Reducing incidence of Urinary Tract Infections by promoting hydration in care homes

A multi-disciplinary quality improvement project to reduce the incidence of Urinary Tract Infections (UTIs) or UTI-related hospital admissions by promoting hydration and optimising UTI management in East Berkshire care homes.

“How keeping it simple means it’s not only easy to implement, but also easy to sustain.”
Sundus Jawad, Prescribing and Care Homes Support Pharmacist,
East Berkshire CCG

What we did and why
Dehydration is a common cause of hospital admission for care home residents and increases the risk of UTIs and other complications including confusion, falls and Acute Kidney Injury (AKI). UTIs in the elderly are often over-diagnosed and over-treated. Our project links in with the national focus on antimicrobial stewardship which aims to reduce inappropriate prescribing of antibiotics for UTIs in primary care.

The multi-disciplinary project promoted evidence-based prescribing and UTI management by implementing a number of NICE recommendations in areas including:

- Improving the correct diagnosis of UTIs and the need for a full clinical review in the over 65 year olds (NICE QS90)
- Optimising UTI management and antimicrobial prescribing (NICE QS61)
- Reducing UTIs through improving hydration in care homes (NICE NG22)
- Raising awareness of AKI (NICE QS76, CG169)
- Raising awareness of antimicrobial resistance (NICE NG15)

Other objectives included:
- Improving residents’ overall wellbeing
- Promoting patient choice

Outcomes and impact
The project demonstrated a reduction in UTI hospital admissions and UTIs requiring antibiotics. Benefits included significant cost savings as well as freeing-up valuable GP time.

UTI admission to hospital [data Jul 2016-Feb 2018]

Overall reduction of 66% to date
July 15 - June 2016 38%
July 16 - July 2017 45%
July 17 - Feb 2018

UTI requiring antibiotics:
On average the incidence of days between UTIs in care homes increased from 1 every 9 days at baseline to 1 every 52 days since the project commenced. One care home was UTI free for 243 days.

The care homes demonstrated sustained compliance (99%) with providing seven structured drinks rounds each day. Care staff benefited from the ‘hydration training’ which raised awareness of the risks of dehydration in the elderly and antimicrobial resistance.

Other objectives included:
- Improving residents’ overall wellbeing
- Promoting patient choice

What we learnt
Integrated working and involving many a range of stakeholders including the patients and their families is crucial from the outset. Raising hydration awareness resulted in improved health and wellbeing, and staff gaining better understanding of the risks of dehydration in the elderly and antimicrobial resistance. We also raised awareness amongst care staff of the risks to kidney function posed by certain medicines.

Structured drinks rounds are designed by care home staff, are easy to follow and low-cost to implement. The drinks rounds became a social point of the day for residents and the simplicity and minimal cost of this project meant it was easy to implement and easy to sustain.

“The drinks trolley totally refreshes up my day.”
Care home resident

“The training has given us an understanding of why it’s important to ensure that residents have enough fluids – it’s looking at the whole system, not just a drink.”
Care home manager

Contact:
Sundus Jawad
Prescribing and care homes support pharmacist
East Berkshire CCG
Email: sundus.jawad@nhs.net
Telephone: 01753 636845

www.nice.org.uk