NHS
University Hospitals Tees

Falls Prevention for Care Providers Webinar

19th September 2024

Caring Better Together

NHS
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Agenda

- **Introduction** – Charlotte Collister, Senior Nurse, Quality Improvement
- **Bone Health** – Kathryn Hodgson, Clinical Lead Falls and Fracture Liaison Services
- **Purposeful Activity** – Kathryn Hodgson, Clinical Lead Falls and Fracture Liaison Services
- **Continence** – Natalie Watt, Specialist Continence Nurse
- **Management of deconditioning/Falls Prevention** – Tina Wiffen and Amanda O'Brien
- **Appropriate Referrals/Pathways** – Kathryn Hodgson, Clinical Lead Falls and Fracture Liaison Services
- **Polypharmacy/Culprit Falls Medication** - Hannah Smith, Pharmacist UCR/H@H
- **Fallen Resident or found on floor** – Louise Williamson, ACP/UCR/H@H

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STEADY ON YOUR FEET

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Bone Health

Kathryn Hodgson

Clinical Lead Falls and Fracture Liaison Services – South Tees Falls Team

Safety and Quality First

Aim of today's session

- Reduce the risk of fracture
  - Primary prevention
  - Secondary prevention

New fracture

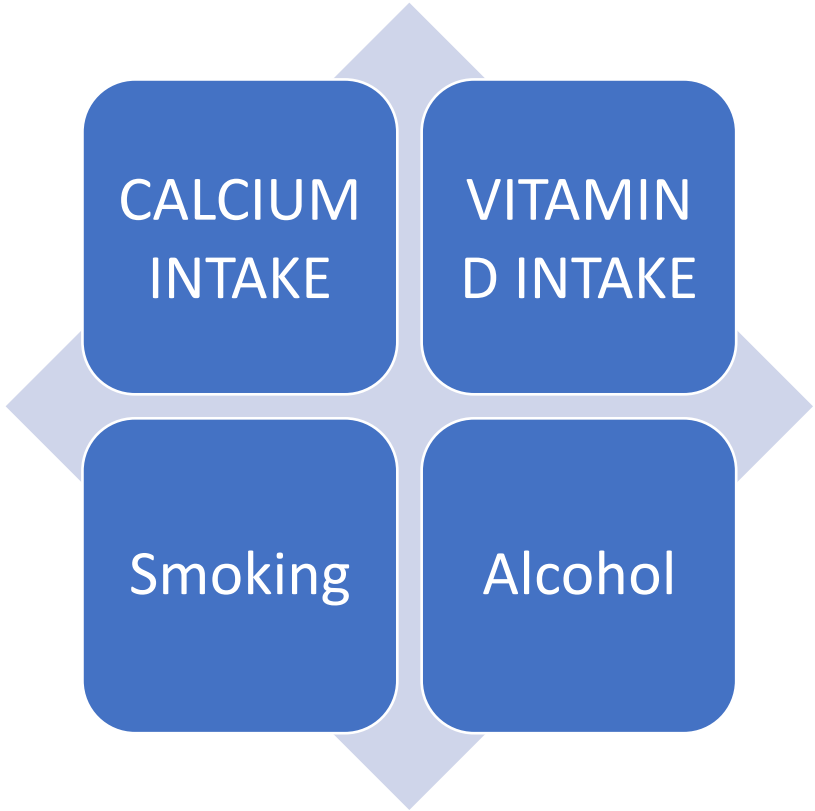
What will happen

- Bone health assessment
- Fracture liaison Service – South Tees
- GP – Hambleton and Richmondshire
- DXA scan
- Treatment

Medication

- Alendronic Acid/ Risedronate
  - Weekly
  - Strict regime
  - Aware of side effects
- Other options
  - IV – Zolendronate/ Denosumab
- Calcium/ vitamin D
  - Crucial to have with the above
  - May have on its own

Nutrition and lifestyle



Key points

- Highlight a new fracture
- Ensure takes medications correctly
- Support with diet and lifestyle

Thank you

Kathryn Hodgson:
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Safety and Quality First

Purposeful Activity

Kathryn Hodgson

Clinical Lead Falls and Fracture Liaison Services –
South Tees Falls Team

Occupation

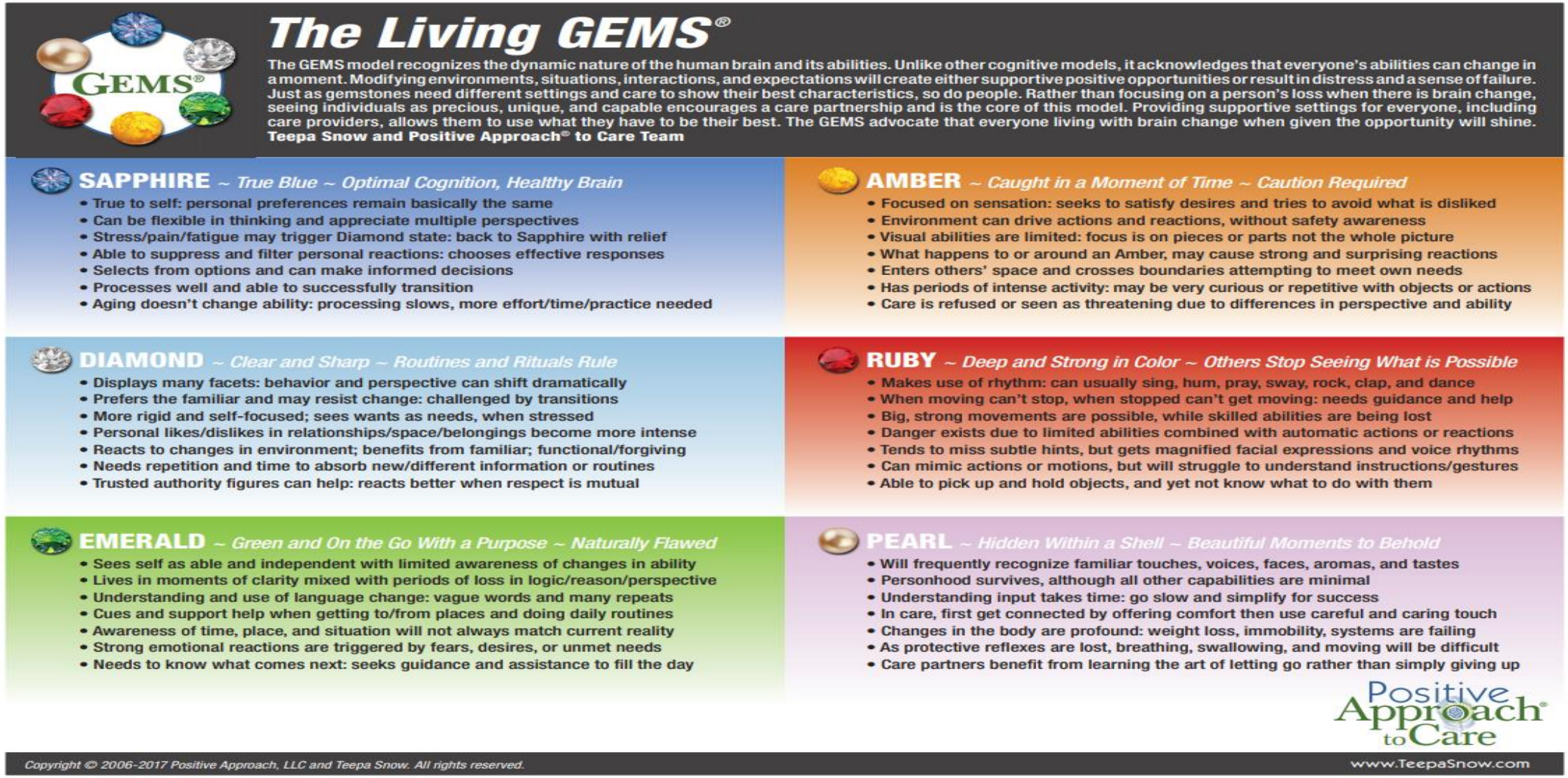
- Humans are occupational beings. We are meant to have purpose to our lives.
- Our skill when working with people with dementia is to find activities that are meaningful to that person and deliver them in a way that enables the person to participate.

Background information

Most Homes will have a variant of the ‘This is me’ format.

- Basic details, name , age etc
- Past jobs and hobbies
- Important routines
- Likes and dislikes
- Things that may worry or upset
- Things that sooth and calm
- Communication
- Mobility

Positive Approaches to care



Individualise the Environment

- Photographs of the person and their family / friends
- Items from home to orientate the person and help them feel at home.
- Not everyone is comfortable in groups
- Make Every Contact Count
- Is the person wandering?

Occupation

- We need to ensure that we are enabling people to have purpose and meaning in their life even if we have to manufacture that purpose and meaning.
- We need to fit the activity to the person not the person to the activity

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Continence

Addressing the impact on Falls

Natalie Watt- RGN
South Tees NHS Continence Service

Statistics:

The national impact of Continence and Falls

Continence:

- In the UK, approximately 14 million people are affected by incontinence.
- 6.5 million of these adults suffer with a form of bowel problem- with approximately 1 in 10 individuals affected by faecal incontinence.
- The estimated global impact reaches approximately 300 million individuals.
- Studies suggest that urinary incontinence affects twice as many women as men.

Falls:

- In the UK, it is estimated that approximately 1.6 million elderly individuals will have one fall every year.
- It is suggested that as many as 1 in every 2 falls have been connected to urinary incontinence.
- A small clinical study funded by the National institute of aging found that urinary urge incontinence increased falls by approximately 26% and the risk of fracture by 34%.

Evidence:

How continence impacts Falls/Risk of Falls

- Individuals may rush to the toilet in fear of having a bladder or bowel accident.
- Individuals may be tired/sleepy during the day if they have had a disturbed night due to needing to go to the toilet frequently overnight.
- Certain medication used to treat urinary incontinence can impact blood pressure causing it to drop on standing (postural hypotension).
- Poor oral fluid intake/dehydration can increase bladder irritation and make symptoms of incontinence worse.
- Unmanaged containment and incontinence leaks such as onto the floor may increase slips/trips.
- Individuals that are worried about leaking may become distracted and focus less on walking or the task they are completing which may affect their balance or stability.

* It is important to note that clinical evidence linking both continence and falls is limited- several studies have shown an association, but more research is deemed needed to specifically support continence promotion as an intervention for falls reduction- however a corelation is professionally accepted.

What can we do to help reduce the impact of continence on falls?

- Fluids- Consider what types of drinks/fluids are being consumed and the volume of intake per 24 hours- a simple change to how much and what individuals are drinking can significantly improve urinary symptoms.

Fluids to Avoid- Bladder irritant drink choices

- Alcoholic drinks
- Caffeinated drinks
- Fizzy/Carbonated drinks
- Fresh fruit Juices
- Green Tea

Bladder Friendly fluid alternatives:

- ✓ Water
- ✓ Diluted Cordial/Squash
- ✓ Fruit/Herbal Teas
- ✓ Red Bush Tea (Naturally caffeine free)
- ✓ Barley water
- ✓ Decaffeinated Tea/Coffee (Not caffeine free, but lower overall content)

Maintaining adequate Hydration:

- ✓ 1.5-2 litres daily or 6-10 average size cups/glasses per day.

Switching to Decaffeinated Tea and Coffee for bladder health

- Caffeine is a mild diuretic, it increases blood flow to the kidneys, increasing filtration and urine production by the kidneys.
- Caffeine stimulates the detrusor, smooth muscle activity within the bladder.
- Caffeine disrupts the bladder filling threshold increasing urinary frequency and urgency.
- Reducing or eliminating caffeine consumption can reduce urinary urgency, nocturia and nocturnal enuresis (nighttime urination and bedwetting).

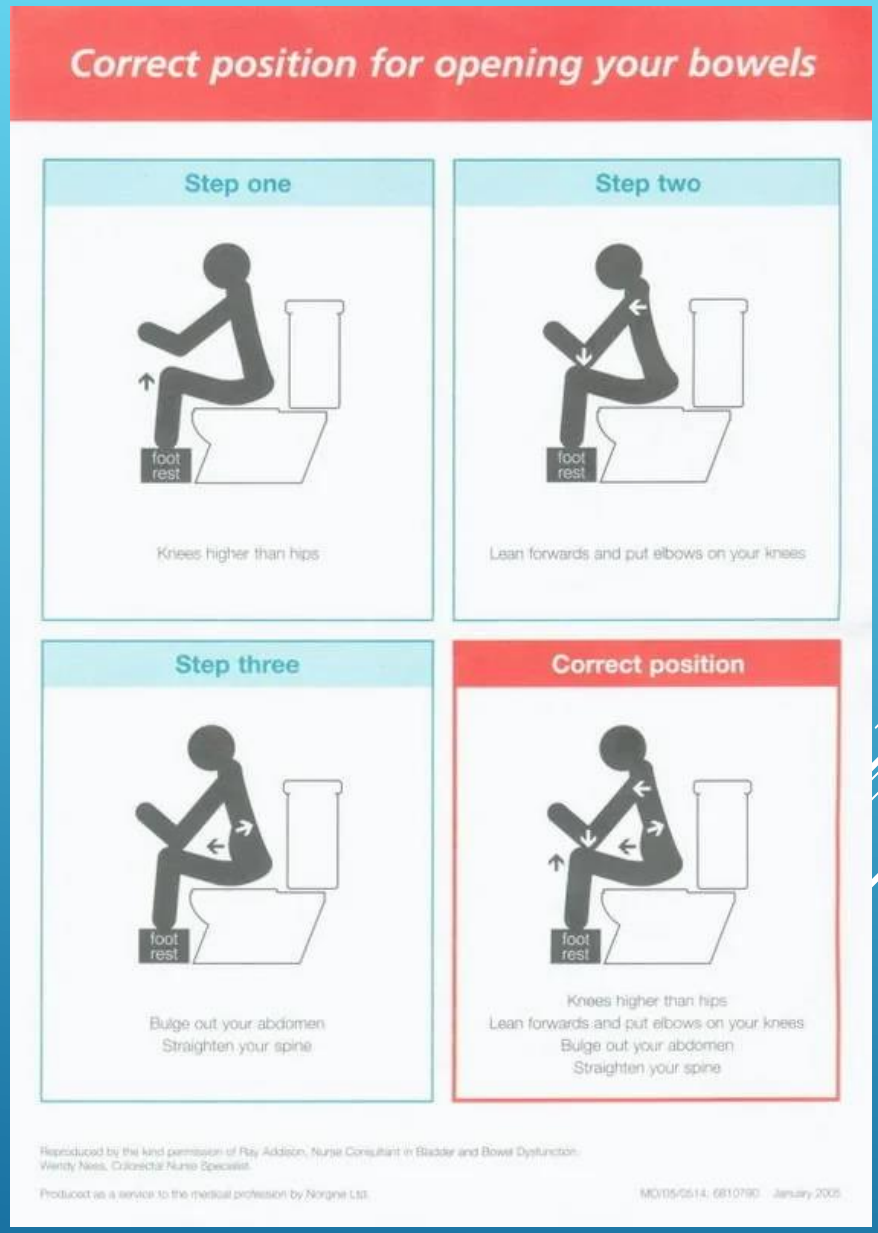
- Other benefits of reducing caffeine intake include:
  - Reduction in sleep disturbances
  - Reduction in palpitations/Tachycardia
  - Reduction in risk of Osteoporosis (Evidence to suggest caffeine can inhibit absorption of calcium)

* A recent pilot by the University Hospitals of Leicester NHS Trust found a 30% reduction in falls occurring on the way to the toilet following the roll out of decaffeinated tea/coffee.

What can we do to help reduce the impact of continence on falls?

- Avoiding constipation- a full bowel adds pressure on the bladder which can lead to an increase in symptoms. (Consider if you need to commence a bowel monitoring chart)

- Promote squatted seated posture in individuals struggling to open their bowels- this position assists with the release of the puborectalis muscle which is responsible for maintaining continence.



What can we do to help reduce the impact of continence on falls?

- £168 million was spent by NHS England on treating constipation in 2018/2019- the prescription cost for laxative medication for the same year was £87 million with 211 people a day admitted to hospital for constipation treatment.

- Including fibre into the diet can support bowel regularity and function by increasing the weight, size and softness of stool. A bulky stool is easier to pass and reduces constipation. Similarly some fibre can help to solidify watery stools if looser stool is a problem.

What can we do to help reduce the impact of continence on falls?

- Healthy toilet habits- avoiding the 'Just in case' visit and 'holding on for too long'- the actions can both negatively impact both the bladder/bowels capacity and emptying pattern. The average healthy bladder holds between 500-700mls and empties approximately every 3-4 hours. Normal bowel function can range from anywhere between 3 times daily to a motion every 3 days.

- Stop Smoking- nicotine can increase irritation to the bladders lining, risk of coughing and risk of bladder and kidney cancer.

- Consider containment products to support management of symptoms- an individual assessment of needs can be undertaken by the continence service to assess for appropriate product provision via the prescription, home delivery service.

:Containment products Commonly prescribed formulary products

Tena Comfort Mini Super

- Ideal for urinary stress incontinence-
- Each pad offers 400mls of absorbency.

Tena Comfort Plus Compact

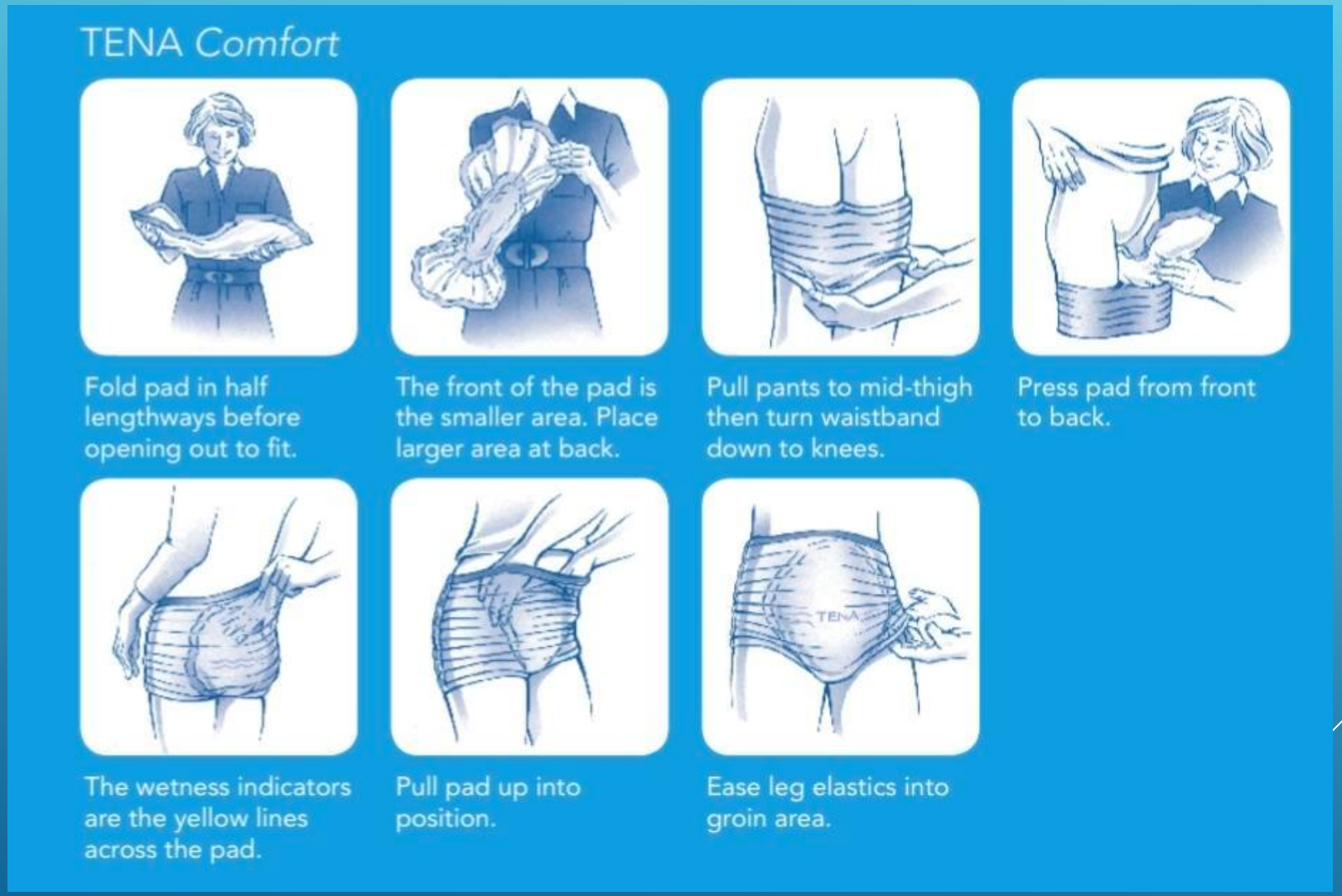
- Suitable for faecal/urinary incontinence and patients that are both mobile/immobile.
- Each pad offers 650mls of absorbency

Tena Comfort Normal

- Suitable for both incontinence of urine and faeces, often the best choice for someone with a urinary catheter and faecal incontinence.
- Each pad offers 450mls of absorbency.

* Normal and Plus Compact pad products need to be body worn with close fitting fixation pants.

Containment products: Application of products



Containment products: Other formulary product considerations

South Tees NHS Trust Continence Advisory Service:

Referrals can be completed via telephone, email or webice - Patients can also self-refer into the service.

If you or your team would like further training or support- we are here to help and always happy to share our enthusiasm for all things continence- please don't hesitate to get in touch!

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The Continence Team is based at: Low grange health village, Normanby Road, Middlesbrough, TS6 6TD

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Management of Deconditioning and Falls Prevention

By Tina Wiffen and Amanda O'Brien

Deconditioning

Definition

The syndrome of physical, psychological and functional decline that occurs as a result of prolonged inactivity and associated loss of muscle strength

Causes

- Prolonged periods of inactivity
- Immobility
- Acute illness and comorbidities
- Nutritional deficiencies and dehydration
- Cognitive changes
- Medication
- Psychosocial factor
- Environmental barriers

Effects

- Reduced muscle strength and mobility
- Increased risk of falls and prevalence of frailty
- Increased risk of psychosocial issues
- Increased risk of delirium, confusion or disorientation
- Increased risk of hospitalisation and mortality
- Decreased appetite/nutritional status

Deconditioning of the Balance System

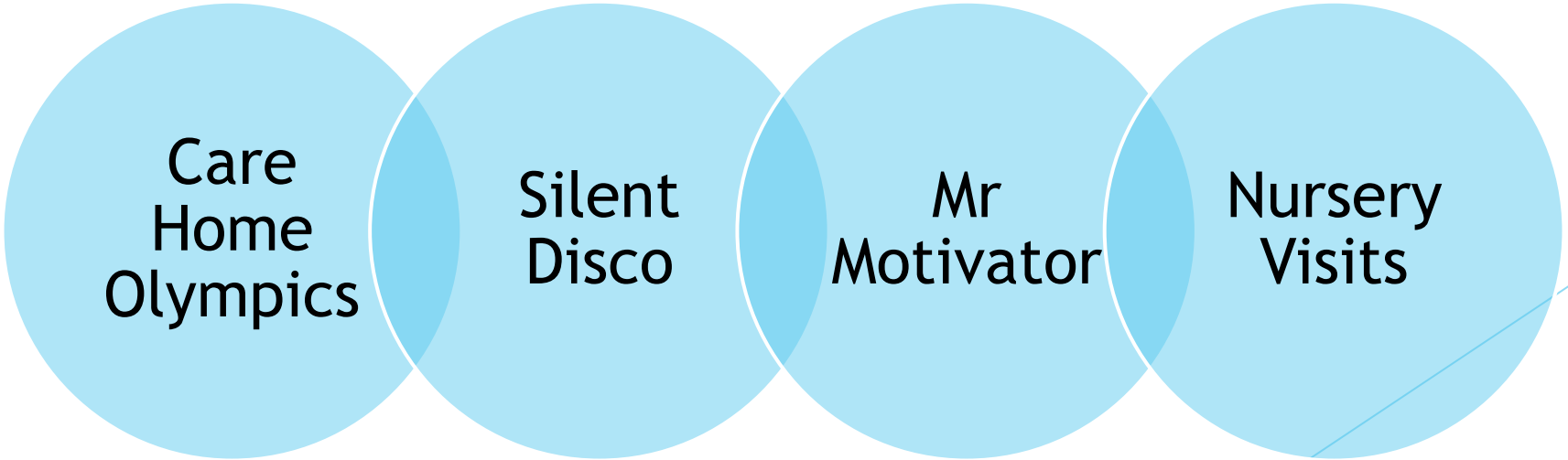
- Balance is achieved by integrating information from 3 main systems:
  - Visual
  - Inner Ear (vestibular apparatus)
  - Sensory and motor (joint receptors, muscle position, sensory feedback)
- Balance systems need to be challenged to stay functional
- Lack of movement and inactivity will lead to deconditioning of these systems
- We cannot alter physical changes to vision - this is why it is so important that regular eye checks are carried out and that glasses are worn as appropriate
- We challenge these systems with changes in position, moving head and neck, exercise, regular activities of daily living such as bathing, dressing, walking, engaging with social activities etc.

The Facts

- 10 days of bed rest ages muscles by the equivalent of 10 years in those over the age of 80.
- Muscle strength can decline by as much as 12-20% per week during periods of bed rest or inactivity.
- Up to 65 per cent of older patients experience decline in function during hospitalisation. Many of these patients could prematurely end up in a care home because of ‘deconditioning’ and the loss of functional abilities in hospital.
- Reconditioning can often take twice as long as deconditioning.
- Inactivity will lead to increased falls risk

Prevention

- Encouraging regular activity and mobility - Mobility aids in easy reach, regular positional changes and reducing use of wheelchairs where appropriate
- Maintaining routine - “Get up, get dressed, get moving”
- Encouraging residents to stay engaged – maintaining contact with friends and family and meaningful activities
- Encouraging independence – Only give the support residents need
- Assisting with good nutrition and hydration - Going into the dining room for meals and easy access to drinks and snacks throughout the day
- Hospital admission avoidance where appropriate – utilising the community services



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Referrals for further support

Kathryn Hodgson

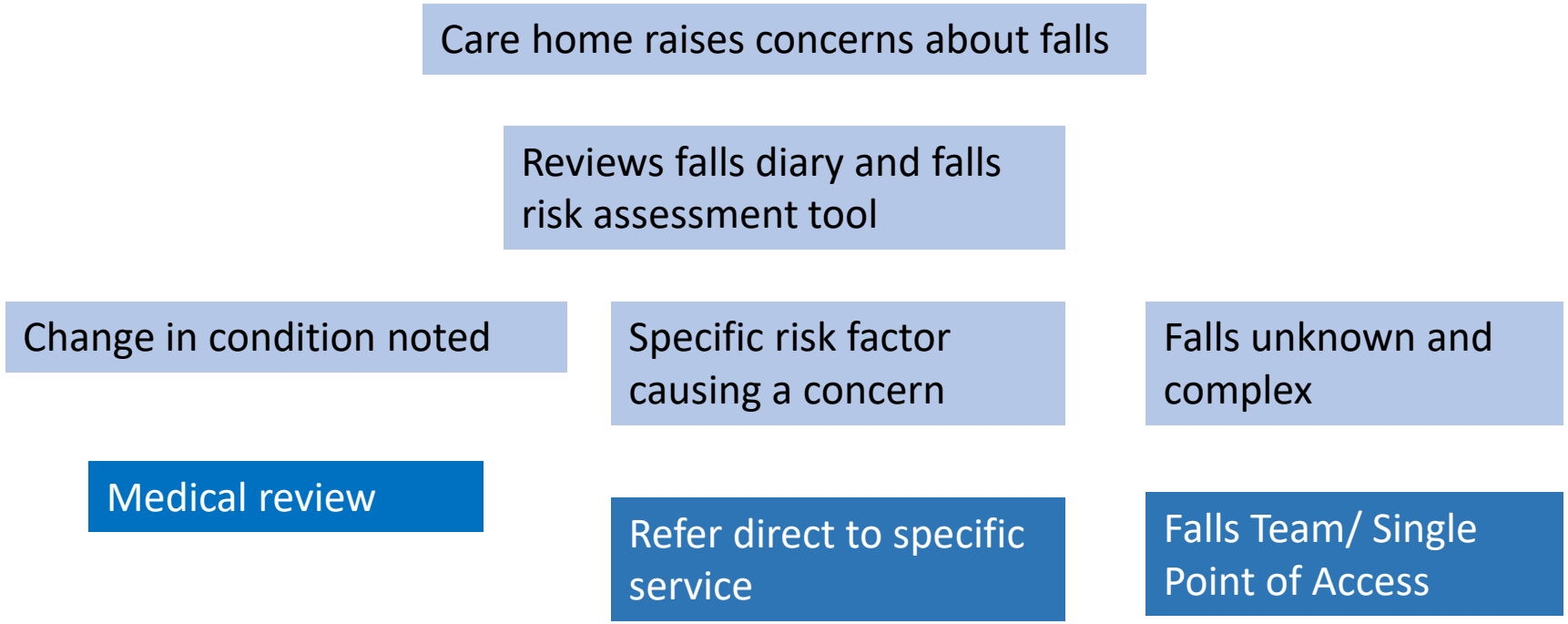
Clinical Lead Falls and Fracture Liaison Services – South Tees Falls Team

Safety and Quality First

Aim of today's session

- A resident who falls doesn't always need Falls Team referral
- Ensure clear pathways of support for when you need it
- Clarify when a Falls Team can help

How to refer for help



1. Review falls diary and falls risk assessment

- Specific times/ locations
- What was the resident doing at the time?
- Update risk factors and any actions you identify to manage falls risk

2. Change in condition

You know your resident. Encourage staff to be proactive in recognising changes:

- Demonstrating signs of infection
- Reduction in mobility
- Pain?
- Alertness
- Agitation
- Reduced appetite

Medical review – routine or urgent?

Case study

85 year old lady

Frequent UTIs

Falls related to infection (3 falls in the past year)

Further fall – urine smelly and increased confusion

Input:

Needs medical review for UTI

Consideration of preventative measures

Likely does not need falls Team input

3. Specific risk factor causing a concern

- Mobility
- Mental health/ agitation
- Environment
- Dizziness
- Not eating/drinking
- Sleep

Health and Social Care staff who can support

- May include:
  - PCN ward round/ GP
  - CHERRS / UCR
  - Community nursing
  - Community therapies
  - Mental health services e.g. ICLES/ memory clinic
  - Social workers
  - Social services OT service
  - Dieticians/ Speech and language
  - Pharmacists
  - Falls Team

Case Study

- 74 year old male resident noticed to have reduced mobility
- On risk assessment noted concerns around mobility
- First step would be therapy input

4. Falls unknown and/or complex

- Multiple risk factors
- Multiple long term medical conditions impacting on falls risk
- Had input from other services and still falling

Case study

- 80 year old
- Parkinson's disease with Lewy body dementia
- Recent increase in falls – multiple times/ locations
- Multiple risk factors identified on risk assessment tool
- Falls Team referral completed
- Falls Team assessment
  - LSBP
  - Mobility review
  - Advice on sensors
  - Advice on activity
  - Request review of medications

Thank you

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Safety and Quality First

Polypharmacy

Hannah Smith

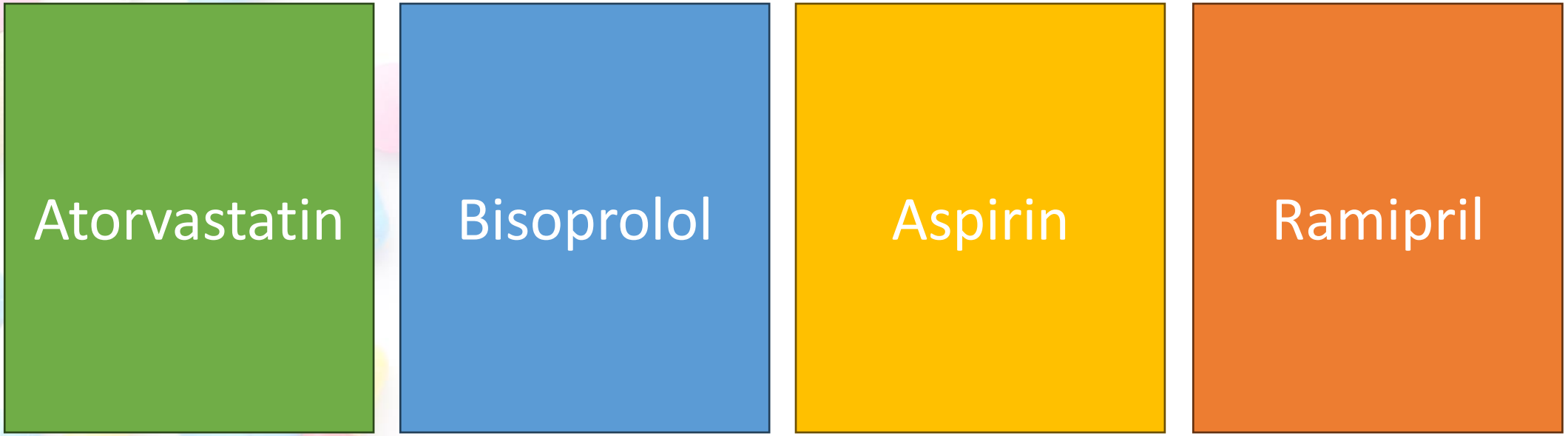
What is Polypharmacy?

Use of multiple medicines by a patient (NICE)

Polypharmacy is often **linked with older people taking multiple medicines however can affect a wider group including children and young adults**

Positive Polypharmacy

Secondary Prevention of a myocardial infarction:



What is Problematic Polypharmacy?

- The prescribing of medicines that are no longer clinically indicated or appropriate
- Where the benefit does not outweigh the harm
- Where the combination of multiple medicines have the potential to or actually cause harm
- Where the practicalities of using medicines have become unmanageable or are causing harm or distress

Problematic Polypharmacy

Amlodipine

- Side effects: oedema

Furosemide

- Side effects: nausea

Cyclizine

- Why not change amlodipine in the first place?

Benefits for individuals and healthcare professionals	Benefits for the healthcare system
Fewer adverse drug reactions and fewer hospital re-admissions	Reduced burden on repeat prescribing systems
Improved outcomes	Reduces medicines waste and cost savings
Shared decision making -> increased adherence	
Improved relationships	Better value from funded medicines
Better conversations about medicines and wider health issues	Fewer avoidable hospital admission
Lower risk of harm leading to litigious claims	

‘Falls are common, harmful, costly and difficult to prevent’

Logan et al (2001) Interventions to prevent falls in residential care

Medication acting on the heart or circulation

Atenolol

Doxazosin

Amlodipine

Propranolol

Digoxin

Candesartan

Tamsulosin

Donepezil

Bendroflumethiazide

Metolazone

Moxonidine

Lisinopril

Rivastigmine

Ramipril

Felodipine

Clonidine

Losartan

Medication acting on the brain

Sodium valproate

Trazodone

Temazepam

Mirtazapine

Tramadol

Lorazepam

Chlordiazepoxide

Zopiclone

Lofepramine

Amitriptyline

Haloperidol

Carbamazepine

Zolpidem

Chlorpromazine

Oxybutynin

Morphine

Codeine

Nortriptyline

Nitrazepam

Cinnarizine

Sertraline

Citalopram

Polypharmacy audit

- 4 week audit completed 13/11/23 to 1/12/23
- Any patient admitted to the Hospital at Home load (32 patients identified)
  - Medication prescribed
  - GP surgery
  - Age

Polypharmacy audit

Average age 85 years

37.5% prescribed 2 or more medications in same drug class

Average 7 medications per patient

85% patients prescribed ‘statins’ were over 75 years

63% patients prescribed ‘statins’ were over 85 years

GP	Average number of medication per patient
Lambert	8
Leyburn	9
Mayford	4.6
Catterick	7.5
Glebe House	6.25
Quaker Lane	9.3
Scorton	5.5
Great Ayton	4
Stokesley	3
Mowbray	9.5
Masham	9
Thirsk	3
Friary	12

The average number of prescription items issued per head of the population has increased steadily since 2005, from 14.3 to 19.8 per head in 2015. A person taking ten or more medicines is 300% more likely to be admitted to hospital.

Anticholinergic Burden

- Many medications have anticholinergic properties which can cause adverse effects in patients >65 years such as confusion, dizziness and falls.
  - These have been shown to increase mortality
  - Each one point increase in the ACB total score has been correlated with a 26% increase in the risk of death.
  - ACB 1.28 per patient on average

Medications with anticholinergic burden properties:

Opioids (tramadol, codeine, morphine)

Antihistamines (cetirizine, promethazine, chlorphenamine)

Antidepressants (amitriptyline, sertraline, mirtazapine)

Oxybutynin, solifenacin, trospium, darifenacin

STOPP Criteria

- Screening Tool of Older Persons' potentially inappropriate Prescriptions
- 44% of patients audited were on STOPP medication
  - Anticholinergics in dementia or chronic cognitive impairment (risk of increased confusion and agitation)
  - Long term strong opioids prescribed inappropriately as first line therapy for mild-moderate pain or in those with chronic constipation (risk of severe constipation)
  - Therapeutic dose PPIs after 1-2 months (review at least annually)

Interventions we can do!

- Review patient's pain regimes and consider reducing/stopping if inappropriate
  - Could co-codamol be changed to paracetamol alone?
- PPIs and alginates clinical appropriateness
- Ensuring treatment courses of benzodiazepines for short term use only
- Escalate side effects if reported by patients

Polypharmacy is everyone's responsibility!

Fallen Resident or found on floor

Immediate Management plan

Assess resident's responsiveness and for any injury (including cuts, bruising, deformities or pain)

Use locally recommended protocol. (eg A B C D E)

<u>If no obvious injury sustained:</u>

Check for any pain, swelling or abnormalities.

Top to toe assessment.

Check understanding and comprehension. Shake gently and shout…."hello, can you tell me your name and date of birth"

If in any doubt follow recommendations for obvious injury.

No injury	Independent	Dependent
Once established as far as reasonably practicable that there has been no obvious injury sustained, correct moving and handling practice should be followed to assist the resident from the floor.	Independent person: Verbally talk through rising from the floor.	Dependent person: Appropriate hoist/floor lifting cushion must be used to lift resident from the floor.

Is it safe to move the person?

Independent person: Verbally talk through rising from the floor. Assist to bed.

Dependent person: Appropriate hoist/floor lifting cushion must be used to lift resident from the floor. Assist to bed.

If it not safe to move the person

Call ambulance via NHS 111

If obvious injury: e.g. severe pain, limb deformity.

Do not move the person (unless in immediate danger of further injury).

Call for assistance/alert senior staff.

Keep person warm and note any changes.

Assess level of injury, provide reassurance and take appropriate action

- (eg call ambulance/GP/NHS 111).

If staff member is competent- take vital signs BP, pulse, respiratory rate, temperature

Attend to superficial wounds/ first aid.

Injury to head suspected – ongoing 24 hour observation for neurological changes. (altered conscious level, nausea vomiting headache)

Post falls Checks

1

Notify next of kin as agreed (e.g.next morning if prearranged)

2

Document actions taken in patient notes. Continue monitoring for 24 hours.

3

Report according to local guidelines

Commence falls investigation

Thanks for listening