valuable to have a standard method for undertaking and reporting ultrasound.

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British Association of Paediatric Surgeons	SH				This organisation was approached, but did not respond.
British National Formulary (BNF)	SH				This organisation was approached, but did not respond.
British Nuclear Medicine Society	SH	1	1. Title	This should include diagnosis.	Urinary tract infection: diagnosis, treatment and long-term management of children.
British Nuclear Medicine Society	SH	2	1. Title	The age limit should be up to the recognised definition of child care i.e. 16 years of age.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
British Nuclear Medicine Society	SH	3	3. General	The scope currently considers UTI as a single clinical entity. However the request is that the guideline should be applicable to primary care for referral as well as general paediatrics, paediatric nephrology and paediatric urology specialist services. To achieve this aim there is a need to identify different clinical sub-groups of children all with a UTI some but not all of whom may require imaging.	Thank you for your comments. The guideline will include children under 16 years old from the point when UTI is first suspected in primary or secondary care. Consideration of management of complex nephrourological cases is outside the scope. However, it is recognised that a significant proportion of children with UTI have VUR and this will be included up to the point of referral to a tertiary specialist.
British Nuclear Medicine Society	SH	4	3d	This statement applies to children under 2 – 3 years of age only. This is not clear in the present document but is inferred.	Thank you. Although non-specific symptoms are most common in children under 2 to 3 years old, they can occur in older children. As the commonest time for UTI is in the first 2 years of life, this statement about symptoms and urine collection has not been changed.
British Nuclear Medicine Society	SH	5	3e	This statement is controversial. e.g. **Chronic Renal Disease:** section 3 c gives the incidence of UTI. However at the data on renal replacement therapy in Europe: data over 20	This guideline provides an opportunity to examine the evidence for the relationship between UTI, renal scarring and its consequences systematically, as well as to evaluate the evidence that the natural history

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				years from the ERA – EDTA registry shows that the Incidence and Prevalence of children who require renal replacement therapy due to pyelonephritis is 3.8 per million age related population. For children who require dialysis the same registry showed an incidence of 1 child per million age related population (1996-2001). This indicates that while UTI is common, the number of children who end up in renal failure is very small. There are publications on the incidence of hypertension (or lack there of) in children with renal damage secondary to pyelonephritis. The same is true of the complications of pregnancy in such girls. Furthermore as most pregnant women attend antenatal clinic where blood pressure is routinely measure, so the need to detect renal scarring for this reason is doubtful. All the issues raised in this section should be included in section 4 to ensure that the previous assumptions are evaluated critically.	can be altered by effective diagnosis and treatment. The discrepancy between the large number of children with UTI, the minority of these with renal scarring (chronic kidney disease levels 1–3) and the small number with established renal failure (CKD level 4–5) is one of the reasons for commissioning this guideline.
British Nuclear Medicine Society	SH	6	4.1.1a	This should be based on 'symptoms'. Age up to 16 years. Recurrent UTI not upper and lower.	Thank you for your comments. The guideline will include children with any symptoms that might be caused by UTI. Age: Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI. Upper or lower: We appreciate that recurrent

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					UTI is the main issue and that it is not possible to distinguish between upper and lower UTI accurately. The text has remained the same to ensure that both possibilities are covered.
				Exclude form this section any mention of those who will be excluded.	Exclusion: Thank you for your comment. The text in 4.1.1a remains for clarity.
British Nuclear Medicine Society	SH	7	4.1.2g	This statement should be excluded.	Thank you for your comments. The reason for exclusion of these groups is that there are additional factors that should be taken into account when choosing treatment options. However, as other stakeholders have commented, it should not prevent individual judgements being made about care based on this guideline where clinically appropriate.
British Nuclear Medicine Society	SH	8	4.3a	The diagnosis of UTI should be considered when the infant, child or adolescent has SYMPTOMS However this means that some children will be sick while others may be well. See section 3 general above. There will be a need to stratify children with a UTI and the classical method based on age may no longer be appropriate. The scope should therefore ensure that the team looks for evidence that will allow stratification. My clinical experience suggests that 'the child at risk' may be more relevant that 'age'. This overlaps with section 4.3.d point number 1.	Criteria for hospital admission will be considered during guideline development and will form part of the pathway. It will be difficult to identify children at risk before the first UTI.
British Nuclear Medicine Society	SH	9	4.3g	This should include function of the kidneys as well as structure. The scope should include the competencies required to undertake the investigations that may come with the guidelines.	Function: The importance of assessing function will be included in the scope. Competencies: Thank you for your comments. We are aware that competency is an important issue, but this is unfortunately out of the Scope because of timeframe we are

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					given.
British Psychological Society, The	SH				This organisation was approached, but did not respond.
British Society for Antimicrobial Chemotherapy	SH				This organisation was approached, but did not respond.
British Society of Paediatric Radiology	SH	1	2a and 4.1.1	Should cover children up to **16 years of age.**	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
British Society of Paediatric Radiology	SH	2	4.1.1	Need to define **" significant….uropathy"** perhaps inserting the word **" pre existing"** would also help.	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
British Society of Paediatric Radiology	SH	3	4.1.2	Should exclude **antenatally detected uropathies** as well although it will be necessary to define what a significant antenatal uropathy is first.	Thank you for your comments. We agree. Persistent urinary tract abnormalities confirmed postnatally will be excluded from this guideline.
British Society of Paediatric Radiology	SH	4	4.3g	**What** investigation(s) to use as well as when. Investigations to assess **function** as well as structure are necessary (eg radionuclide studies).	The importance of assessing function will be included in the scope.
CEMACH	SH				This organisation was approached, but did not respond.
Centre for Reviews and Dissemination	SH	1	4.3b and c	The literature on sample collection and diagnosis of UTI in children has been comprehensively covered in our recent review for the HTA.	Thank you for drawing our attention to this valuable piece of work.
Centre for Reviews and Dissemination	SH	2	4.3g	The accuracy of tests used to further investigate children with confirmed UTI was also covered by the above review. However, important issues remain unresolved and should be considered when preparing the guideline:	We agree: these points will be incorporated into the clinical questions and search for evidence and reflected in the clinical pathway.

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				1. Many tests aim to detect reflux. Evidence for a link between the presence of reflux and long term outcome would need to be established before these tests could be considered clinically useful (even if they are known to be accurate). 2. There must be evidence for an effective intervention that improves outcome in any target condition, e.g. reflux or presence of renal scarring, before testing for that target condition can be justified.	
Centre for Reviews and Dissemination	SH	3	General	A copy of our draft report on the above systematic review has been sent to ****.	Thank you.
CIS'ters	SH				This organisation was approached, but did not respond.
Coloplast Limited	SH				This organisation was approached, but did not respond.
Conwy and Denbighshire NHS Trust	SH				This organisation was approached, but did not respond.
Co-operative Pharmacy Association	SH				This organisation was approached, but did not respond.
Craven Harrogate and Rural District PCT	SH				This organisation was approached, but did not respond.
Croydon Primary Care Trust	SH				This organisation was approached, but did not respond.
Department of Health	SH	1	3d	Accurate diagnosis of urinary tract infection is very important because a diagnosis of UTI in infancy currently carries the implication that renal tract imaging is necessary. Would you consider rewording the 3rd sentence to read: *'Despite these difficulties, it is important to diagnose UTI accurately'.*	The importance of accurate diagnosis should be a question during the guideline development process rather than starting with this assumption. To some extent this will depend on the value of 'necessary imaging'.

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Department of Health	SH	2	3e	A significant proportion of infants who present with a UTI have an underlying urological abnormality such as vesicoureteric reflux, pelvic-ureteric obstruction, ureterocoele. Would you therefore consider rewording the text as follows: '*The purpose of diagnosis and treatment of UTI is first to alleviate the acute symptoms, then to detect underlying urological abnormalities which will influence response to treatment and long-term outcome and management. This will in the long term protect renal tissue from avoidable scarring*' In the following sentence - would you consider removing the word '*acquired*'.	There is no intrinsic value in detecting underlying anomalies unless their detection alters management. The importance of detecting these anomalies will be dependent on the evidence of benefit from interventions. The word 'acquired' can be omitted from the second sentence.
Department of Health	SH	3	3f	We are concerned that the phrase 'a stigma of illness on children with minor health problems' suggests that urinary tract infection is a minor problem which is unnecessarily investigated and treated. Would the guideline development team consider this point?	Thank you; we will omit the word stigma here. UTI may be a minor illness or less frequently a much more serious condition. The aim of the guideline is to find out how much investigation is justified.
Department of Health	SH	4	4.1.1a	We understand that it may not be known that a child has a significant underlying uropathy until he or she presents with a urinary tract infection. Could you clarify this point?	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
Department of Health	SH	5	4.1.1a and 4.1.2f	Would you consider whether some neonates should be included? We understand that UTI in the newborn is often associated with septicaemia and sometimes meningitis. Such an infant may be diagnosed and then transferred to a special care baby unit or a neonatal intensive care unit. We believe that a more sensible exclusion in this age group would be preterm babies or neonates who are ill for another reason such as galactosemia.	Thank you for your comments. Neonates will be included.

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Department of Health	SH	6	4.1.2c	Whilst it does seem reasonable to exclude children already known to have a significant uropathy, e.g. an antenatally diagnosed abnormality, many will be found to have a significant uropathy as a result of a UTI being diagnosed and investigated. The commonest of these will be vesicoureteric reflux. As it is hoped that this guidance will be applicable to general paediatrics, paediatric nephrology and paediatric urology specialist services, would you consider clarifying where the scope of this guideline finishes? We understand that is not possible to make a decision about the indications for renal tract imaging without knowledge of the frequency and prognosis of the common urological abnormalities found, would you consider including these within the scope?	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
Department of Health	SH	7	4.3d	Would you consider whether the word '*symptomatic*' is appropriate here?	Thank you for your comment. The scope has been amended to say sick and/or symptomatic, etc.
East Cambridgeshire and Fenland Primary Care Trust	SH				This organisation was approached, but did not respond.
Eastbourne Downs Primary Care Trust	SH				This organisation was approached, but did not respond.
Faculty of Public Health	SH				This organisation was approached, but did not respond.
Gloucestershire Hospital NHS Trust	SH				This organisation was approached, but did not respond.
Good Hope Hospitals NHS Trust	SH				This organisation was approached, but did not respond.
Health Protection Agency	SH	1	General	This is complete and all-encompassing.	Thank you.

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Health Protection Agency	SH	2		One very minor point from ****: Older children (eg age 8-12) with UTI and systemic symptoms with suspected pyelonephritis – there is still the issue of whether and how much to investigate, so I would broaden the age range.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Healthcare Commission	SH				This organisation was approached, but did not respond.
Hertfordshire Partnership NHS Trust	SH				This organisation was approached, but did not respond.
Hospital Infection Society	SH				This organisation was approached, but did not respond.
Infection Control Nurses Association of the British Isles	SH				This organisation was approached, but did not respond.
Leeds Teaching Hospitals NHS Trust	SH				This organisation was approached, but did not respond.
Maidstone and Tunbridge Wells NHS Trust	SH				This organisation was approached, but did not respond.
Medicines and Healthcare Products Regulatory Agency (MHRA)	SH				This organisation was approached, but did not respond.
Mid Essex Hospitals NHS Trust	SH	1	3a	As a result of the introduction of antibiotics and improved understanding of underlying renal pathology.	Thank you for your comment.
Mid Essex Hospitals NHS Trust	SH	2	3d	Urine collection and interpretation of urine tests in infants and children are not easy.	We agree – diagnosis will be covered in the guideline.
Mid Essex Hospitals NHS Trust	SH	3	3e	The purpose of diagnosis and treatment of UTI is first to treat acute infection, secondly to diagnose any underlying renal abnormality if present and thirdly to protect renal tissue from avoidable scarring in the long run.	Thank you. The value of detecting underlying renal anomalies is dependent on the evidence that interventions consequent on the anomalies revealed are effective.

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National Kidney Research Fund, The	SH				This organisation was approached, but did not respond.
National Patient Safety Agency	SH				This organisation was approached, but did not respond.
National Public Health Service – Wales	SH				This organisation was approached, but did not respond.
Neonatal & Paediatric Pharmacists Group (NPPG)	SH				This organisation was approached, but did not respond.
Newcastle Upon Tyne Hospitals NHS Trust	SH				This organisation was approached, but did not respond.
NHS Direct	SH				This organisation was approached, but did not respond.
NHS Modernisation Agency, The	SH				This organisation was approached, but did not respond.
NHS Quality Improvement Scotland	SH				This organisation was approached, but did not respond.
Nottingham City Hospital	SH				This organisation was approached, but did not respond.
Powys Local Health Board	SH				This organisation was approached, but did not respond.
Princess Alexandra Hospital NHS Trust	SH				This organisation was approached, but did not respond.
Prodigy	SH				This organisation was approached, but did not respond.
PromoCon (Disabled Living)	SH				This organisation was approached, but did not respond.
Q-Med (UK) Ltd	SH				This organisation was approached, but did not respond.

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Queen Elizabeth Hospital NHS Trust (Woolwich)	SH	1	1	Title should include *diagnosis* as well as investigation etc.	Urinary tract infection: diagnosis, treatment and long-term management of children.
Queen Elizabeth Hospital NHS Trust (Woolwich)	SH	2	4.1.1	Children who do not have a *known* significant underlying…	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
Queen Elizabeth Hospital NHS Trust (Woolwich)	SH	3	4.1.2f	Should be included.	Thank you for your comments. We are unable to cover this part of the care pathway because the main aim of this guideline is to focus on the usual presentations of UI in childhood.
Queen Elizabeth Hospital NHS Trust (Woolwich)	SH	4	4.1.2g	Should be included.	Thank you for your comments. The reason for exclusion of these groups is mainly that there are additional factors that should be taken into account when choosing treatment options. However, as other stakeholders have commented it should not prevent individual judgements being made about care based on this guideline where clinically appropriate.
Rotherham Primary Care Trust	SH				This organisation was approached, but did not respond.
Royal Bolton Hospitals NHS Trust	SH				This organisation was approached, but did not respond.
Royal College of General Practitioners	SH	1	General	The age range covered is too short and should be extended upwards, possibly to the age of 16.This is mainly due to the high rate of missed UTI's. Possible change in the title to: 'Urinary tract infection: diagnosis, investigation and long-term management in children'.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Royal College of General Practitioners	SH	2	P. 2, section 3a	Here the emphasis should be upon the fact that our awareness of the natural history of UTI has changed. We have learned more about the major impact of missed ureteric reflux disease, which as a consequence can lead to reflux nephropathy,	Thank you for your comment.

Organisation	Status	Order no.	Section	Comments	Response
				hypertension and chronic kidney disease. It is therefore important to develop clear guidelines, which help clinicians and other members of the Primary Health Care team to think of a UTI as a possible diagnosis, to try to diagnose it and treat it promptly.	
Royal College of General Practitioners	SH	3	P. 2, section 3d	This section is a bit negative. It is often difficult to confirm the diagnosis of a UTI in a baby, toddler or young child. It is however possible to try to do so with clear instructions and advice to the parents or carers on how to collect a urine sample for each of the age groups mentioned. "Urine collection is also difficult…" - should read, "Urine collection can be difficult…" "Often not possible to confirm diagnosis" - should read "May not always be possible to confirm diagnosis".	Yes, we could make this section more positive. The Scope has been amended accordingly to ensure clarity.
Royal College of General Practitioners	SH	4	P. 2, section 3e	The purpose outlined here for diagnosing and treating UTI's is agreed upon. However the emphasis should stress that prompt treatment with antibiotics can be started before the results from the urine sample are obtained, (as long as urine sample has been collected). This would hopefully minimise the risks of developing renal scars and their consequences.	This is a valid viewpoint, which will be examined as part of the guideline development process in the light of the evidence.
Royal College of General Practitioners	SH	5	P. 2, section 3f	We all have to be aware of the limited resources in primary and secondary care. For that reason it is important not to over investigate. Therefore clear guidelines are needed to try to avoid missing children with un-diagnosed renal reflux disease. It might be worth considering different levels of investigations for different age groups, as it is thought that there is good evidence that children who have not scarred their kidneys by the age of 4 might not scar after this age. Most follow up in uncomplicated cases of renal scarring can easily take place in primary care. We are more than	The importance of diagnosing every child with reflux will emerge from the evidence. Clinical experience is that VUR is extremely common, but there is much less evidence that knowing about it is useful to guide treatment. Once the guidance has been developed it will be much clearer how to implement the recommendations in primary and secondary care.

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				able to monitor BP readings. It would be useful however to have copies of centile charts for children's Bp readings.	
Royal College of General Practitioners	SH	6	4.1.1a	Would you consider emphasising children who have a family history or renal disease? Also possible re-define age range. Age: less than 16 is still imperfect but provides a more physiological basis to the guideline. Age < 8 reflects a disputed cut-off for radiological risk. Risk of kidney damage probably follows a log scale. Many children will have been identified by the age of four, most by eight, but a few more will turn up later (even in adulthood).	Thank you for your comments. The significance of familial renal diseases will be considered in relation to the evidence. Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Royal College of General Practitioners	SH	7	4.3a	To always consider UTI as potential cause for a child to be unwell.	This will form part of the GDG process.
Royal College of General Practitioners	SH	8	4.3c	Dipstick testing can be unhelpful in diagnosing children's UTI's. If it is positive it can be interesting and so can it be if it is negative. It is still best to send a sample for microscopy and culture. The presence of protein or blood however may indicate significant pathology. It should not be relied upon alone. Microscopy can be difficult to do in General Practice mainly due to the training and time taken to perform it.	The evidence for which tests are best will be examined and recommendations made based on the evidence.
Royal College of General Practitioners	SH	9	General	**** GP at **** Medical Practice, Newcastle upon Tyne, had the following statement to add: "This is an important clinical area to try to manage correctly. We have been part of a pilot scheme for Direct Access UTI monitoring for a few years now. The whole practice has had training and we have a protocol to follow and an excellent and supportive secondary team. I feel that there has been no stigma attached as a result of referring	Thank you for your helpful comments – we congratulate you on your success.

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				these children through the scheme. Parents feel their children are being well looked after and understand why further tests are needed. If all the tests are 'clear' then they feel they do not need to worry any more but are aware how to access help."	
Royal College of General Practitioners Wales	SH				This organisation was approached, but did not respond.
Royal College of Nursing (RCN)	SH	1	General	Wondered about issues of trimethoprim resistance, will this be covered as this can be a problem? This would mean what about the evidence for second line antibiotics? This may be outside this document but presents a real dilemma in practice.	Evidence will be sought to inform advice about the choice of antibiotics.
Royal College of Nursing (RCN)	SH	2	1.1	Age range should be increased to 16 years.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Royal College of Nursing (RCN)	SH	3	3e	Would it be possible to indicate that renal scarring from UTI is generally seen only in the presence of vesico-ureteric reflux, and that it is therefore important that this is either identified or excluded as part of the assessment of a child with UTI?	Renal scarring and VUR are linked in a proportion of cases, but by no means all those with scarring have evidence of reflux. The evidence for importance of identifying those with VUR will form part of the guideline development process and will depend on the value of available interventions.
Royal College of Nursing (RCN)	SH	4	4.1.2	Exclusion criteria should be clarified in more detail.	Thank you for your comments. The population exclusion criteria have been amended following the stakeholder comments.
Royal College of Nursing (RCN)	SH	5	4.1.2b	Also concerned re some of the exclusion criteria particularly 4.1.2 - b: Children with neurogenic bladders - as these children are often on prophylactic antibiotics and	Thank you for your comments. The reason for exclusion of these groups is mainly that there are additional factors that should be taken into account when choosing treatment options. However, as other stakeholders have

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				have high risk of UTI's, the emphasis of early intervention for example, intermittent catheterisation etc could be made with statements of best practice and we consider that they will clearly benefit from being included in the guidelines.	commented, it should not prevent individual judgements being made about care based on this guideline where clinically appropriate.
Royal College of Nursing (RCN)	SH	6	4.3	Clinical management of symptomatic rather than sick infants and children and category to be broadened to parents and carers.	Thank you for your comment. The Scope has been amended to say sick and/or symptomatic, etc.
Royal College of Nursing (RCN)	SH	7	4.3c	This is a controversial issue and needs more thought/discussion by the group and discussion must include resource issues.	The aim of the GDG is to examine the evidence and make recommendations based on the results of the investigation.
Royal College of Nursing (RCN)	SH	8	4.3	Need to include prevention advice including that for genital soreness in girls.	Thank you for your comments. Genital soreness may be considered in this guideline in relation to differential diagnosis (as it relates to the evidence). However, treatment of this condition is outside the scope of this guideline.
Royal College of Nursing (RCN)	SH	9	General	Need to ask what is it in the care of this group of patients that causes the problem.	Thank for your helpful comment. The problems are related to failure to consider the diagnosis in children under 2 years old, difficulties in urine collection and interpretation, delays in making or confirming the diagnosis, confusion about the correct management and the debate about whether or not it is useful to do invasive tests after the patient has recovered.
Royal College of Paediatrics and Child Health	SH	1	General	The RCPCH acknowledges that the scope needs to be limited so as to ensure that it is manageable. The key clinical question for the NHS is the diagnosis, investigation, and subsequent management of acute UTI. It is unclear whether the management of asymptomatic bacteriuria is included within the scope. The one concern about its inclusion is whether this would render the scope	Thank you for your helpful comment. The guideline will not cover screening for asymptomatic bacteria. However, asymptomatic bacteria detected during routine follow-up will be considered.

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				unmanageable. The guideline developers need to make a judgement as to whether inappropriate investigation of children without urinary symptoms is a current problem in the NHS.	
Royal College of Paediatrics and Child Health	SH	2	4.1.1a	Inclusion Criteria: It is unclear why the scope is only up to 8 years. Children and young people over that age cannot be considered under adult guidelines. The RCPCH recommends amending the inclusion criteria to children and adolescents <16years presenting with symptoms of an acute UTI.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Royal College of Paediatrics and Child Health	SH	3	4.1.1b	Whilst no patient subgroups have been identified at this stage, infants (however defined) will need to be considered separately.	Thank you for your comments. Separate age groups may be considered following appraisal of the evidence.
Royal College of Paediatrics and Child Health	SH	4	4.1.2	The excluded categories are largely appropriate. However, an alternative approach would be to define groups that will not be covered as follows: • children that do not present with UTI but develop UTI as a complication of co-morbidity (eg: children in PICU, NICU), and • children who have UTI detected pre-symptomatically, through routine screening (eg: for children with indwelling catheters, recurrent UTI or antenatally detected abnormalities who are having routine dipstick or urine culture performed). • That would encompass the groups in sections 4.1.2 a - g (groups that will not be covered) and these would not need to be stated separately.	Thank you for your comments. We believe that your comments have been addressed in Sections a, b and c (cross-refer to answers for each issue raised).
Royal College of Paediatrics and Child Health	SH	5	4.1.2c	The term “significant uropathies” is ill defined. There are many infants in whom renal pelvic dilatation has been identified antenatally. A decision needs to be made whether these infants	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of

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				are to be excluded. Even if they are to be excluded, in a population where antenatal ultrasound screening is routine this may have an impact on decision making in infants presenting with UTI.	referral to another specialist.
Royal College of Paediatrics and Child Health	SH	6	4.3a	This is an important aspect of management, and will need to be underpinned by a review of the symptoms suggestive of an acute UTI, according to age group. This requires a summary of the evidence on the probabilities of underlying UTI (defined by an acceptable reference standard), according to presenting symptoms and age. The conclusion may be that few symptoms are good at ruling in (ie specific to) acute UTI. However, the guideline can potentially provide guidance about which symptoms (e.g. recurrent abdominal pain) might not warrant testing for acute UTI.	This type of issue will be examined as part of the guideline development process and clinical pathway.
Royal College of Paediatrics and Child Health	SH	7	4.3	It is important that the scope includes the long-term prognosis for children presenting with symptomatic acute UTI for hypertension requiring treatment later in childhood, adulthood or pregnancy, and for end stage renal disease. This must underpin the following questions: • How is the risk of these outcomes modified by the detection of reflux or scarring after the acute UTI (needed to address 4.3.g)? • Is there any need to monitor blood pressure in childhood? • Are these risks reduced by prophylactic antibiotics compared with treatment of acute UTI if symptoms recur (needed to address 4.3.f, 4.3.g, and 4.3.k)?	Thank you for these comments. These considerations will be at the core of the evidence for imaging and long-term follow-up as well as informing whether or not it is important to confirm the diagnosis and start treatment early.

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				• Is routine screening for repeat infection an alternative strategy that could be used? (needed to address 4.3.f and 4.3.g).	
Royal College of Paediatrics and Child Health	SH	8	4.3e	As well as the treatment of recurrent UTI's the scope should include investigations in this situation.	Management of recurrent infection is within the scope of this guideline.
Royal College of Paediatrics and Child Health	SH	9	4.3i	The scope currently includes referral for surgical intervention. This would not normally be contemplated after an acute UTI except when obstructive uropathy is recognised. A decision on whether to include the indications for referral of children with vesico-ureteric reflux for surgery should be based on a judgement as to whether there are still children receiving inappropriate reflux surgery.	The GDG will examine the evidence of benefits of interventions such as surgery and make recommendations based on the evidence. Where evidence is insufficient, the recommendations will be based on a consensus process.
Royal College of Paediatrics and Child Health	SH	10	4.3g	This must also include guidance on which investigations should be performed.	The guideline will consider the commonly used first-line tests, ultrasound, DMSA, MCUG and other tests as agreed within the group.
Royal College of Paediatrics and Child Health	SH	11	4.3j	Advice on long-term follow up should include duration and handover at maturity.	The Renal NSF Part 2 (January 2005) advises that all adults with CKD levels 1–3, which would include renal scarring but not UTI or VUR without scarring, should have follow-up (usually in primary care) of BP and proteinuria, and possibly some blood tests too.
Royal College of Pathologists	SH	1	4.3a	When to consider the diagnosis of UTI in sick infants and children who were previously healthy - Fever – no source evident from history or physical examination (between 2mths and 2yrs the prevalence is 5%) as early diagnosis may prevent inappropriate Rx, prevent renal damage from pyelonephritis and allow early diagnosis of VUR.	These points will be incorporated into the clinical questions and search for evidence, and reflected in the clinical pathway.
Royal College of Pathologists	SH	2	4.3a	How do we define fever ?	This will be discussed during the guideline development process and cross-referenced to

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Royal College of Pathologists	SH	3	4.3a	How is temperature measured ?	the fever guideline.
Royal College of Pathologists	SH	4	4.3a	Need to be aware that children may have than one diagnosis.	
Royal College of Pathologists	SH	5	4.3a	Urinary tract symptoms – crying on urination, foul smelling urine, altered voiding pattern. Dysuria, urgency, frequency, hesitancy cannot be reliably discerned in young children.	
Royal College of Pathologists	SH	6	4.3a	Other non-specific features include irritability, vomiting, diarrhoea and failure to thrive.	
Royal College of Pathologists	SH	7	4.3a	When to take blood cultures? Bacteraemic children more likely to have underlying renal tract abnormalities (esp. non *E. coli* UTI). Bacteraemia more likely in children < 2months Clinically difficult to distinguish clinically between bacteraemic and non-bacteraemic UTI.	
Royal College of Pathologists	SH	8	4.3b	When and how to collect urine for the diagnosis of UTI in infants and children - Bag Urine is inappropriate (estimated 85% false positive, higher in low risk groups) – Negative culture rules out infection.	The advice given will be based on evidence wherever possible. Where this is not available, a consensus statement will be developed.
Royal College of Pathologists	SH	9	4.3b	Supra-pubic aspirate (variable success, requires technical experience, invasive, children < 6 months).	
Royal College of Pathologists	SH	10	4.3b	In-out catheter (sensitivity 95%, specificity 99% compared to SPA), some degree of clinical experience required therefore may not be suitable in General Practice.	
Royal College of Pathologists	SH	11	4.3b	Clean catch urine, undressing infants often induces voiding and/or ask to sit on a potty and give a drink, await results.	
Royal College of Pathologists	SH	12	4.3b	Sterile foil dishes and explanatory leaflets reduce contamination rates in General Practice.	

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Royal College of Pathologists	SH	13	4.3b	Consideration needs to be given to the acceptability of some of the methods by the patient and their family.	Thank you for raising this point, which will be taken into consideration in developing the pathway.
Royal College of Pathologists	SH	14	4.3c	Which tests establish or exclude UTI as the cause of illness in infants and children (e.g. dipstick) Urine dipstick:- Leucocyte esterase Nitrite If both are positive infection is likely, if either are positive it indicates a possible infection if neither are positive infection is unlikely (except in children with complex renal problems in whom bacteria which are nitrite-negative are more likely to cause infection).	These issues will be included in the guideline development process.
Royal College of Pathologists	SH	15	4.3c	Urine microscopy (white cells/bacteria) – quality performance varies although according to meta-analysis performed by Huich *et al* this is best suited for assessing UTI. It may not be the most cost effective method to do so.	The evidence for which tests are best will be examined and recommendations made based on the evidence.
Royal College of Pathologists	SH	16	4.3c	Quantative Urine Culture – refrigeration required if not processed immediately Boric acid may be used as a preservative if transport of specimen may be an issue Significance also depends on type of specimen, e.g. SPA should be sterile therefore low numbers of coliforms significant Urethral catheterisation – >10^5 95% probability of infection (lower counts may warrant repeating depending on clinical scenario) Clean void urine Boy >10^4 infection likely Girl 3 specimens ≥ 10^5 95%	The evidence for which tests are best will be examined and recommendations made based on the evidence. A number of related issues will be included as suggested in your comments.

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				probability of infection 2 specimens ≥10^5 90% 1 specimen ≥ 10^5 80% lower counts should be repeated if suspicious of infection lower counts may be associated with less pyuria Lower counts may also be caused by colonisation without infection, dilution from fluid load, urinary frequency, cleansing agent with antibacterial activity, concurrent antibiotics, fastidious bacteria, growth inhibitor, haematogenous UTI, ureteral obstruction ? >10^3 significant.	
Royal College of Pathologists	SH	17	4.3c	Automated urine analysis may be performed in some laboratories.	The evidence for which tests are best will be examined and recommendations made based on the evidence.
Royal College of Pathologists	SH	18	4.3c	Choice of route of therapy will depend on degree of toxicity, dehydration and ability to retain oral fluids.	The advice given will be based on evidence wherever possible.
Royal College of Pathologists	SH	19	4.3c	After appropriate cultures taken.	Thank you for your comments.
Royal College of Pathologists	SH	20	4.3c	IV antibiotics – cefuroxime Oral antibiotics – trimethoprim, cefalexin, amoxicillin, co-amoxiclav, nalidixic acid, ciprofloxacin Choice depends on local sensitivity pattern and recent antibiotic exposure.	The advice given will be based on evidence wherever possible.
Royal College of Pathologists	SH	21	4.3c	If no clinical response within 48hrs – repeat clinical evaluation and repeat urine culture, Renal imaging – ultrasound.	The advice given will be based on evidence wherever possible. Where this is not available, a consensus statement will be

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Royal College of Pathologists	SH	22	4.3c	7-14 days; no data comparing these two durations Shorter course therapy (single dose less effective) 3 day course; not worse (but statistical trend to failure) ? 3-7 day course not studied.	developed.
Royal College of Pathologists	SH	23	4.3c	Prophylaxis should be given until imaging results are available (in those children in whom further imaging is deemed necessary).	
Royal College of Pathologists	SH	24	4.3e	How and when to treat re-infection after initial Rx - Re-infection is usually due to endogenous relapse Choice of therapy will depend on sensitivities of culture isolates, if empirical will depend on previous antibiotic exposure.	There is a large body of literature on causes of re-infection in children that will form part of the search for evidence. The importance of up-to-date local advice on antibiotic choice will be within the remit of the guideline and clinical pathway.
Royal College of Pathologists	SH	25	4.3f	When to use prophylactic antibiotics, which to use and when to stop - A variety of agents used, trimethoprim remains prophylactic antibiotic of choice, use when awaiting imaging results in children being investigated for VUR or if found to have VUR or other renal abnormality Recommended for children <12yrs.	The value, choice and timing of prophylaxis will be examined during guideline development and related to evidence of benefit.
Royal College of Pathologists	SH	26	4.3g	When to use investigations and assess structure No comment.	Thank you.
Royal College of Pathologists	SH	27	4.3h	When to refer No comment.	
Royal College of Pathologists	SH	28	4.3i	When to operate - No comment.	
Royal College of Pathologists	SH	29	4.3j	When to do long term follow up - No comment.	
Royal College of Pathologists	SH	30	4.3k	What advice to give carers and patients, including what to do if another UTI occurs - No comment.	
Royal College of Radiologists	SH				This organisation was approached, but did not respond.

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Royal College of Surgeons of England	SH				This organisation was approached, but did not respond.
Royal Liverpool Children's NHS Trust	SH				This organisation was approached, but did not respond.
Sandwell & West Birmingham Hospitals NHS Trust	SH	1	1	Symptomatic urinary tract infection: diagnosis, imaging studies and management of children from birth to 16 years of age.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI. The title of the guideline has been amended to 'Urinary tract infection: diagnosis, treatment and long-term management of children', taking other Stakeholders' comments into account.
Sandwell & West Birmingham Hospitals NHS Trust	SH	2	4.1.1a	Children from birth to 16 years of age with a first or recurrent UTI.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
Sandwell & West Birmingham Hospitals NHS Trust	SH	3	4.1.2a	Children with bladder catheters in situ.	Thank you for your comment. The scope has been amended.
Sandwell & West Birmingham Hospitals NHS Trust	SH	4	4.1.2c	Children known to have specific underlying renal tract anomalies: antenatal hydronephrosis, cystic renal dysplasia, bladder extrophy.	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
Sandwell & West Birmingham Hospitals NHS Trust	SH	5	4. General	Omit sections d,e,f, and g.	Thank you for your comments. The reason for exclusion of these groups is mainly that there are additional factors that should be taken into account when choosing treatment options. However, as other stakeholders have commented, it should not prevent individual

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					judgements being made about care based on this guideline where clinically appropriate.
Sandwell & West Birmingham Hospitals NHS Trust	SH	6	4.3a	When to consider the diagnosis of UTI in symptomatic infants and children.	When to consider the diagnosis of UTI in symptomatic infants and children.
Sandwell & West Birmingham Hospitals NHS Trust	SH	7	4.3c	Urine culture is the gold standard. Dipstick and microscopy are only screening tests and not diagnostic.	The basis for the gold standard used in laboratories will form part of the evidence examined. Other tests will be compared with each other and with the gold standard.
Sandwell & West Birmingham Hospitals NHS Trust	SH	8	4.3e	How and when to treat symptomatic reinfection (omit also “after initial treatment”).	Thank you, we agree.
Sandwell & West Birmingham Hospitals NHS Trust	SH	9	4.3f	Note that the benefit of prophylaxis on preventing UTI recurrences has been disproved (J.Craig, Cochrane review) and in preventing long term renal damage has never been established.	This systematic review will form part of the evidence examined during the guideline development process.
Sandwell & West Birmingham Hospitals NHS Trust	SH	10	4.3g	When and which imaging studies to use to assess the structure and function of the renal tracts. How long after the diagnosis of UTI should a reflux study be carried out, or a DMSA scan carried out (DMSA in the acute stage of UTI, or several months later ?)	The choice of tests, timing and place will be considered by the GDG and addressed in the context of the patient pathway.
Sandwell & West Birmingham Hospitals NHS Trust	SH	11	4.3j	Which children need a long term follow up, what to monitor on follow up (are routine urine tests or cultures needed?), how long the follow up should be and by whom (primary, 2ndary or tertiary? for which subgroups of affected children?)	The need for follow-up will depend on the evidence for benefit of monitoring and interventions in relation to UTI, VUR and renal scarring. Duration as above.
Scottish Intercollegiate Guidelines Network (SIGN)	SH				This organisation was approached, but did not respond.
Sheffield Children's Hospital NHS Trust	SH				This organisation was approached, but did not respond.
South & Central Huddersfield PCTs	SH				This organisation was approached, but did not respond.
South Birmingham Primary Care Trust	SH				This organisation was approached, but did not respond.

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South Warwickshire General Hospitals NHS Trust	SH				This organisation was approached, but did not respond.
Southport & Ormskirk NHS Trust	SH				This organisation was approached, but did not respond.
St Mary's Hospital, Isle of Wight Healthcare NHS Trust	SH				This organisation was approached, but did not respond.
Tameside and Glossop Acute Services NHS Trust	SH				This organisation was approached, but did not respond.
The Medway NHS Trust	SH				This organisation was approached, but did not respond.
The Royal Society of Medicine	SH	1	1	The guideline title should be amended to include diagnosis, and the age range changed, i.e. UTI: Diagnosis, investigation and long term management of children up to 16 years.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI. The title of the guideline has been amended to 'Urinary tract infection: diagnosis, treatment and long-term management of children', taking other Stakeholders' comments into account.
The Royal Society of Medicine	SH	2	4.1.2	f. amend to 'Infants and children in intensive care units'.	Thank you for your comments. The scope has been amended.
The Royal Society of Medicine	SH	3	4.3	a. amend to 'When to consider the diagnosis of UTI in symptomatic infants and children who were previously healthy'.	Thank you for your comment. The scope has been amended to say sick and/or symptomatic, etc.
The Royal Society of Medicine	SH	4	4.3	c. it is crucial to decide upon one investigation on which to base the diagnosis of UTI. Dipsticks are not diagnostic and may give false positive and false negative information. A urine sample sent to the microbiology lab for urgent microscopy and culture is essential.	The evidence for which tests are best will be examined and recommendations made based on the evidence.

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The Royal Society of Medicine	SH	5	4.3	g. amend to 'When and where to investigate the structure and function of the urinary tract'.	The choice of tests, timing and place will be considered by the GDG and addressed in the context of the patient pathway.
The Royal West Sussex Trust	SH				This organisation was approached, but did not respond.
University College London Hospitals NHS Trust	SH	1	1	Would include 'diagnosis' investigations etc.	Urinary tract infection: diagnosis, treatment and long-term management of children.
University College London Hospitals NHS Trust	SH	2	1	Should include age range up to 16, or at least up to 14 years.	Thank you for your comment. The scope has been amended to include all children up to 16 years old with UTI. The title has been amended to reflect this. Please note that the guideline will not cover preventive measures or long-term management of sexually active girls with recurrent UTI.
University College London Hospitals NHS Trust	SH	3	4.1.1	Have to be clear what 'significant' uropathy means. We should include children already known to have minor calyceal dilation from antenatal scans – who develops symptomatic UTI if not already on treatment.	Thank you for your comments. The Scope has been amended.
University College London Hospitals NHS Trust	SH	4	4.1.1	Should this be 'concomitant major illness or chronic condition affecting the renal tract'	We have agreed to reword this section to clarify the position. Uropathy discovered during the imaging recommended in the guideline will be included until the point of referral to another specialist.
University College London Hospitals NHS Trust	SH	5	4.3a	Suggest 'symptomatic' rather than 'sick which has different connotations.	We agree that sick and symptomatic are not the same.
University College London Hospitals NHS Trust	SH	6	4.3c	Is the role of microscopy going to be included?	Yes.
University College London Hospitals NHS Trust	SH	7	4.3g	When to use investigations, including blood tests, and when to assess the function and structure.	The choice of tests, timing and place will be considered by the GDG and addressed in the context of the patient pathway.
University College London Hospitals NHS Trust	SH	8	General	Overall will be a very useful and helpful piece of guidance for general paediatricians, who can of course use the guidelines if they wish for children outside the scope.	Thank you for your comment.

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University Hospital Birmingham NHS Trust	SH				This organisation was approached, but did not respond.
Welsh Assembly Government (formerly National Assembly for Wales)	SH	1		Thank you for giving the Welsh Assembly Government the opportunity to comment on the scope. We are content with the document as drafted and have no further comments to make at this stage.	Thank you for your comment.
West Cornwall Primary Care Trust	SH				This organisation was approached, but did not respond.
Whipps Cross University Hospital NHS Trust	SH				This organisation was approached, but did not respond.
Wyre Forest Primary Care Trust	SH				This organisation was approached, but did not respond.