



Resource impact summary report

Resource impact

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Recommendations

This guideline updates NICE's guideline on urinary tract infection (recurrent), published October 2018. Evidence on methenamine hippurate for preventing recurrent urinary tract infection (UTI) was reviewed. The evidence on referral and seeking specialist advice, or on oestrogen, was not reviewed, but some recommendations were amended based on committee expertise.

The updated recommendations were not considered a major change to current practice. However, the new recommendations to consider using methenamine hippurate as an alternative to daily antibiotic prophylaxis may have resource implications. Methenamine hippurate is already being used variably in the NHS outside of NICE recommendations. Its use may increase as a result of the recommendation and therefore increase prescribing costs. There is potential for savings in treating antimicrobial resistance. There may also be savings in treating adverse events such as diarrhoea and nausea as a consequence of daily antibiotic prophylaxis. The potential savings would contribute to offsetting any increase in costs.

NICE has developed a [resource impact assessment template](#) which supports this summary report. The template allows users to estimate the potential resource impact associated with the use of methenamine hippurate.

Eligible population for methenamine hippurate

Around 10% (2,348,348) of women aged 18 and over in England experience UTI.

Table 1 Eligible population for methenamine hippurate in England, current year

Details	Number of people	Percentage of women, %
Women aged 18 and above	23,803,478	-
Women aged 18 and above who experience UTI	2,380,348	10
Women who experience recurrent UTI	714,104	30

The data in table is based on [Williams et al. 2023](#). Population is subject to population growth.

Current treatment options

Methenamine hippurate would be an alternative treatment to daily antibiotic prophylaxis. Potential uptake of methenamine hippurate is unknown and should be considered at a local level.

Financial resource impact (cash items)

Based on the current costs on the [NHS Electronic drug tariff online](#) (accessed September 2024) methenamine hippurate is more expensive compared to a range of alternative antibiotics used for prophylaxis of recurrent urinary tract infection (see table 2). Expert clinical opinion from the guidance committee was that antibiotic prophylaxis commonly uses agents such as nitrofurantoin or cefalexin. Therefore, additional costs would be incurred and would vary depending on local prescribing practice. Prices are subject to change and can be amended locally in the resource impact template.

Table 2 Treatment cost per month of treatment options

Antibiotics	Cost per month
Methenamine hippurate (new option)	£15.28
Cefalexin	£4.38
Nitrofurantoin	£10.17
Trimethoprim	£0.91

Table 3 is a scenario that illustrates the potential resource impact in England (based on a 6-month or 12-month treatment duration) if there is a 10% increase in people from the eligible population receiving methenamine hippurate as an alternative to antibiotic prophylaxis of recurrent urinary tract infection. This scenario gives users an estimate of potential costs if there is an increase in usage of methenamine hippurate. The potential increase in usage is unknown. This should be modelled locally in the resource impact template.

Table 3 Resource impact if 10% of eligible people (71,400) receive methenamine hippurate instead of antibiotics

Unit cost	Antibiotic cost per person per month	Additional cost per person per month	Additional cost per year (based on 6-month use)	Additional cost per year (based on 12-month use)	Annual cost increase for England if 6-month assumed use (£m)	Annual cost increase for England if 12-month assumed use (£m)
Average (all 3 antibiotics)	£5.15	£10.13	£60.76	£121.51	£4.3	£8.7
Lowest (Trimethoprim)	£0.91	£14.37	£86.22	£172.44	£6.1	£12.3

Highest (Nitrofurantoin)	£10.17	£5.11	£30.65	£61.29	£2.2	£4.4
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Treatment duration depends on local practice, patient preferences, and clinical decisions. There are likely to be more types and medicinal forms of antibiotics used so costs would vary accordingly depending on local prescribing practices. Costs estimates are made only for the impact on prescribing, and do not allow for the costs associated with treatment relapses, noting that the various treatments are not equally effective at preventing UTI. Treatment relapses may involve further dose titrations or additional antibiotic regimens, both in primary or secondary care, and this will impact the overall costs associated with recurrent UTI prophylactic treatment.

There may also be savings in treating adverse events such as diarrhoea and nausea as a consequence of daily antibiotic prophylaxis. The potential savings would contribute to offsetting any increase in costs. Data to model this was uncertain, and these could not be quantified with certainty.

For further analysis or to calculate the financial impact of cash items, see the resource impact template.

Capacity impact

The use of methenamine hippurate for recurrent UTI prophylaxis could potentially reduce:

- the number of prophylactic antibiotic prescriptions
- the number of treatment relapses. This will have an impact on both primary care appointments, referrals to urology clinics, and A&E attendances
- adverse events, such as diarrhoea and nausea
- monitoring (treatment reviews) and tests associated with antibiotic use such as blood tests and x-rays. The use of methenamine hippurate should be reviewed and if there are fewer reviews than for patients who use daily antibiotics, there would be a capacity saving. This depends on local clinical practice.

The impact of these can be modelled locally in the resource impact template using local data where available.

For further analysis or to calculate the financial capacity impact from a commissioner (national) and provider (local) perspective, see the [resource impact template](#).

Key information

Table 4 Key information

Speciality	Urology
Disease area	Urinary tract infections
Programme budgeting category	PBC17X - Problems of Genito Urinary systems
Commissioner(s)	Integrated care boards
Provider(s)	Primary care
Pathway position	Alternative treatment to antibiotic prophylaxis

About this resource impact summary report

This resource impact summary report accompanies [NICE's guideline on urinary tract infection \(recurrent\): antimicrobial prescribing](#) and should be read with it.