## Imaging the renal tract in under-16s with urinary tract infection (UTI)

## Descriptor

The most recent NICE guidelines for managing urinary tract infection (UTI) in patients under 16 years of age were published in July 2022 [1]. The aim of this audit is to assess compliance with these guidelines. This audit would also be valuable for identifying patients having unnecessary investigations for UTI.

## Background

The most recent NICE guidelines for managing UTI in under-16s aim to “achieve more consistent clinical practice, based on accurate diagnosis and effective management”[1]. Avoiding unnecessary imaging tests alleviates anxiety for children and parents, in addition to reducing costs.

## The Cycle

### The Standard

Imaging in under-16s who have suffered a UTI should be performed according to the tables set out in the NICE guidance, which can be accessed via Reference 1.

### Target

100% compliance with NICE guidelines.

## Assess local practice

### Indicators

The percentage of USS, DMSA and MCUG requests which contain clinical information justifying the examination according to the NICE guidelines, for each age group.

### Data items to be collected

Review the clinical details on each request form to determine if they comply with the guidelines for the relevant age group [1].

Evaluate if appropriate clinical information has been given. It is also imperative to assess request forms where imaging was not performed.

### Suggested number

50 USS; 25 DMSA; 25 MCUG requests. Prospective or retrospective data may be collected.

## Suggestions for change if target not met

The latest NICE guidelines can be found in the resources section and could be circulated to all referrers (GPs, A&E and Paediatricians).

Presentation of findings at audit meeting.

Reiteration of guidelines at local audit meetings.

Re-audit after the above measures have been undertaken.

## Resources

Time for Radiologist to

-  collect appropriate request cards,

-  correlate clinical details with published guidelines and record if compliance is achieved.

## References

1. NICE Guideline NG 224): Urinary tract infection in under 16s: diagnosis and management. Published July 2022.  Available at https://www.nice.org.uk/guidance/ng224
2. National Collaborating Centre for Women’s and Children’s Health Urinary tract infection in children: diagnosis, treatment and long-term management. London, UK: National Institute for Health and Clinical Excellence, August 2007. Available at http://www.nice.org.uk/guidance/cg54/evidence/cg54-urinary-tract-infection-in-children-full-guideline2
3. Baumer JH, Jones RW. Urinary tract infection in children. National Institute for Health and Clinical Excellence. *Arch Dis Child Educ Pract Ed*. 2007 Dec;92(6):189-92.

## Editors’ Comments

This audit could be adapted to check if patients with UTI who meet the criteria for tests actually receive them. This could be done prospectively for A&E, inpatients and outpatients. However, this would admittedly be more challenging for patients who have only seen their GP.

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