Adults with a urinary tract infection not responding to initial antibiotic treatment have a urine culture. [NICE QS90]

Measure: Proportion of episodes of a UTI not responding to initial antibiotic treatment investigated with a urine culture. (1 month)
This audit is suitable for a run chart, i.e. several data collections at monthly intervals

Rationale: to guide a change in antibiotic treatment in people who do not respond to initial antibiotic treatment and to seek alternative causes if MSU is negative

MSU should be sent in adults at initial presentation in men, pregnancy, children<3yrs, recurrent or complicated UTI or suspected pyelonephritis, suspected resistant organisms

Consider involving GPs, OOH, pharmacy, care homes, public
Cluster quality improvement: this audit may have low numbers and should be undertaken with one of the remaining 3 UTI QI topics.
Health Boards may support data provision.

Method

1. Identify the number of patients prescribed more than one UTI antibiotic [trimethoprim, nitrofurantoin, fosfomycin & pivmecillinam] or cephalosporins in the month prior to the search date¹. Remove patients who have only received antibiotics at prophylactic doses.

2. For each patient, identify the date of the first UTI treatment. Identify whether an MSU² had been sent at initial presentation or at treatment failure (second presentation).

<table>
<thead>
<tr>
<th>ID</th>
<th>UTI Treatment failure?</th>
<th>MSU sent initial</th>
<th>MSU sent at second presentation</th>
<th>Meets criteria (MSU sent either at initial presentation or at treatment failure)</th>
<th>Notes E.g. male, recurrent UTIs, under investigation, MSU actioned?</th>
</tr>
</thead>
</table>

Results

<table>
<thead>
<tr>
<th>Practice total population</th>
<th>Number of patients prescribed 2 or more UTI antibiotic treatment courses /1 month</th>
<th>N=</th>
<th>% of episodes of a UTI not responding to initial antibiotic treatment investigated with a urine culture</th>
<th>For cluster report</th>
</tr>
</thead>
</table>

Practice actions

² Code: MSU Urine culture 46U