



South Tees Hospitals
NHS Foundation Trust

The Royal Wee South Tees' learning from the national UTI collaborative

Sam Davison IPCN care homes



Excellence in Patient Outcome and Experience

Aims & Objectives

- Discuss the STees care home UTI reduction project within the national picture
- Look at the importance of collaborative infection prevention working within the wider health economy
- Hydration aspects for all of us to consider;

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Background

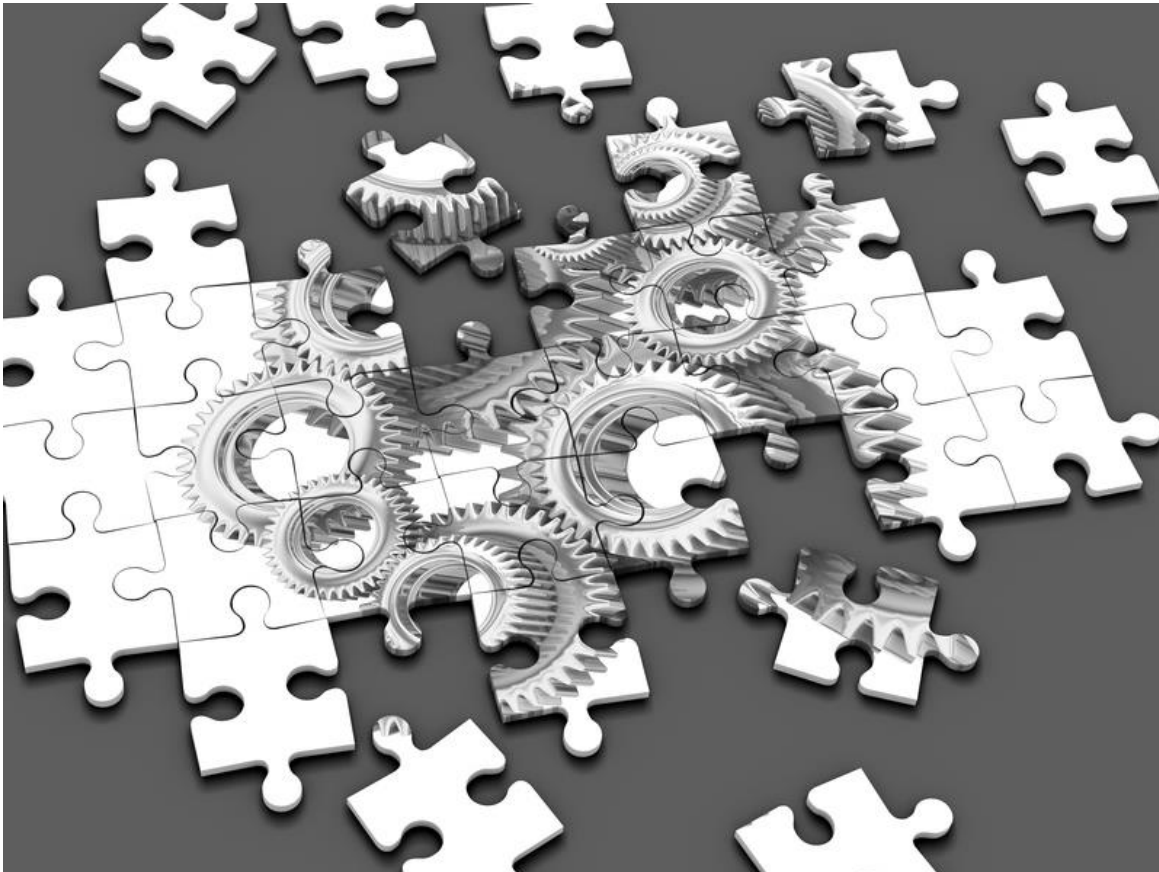
- STees and NTees acute trusts and CCG's were invited to join the NHS Improvement Cohort 2 "Reducing UTI's Collaborative"
- 3 month project to reduce UTI prevalence by 5%
- Using the Oxford AHSN care home project it was agreed to select one care home to see it was replicable within STees



Start by looking at the bigger picture



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Influencing Factors

Need to address the Gram Negative Blood Stream Infections (GNBSI's)
Both in Acute and Community

“REDUCE GNBSI’S BY 50% BY 2021

NHS England July 2017

Financial incentive in the form of a CCG based Quality
Premium to the sum of £500,000 for non compliance.



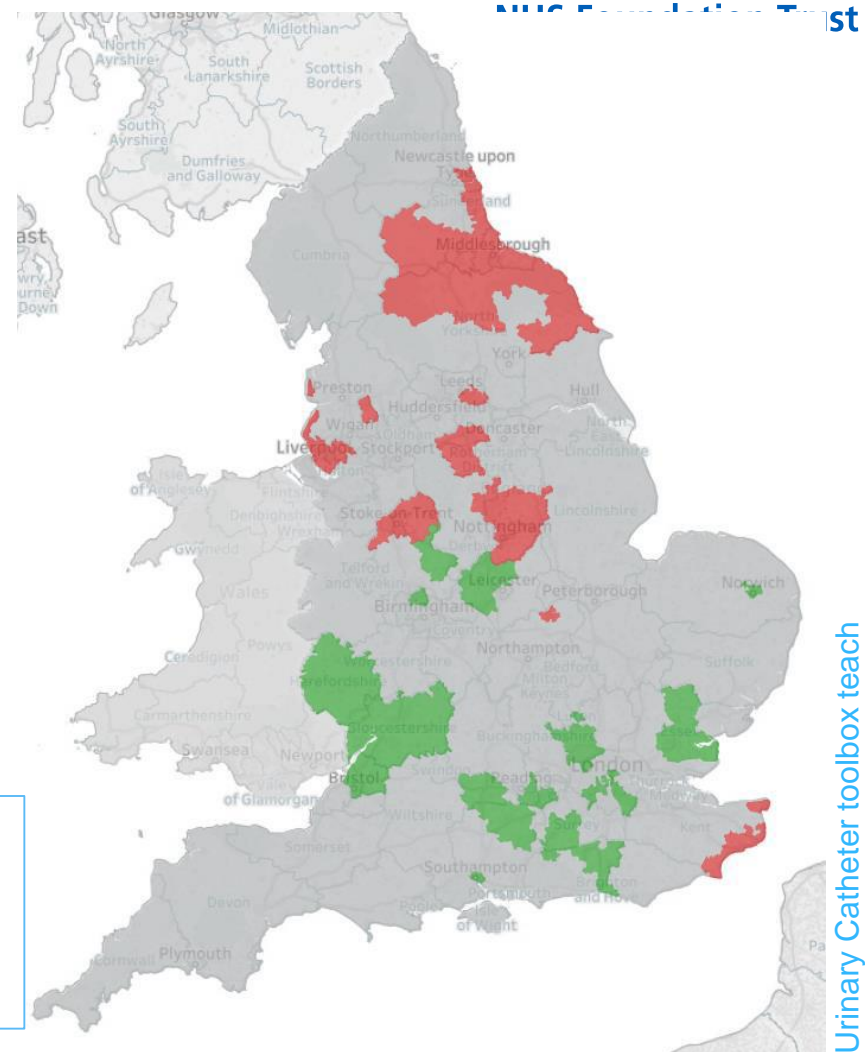
E. coli rates in 2016/17 by CCG and trust

This map shows the clinical commissioning groups (CCGs) and trusts that reported the highest and lowest rates of *E. coli* bacteraemia in 2016/17.

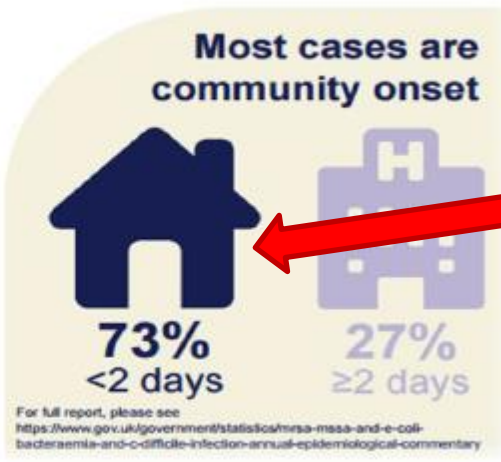
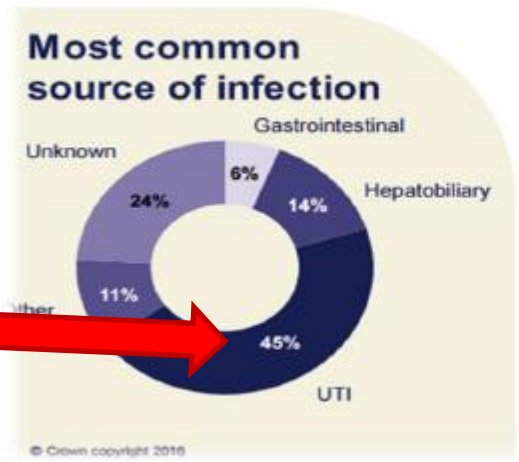
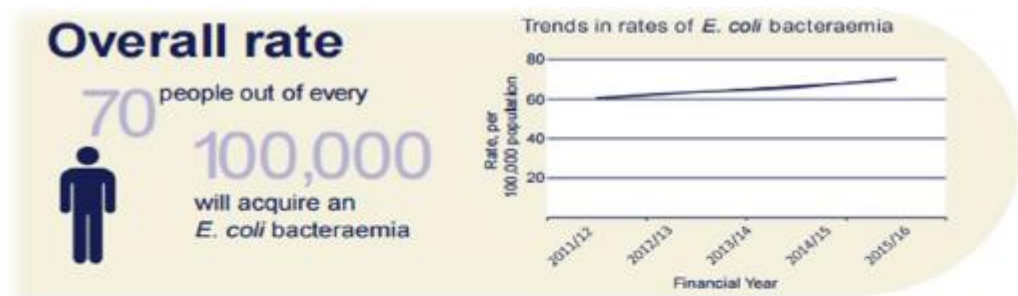
- Only the highest 30 and lowest 30 of the 207 CCGs are shaded, in red and green, as shown in the key.

Trust key: *E. coli* rate per 100,000 bed day 2016/17

- 30 Trusts with highest rates
- 30 Trusts with lowest rates



Distribution of national E.coli bloodstream infections 2015/16, steadily increasing despite MRSA figures falling.



Community sources make up the majority of cases.

UTI make up 45% GNBSI source



- Created an Alliance within Tees Valley
- Merged CCG's, North & South Tees NHSFT's, Darlington Durham and Dales NHSFT, Council and Social Care teams, PHE and NEAS
- Pooled resources to maximise results.

Tees-wide Infection Prevention & Control Collaborative aka (TIPCC), very apt when discussing hydration...





The Project

Project planned to create a sustainable culture in improved hydration to reduce UTI's using "Oxford AHSN Care home hydration project". Home led project supported by care home IPCN to provide and promote tools for other homes to replicate with limited support. Proposed a realistic target to achieve 3 or less UTI' within a month period.

2 storey 68 bed residential elderly home in Middlesbrough with dementia unit. 5 green Good CQC rating with a history of positive change culture. History of high UTI rates, proactive treatment, seen as an occupational hazard of elderly care. Supported by 8 GP practices.

Due to run for 3 months though due to seasonal discrepancies and information gathering this was extended to 6 months.



Information Gathering:

- Amended existing
- Infection collection data,
- Prescribing information.
- Admitted to hospital.
- Professional person attending?

Education

Care home manager and Staff

Hydration stations introduction

Drinks trolleys re vamped, themed enticing,

Staff to drink with residents

Documentation – Fluid balance charts

1-8 to hydrate Urine colour charts

Fluid matrix

Urine sampling

UTI safety cross document

		1 ●	2 ●		
		3 ●	4 ●		
		5 ●	6 ●		
7 ●	8 ●	9 ●	10 ●	11 ●	12 ●
13 ●	14 ●	15 ●	16	17	18
19	20	21	22	23	24
		25	26		
		27	28		
		29	30	31	

KEY: If a resident has a UTI use the following coloured dots to populate the date it occurred on. Write the initials of the resident who has the UTI in the box. If multiple residents on one day i.e. 3 residents put 3 dots and 3 sets of initials.

No UTIs	●
UTI with antibiotics but remained in the residential/nursing home	●
UTI and admitted to hospital	●

STAY HEALTHY THROUGH HYDRATION

ARE YOU DRINKING ENOUGH FLUID?

If you do not drink enough you will produce concentrated urine. Well hydrated people are less likely to develop a urinary tract infection. The table below is a rough guide for the recommended amount of fluid you should drink per day based on your weight.

WEIGHT		FLUID (fluid should be alcohol free)	
Stones	Kg	Mls	Mugs (300mls)
6	38	1,190	4
7	45	1,275	5
8	51	1,446	5-6
9	57	1,786	6
10	64	1,981	7
11	70	2,179	7-8
12	76	2,377	8
13	83	2,575	9
14	89	2,773	10
15	95	2,971	10-11
16	102	3,136	11

ADAPTED FROM: Abrams & Klever (1996)

NOTE: SOME PEOPLE HAVE FLUID RESTRICTIONS FOR MEDICAL REASONS, CONTACT YOUR GP FOR ADVICE DURING HOT WEATHER IF YOU HAVE BEEN ADVISED TO LIMIT YOUR FLUID INTAKE

URINE COLOUR CHART

NOTE: VITAMINS, MEDICATIONS, ALCOHOL & CERTAIN DIETS CAN AFFECT COLOUR OF URINE

The general rule of adequate hydration is that the clearer and lighter the urine the better.



Hydration stations

Remember it was a very long summer!

Engagement with activity co-ordinators to drive resident participation to create themed stations.

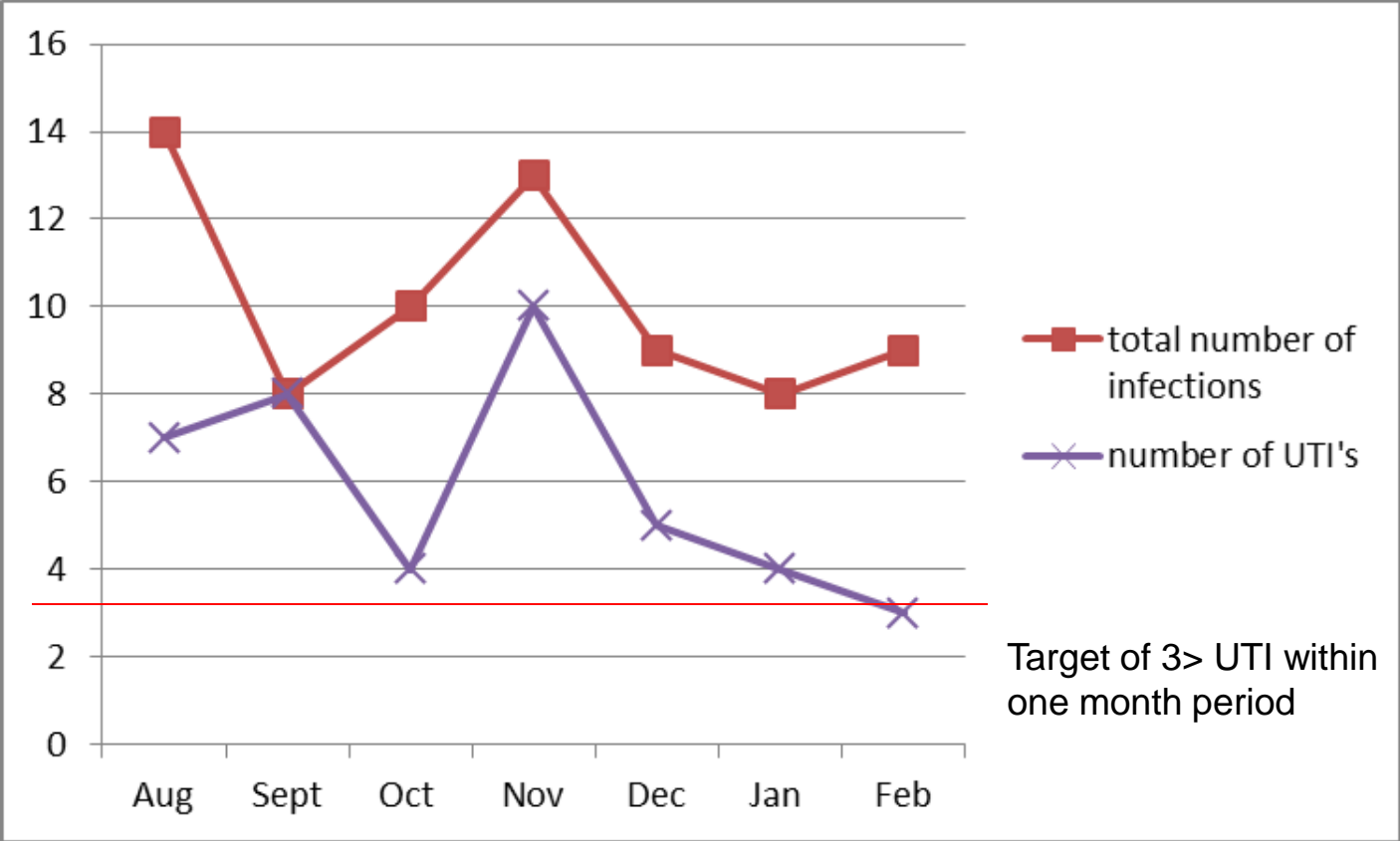


“Caffeine free from 3 “also implemented very slow uptake but suggested impact of 30% reduction in falls, improved sleep patterns,

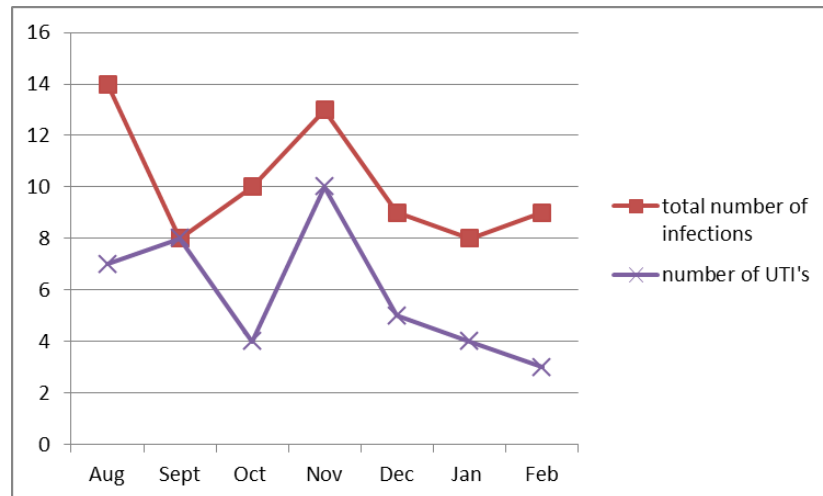


The Results

Number of infections requiring antibiotics



Exploring the results



- **August** Very hot, hourly drinks rounds, (ice lollies)
- **Sept** Rapid drop in temp, lollies refused, still on summer menu
- **Oct** Winter menu soups, broths and casseroles, Fluid balance charts amended to include urine colour number
- **Nov** Reintroduce lollies etc., (Home experienced D&V outbreak) coincidence?
- **Dec** x3 residents prescribed antibiotics Christmas eve “just in case” due to the holidays. (Unable to ascertain validity of UTI)
- **Jan** Urine colour charts placed in staff toilets to coincide with new year resolutions, encouraged staff to discuss these with staff.
- **Feb** Finally saw target of achieving 3 UTI’s in month.



Areas Highlighted to investigate

- Focus being around hydration not assuming UTI.
- Accurate and timely sampling of urine
- GP prescribing blind
- Catheter care, personal hygiene standards
- Managing continence not incontinence
- Revisit fluid balance charts make more robust
- Think outside the box (Staff hydration)



Question

Do ***YOU*** drink enough fluids?

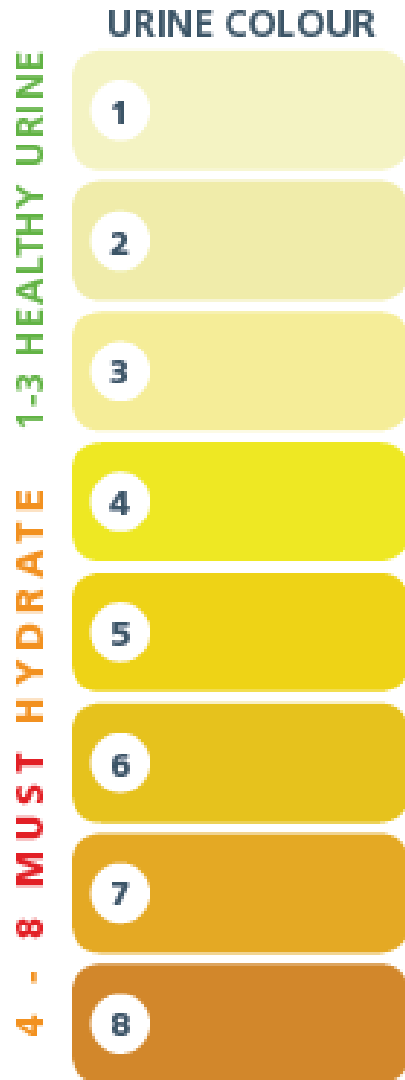


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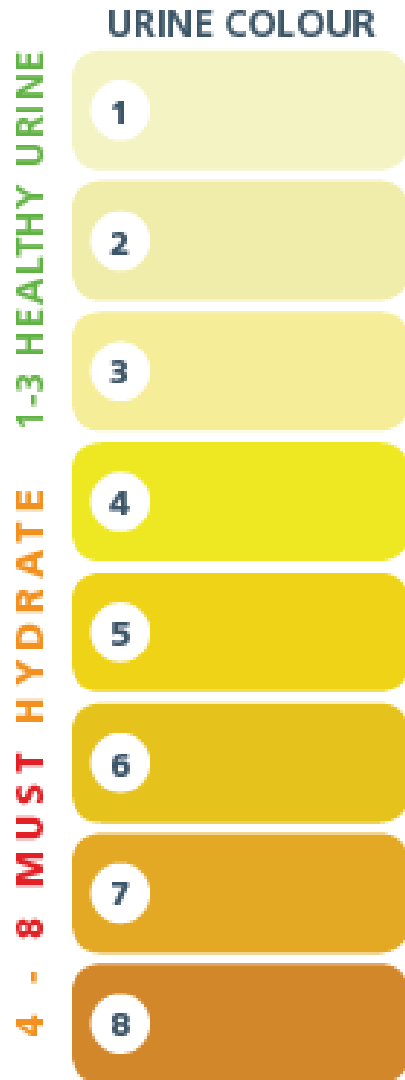


What colour is your urine after a long day at work?

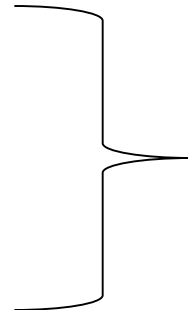


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What colour is your urine after a long day at work?



These are often the colours reported,



WHY?

Not enough time?

Too busy?

Residents come first.

Not encouraged/allowed to take timely breaks or have a drink.



Check if you're dehydrated

Symptoms of dehydration in adults include:

- feeling thirsty
- dark yellow and strong smelling pee
- feeling dizzy or lightheaded
- feeling tired
- dry mouth, lips and eyes
- peeing little, and fewer than 4 times a day



If our urine is dark and concentrated what do we do?



Get home have a large drink and offset the negative fluid balance!

together we do the amazing

Pause for thought.

“If a carer works for 40 years and routinely doesn’t drink enough and has concentrated urine a habit will form.

Therefore when that carer retires are they going to change their drinking habits?”



HABITS

Whether it is smoking, health eating or exercise.

It is expected to take average 66 days to change or create that habit.

After 40years of poor hydration we have a huge hurdle to overcome.



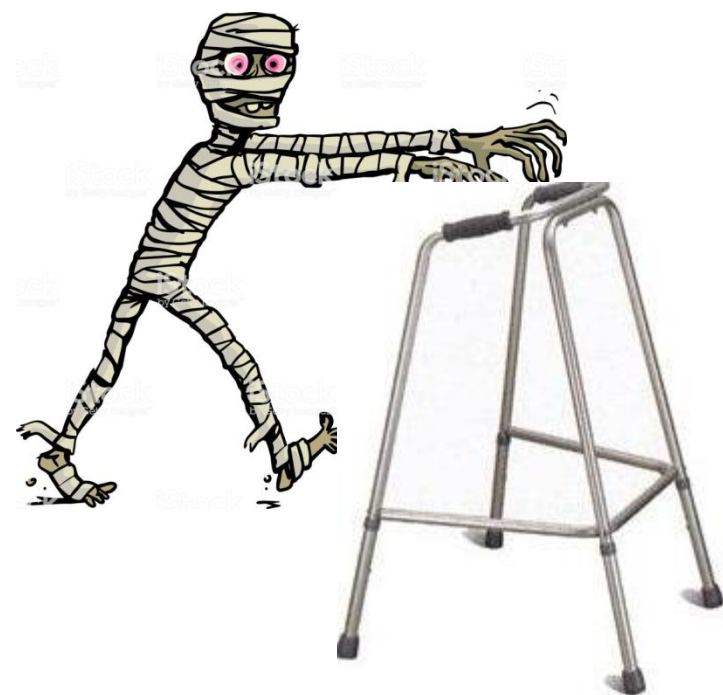
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Why won't the elderly drink?



The End result

- Historical Poor drinking habit
- Removal of the compensatory mechanism to avoid getting up at night.
- Effects of medication, Medical history.
- Pain on movement.



What can be done?

- Look after our own hydration it will make us more compassionate
- Look at our residents closer monitoring of fluid needs
- Spend time to improve the overall culture of hydration.
- Look at your fluid balance charts, adapt them to include 1-8 to hydrate ?



PUT one of these on the staff toilet door!



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NHS UK



Thank
you

