

Preventing Urinary Tract Infection

Strategies for older people living in care homes

Policy brief



Executive Summary

Urinary tract infection (UTI) is the most commonly diagnosed infection in older people living in care homes across the UK, accounting for over a third of antibiotic prescriptions.

The high use of antibiotics drives resistance in the bacteria that cause UTI, making infection more difficult to treat and more likely to develop into life-threatening illness. In England in 2016/7, UTI caused 8% of all emergency admissions to hospital among residential and nursing home residents aged 65 years or older, whose average stay was 8.2 days. Those admitted with UTI had a mortality rate of 8%.



The StOP UTI project

The StOP UTI project has for the first time established the evidence for strategies to prevent UTI and their implementation in care homes where many residents are cognitively impaired and most care is delivered by care staff with no clinical training.

Our review provides an explanatory account of how the design and delivery of interventions can work to improve the prevention and recognition of UTI in older people living in care homes in the UK. Recommendations provided in this policy brief were co-created with organisational and system stakeholders, who identified key policy levers that are needed to drive change based on the study outcomes.

The evidence we found highlights the importance of incorporating both the prevention and recognition of UTI into the personalised care of residents in care homes. Because UTI is common in older people, care home staff may suspect this as the most likely cause of changes or general symptoms in a resident without also considering alternative explanations. They may presume that acquiring a UTI is inevitable for some residents. This can influence their actions and has important implications for the initiation of preventative care strategies and the instigation and timing of antibiotics.





Recommendations

Actions for staff working in care homes

It is vital for care home staff to know what actions they can take to help prevent UTI in care home residents:

PRIORITISING HYDRATION

Care routines need to include sufficient opportunities for drinking and enable care staff to devote the necessary time and resources to support residents to consume enough fluid every day.

SYSTEMS FOR MONITORING FLUID INTAKE

Realistic daily fluid intake targets need to be set and monitored to ensure that poor intake does not go unnoticed and appropriate actions are taken promptly.

OPTIMISING URINARY CATHETER CARE

Education and training needs to be in place to enable care staff to recognise the risk of UTI associated with catheters and their role in applying the principles of infection prevention to the care of residents with a catheter.

ACCURATE RECOGNITION OF UTI

Care staff need tailored education about the use of decision support tools to enable them to consider alternative explanations for generalised changes in a resident. The whole care team need to be involved in gathering and conveying information to support the accurate diagnosis of UTI.

ACTIVE MONITORING OF RESIDENTS WITH UNCERTAIN SYMPTOMS OF UTI

A protocol for active monitoring enables care staff to adopt a proactive approach to managing residents when there is diagnostic uncertainty about UTI by focusing on preventative measures and extra monitoring.

PROACTIVE STRATEGIES FOR PREVENTING RECURRENT UTI

Care homes need strategies in place to identify residents who experience recurrent UTI and seek advice on effective preventative treatments.

Actions for care home leaders and managers

Care home managers and leaders can play a pivotal role in the prioritisation and delivery of best practice to prevent and recognise UTI by:

PRIORITISING HYDRATION WITHIN CARE ROUTINES

Endorsing the allocation of staff time within daily care routines to support and monitor hydration and providing the necessary resources such as a wide range of fluids and appropriately designed drinking vessels.

FOSTERING A LEARNING CULTURE

that enables care staff to develop confidence in their ability to share their observations and concerns about a resident who may have a UTI, take the appropriate actions and support the communication of accurate and relevant information to healthcare professionals.

DEVELOPING WELL-EDUCATED CARE STAFF

Facilitating the provision of interactive education, which is informed by specialists, relevant to the roles of different levels of care staff and designed to promote active learning about preventing and recognising UTI.

DRIVING THE DELIVERY OF BEST PRACTICE IN PREVENTING AND RECOGNISING UTI

Involving the whole care team in making best practice happen, recognising individual talents and valuing junior staff who work most closely with residents.



Policy levers for implementing system-wide change

1

NATIONAL STANDARDS FOR HYDRATION

A defined standard for hydration as a care priority is required to elevate and embed best practice in the same way as the Malnutrition Universal Screening Tool (MUST) is used to prevent under-nutrition. This would provide clarity around a shared goal, involve Integrated Care Services and the CQC in setting and monitoring expectations around hydration and enable care home managers and their staff to prioritise this as part of person-centred care.

2

ACTIVE MONITORING INCORPORATED INTO DETERIORATION TOOLS

Existing tools designed to recognise and escalate physical deterioration (e.g., RESTORE 2) need to be aligned with a protocol to facilitate a period of 'active monitoring' when there is diagnostic uncertainty. This would facilitate the use of active monitoring as a proactive step, enable care home staff in partnership with family carers to initiate preventative care ahead of escalation, and reduce the inappropriate use of antimicrobials.

3

SUPPORT THE DEVELOPMENT OF DIGITAL SOLUTIONS

Systems are required to consistently document and identify when residents are treated for UTI, e.g., in GP and pharmacy records, so that residents who experience recurrent UTI can be recognised and appropriately managed to reduce the risk of repeat infections. Support is needed for the development of digital solutions to enable proactive fluid monitoring and trigger action in response to low intake.

4

ADDRESSING EDUCATION REQUIREMENTS FOR THE CARE HOME WORKFORCE

The curriculum for educating care staff (e.g., diploma/BTEC courses, Care Certificate) needs to be informed by experts, include more emphasis on the prevention and recognition of UTI and align with the system-wide framework for education of the care home workforce. This framework should also consider the specific training needs of registered healthcare professionals in relation to strategies to support the prevention and recognition of UTI.



These levers fit into the existing key policy imperatives to:

1. Recognise hydration as a care priority (NHSE Nutrition and Hydration Advisory Board);
2. Deliver system-wide improvement of infection prevention and antimicrobial stewardship practices (Confronting Antimicrobial Resistance 2024 to 2029 national action plan) and;
3. Improve health outcomes in older people and reduce the risk of preventable adverse events (Enhanced Health in Care Homes Framework).

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Full report

<https://fundingawards.nihr.ac.uk/award/NIHR130396#>

Project pages

<https://www.southampton.ac.uk/research/groups/bladder-bowel-management/preventing-urinary-tract-infections>

<https://www.uwl.ac.uk/research/research-centres-and-groups/richard-wells-centre/stop-uti>

Research methodology paper

<https://doi.org/10.1111/jan.15707>

Results paper

<https://doi.org/10.1136/bmjqs-2023-016967>

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