NHS
West Hampshire
Clinical Commissioning Group

De-Prescribing in relation to Polypharmacy

Liz Corteville
Locality Lead Pharmacist
West Hampshire CCG
July 2019

quality services, better health

quality services, better health

WHO Global Patient Safety Challenges

- 1st handwashing

- 2nd safe surgery checklist

- 3rd medication without harm

quality services, better health

Medication Without Harm – launched March 2017

Overall goal

Reduce the level of severe, avoidable harm related to medications by 50% over 5 years globally

quality services, better health

WHO:
3 key areas that need managing to protect patients from harm

1. high-risk situations
2. polypharmacy
3. transitions of care

quality services, better health

What is polypharmacy?

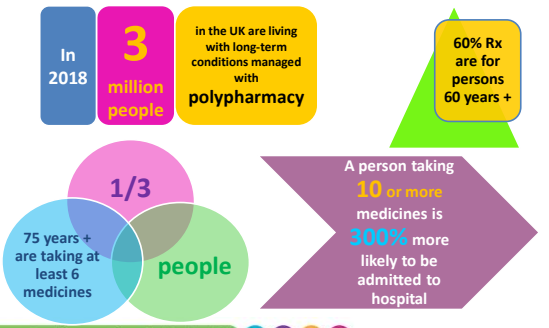
quality services, better health

Polypharmacy - what are concerns?

- adverse drug reactions
- drug interactions
- prescribing cascade
- higher costs
- decreased quality of life
- decreased mobility and cognition

Quality services, better health

Polypharmacy is common



Quality services, better health

What is De-prescribing?

The process of withdrawal of an inappropriate medication, supervised by a healthcare professional with the goal of managing polypharmacy and improving outcomes. BrJClinPhar 2015

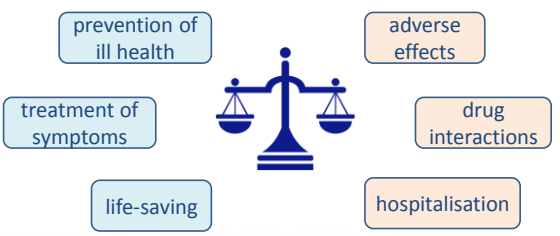
Minimising the number of medication-related problems and reducing waste

- shared decision patient and next of kin: priorities, beliefs, expectations
- side effects
- option of reducing & stopping treatments

Quality services, better health

Prescribing and De-prescribing

Being prescribed (and taking) a medicine is the most frequent intervention in the NHS



Quality services, better health

Polypharmacy Actions

- Reduce pill burden – reduce number of unique items
- STOP high-risk drugs/ drug combos
  - Drugs that cause falls
    - Anticholinergics
    - Other psychoactive drugs sedatives/ antipsychotics / antidepressants
    - Cardiovascular drugs
    - Hypoglycaemic agents
  - Drugs that cause bleeds
    - Combinations of OACs and antiplatelets
    - NSAIDs, SSRIs& NSAIDs
  - Medicines that cause kidney injury (DAMN)
- Look at physiological age and adjust targets/ doses
- Review treatment targets in frailty

Quality services, better health

Treatment targets in frailty

Treatment targets should also be reviewed and the following targets are believed to be more appropriate:

1. **Blood pressure** - avoid blood pressure < 130 systolic and or < 65 diastolic
2. **Blood sugar control** - avoid lowering HbA1c < 65 mmol/mol
3. **Treatments to maintain renal function and avoid progression of proteinuria** - avoid treating unless considered to have sufficient life expectancy to see benefit
4. **Use of blood thinners** - avoid the use of combination blood thinners
5. **Heart rate control** - reduce or stop heart rate limiting medication if pulse < 60

NB: as with all targets an individualised approach should be adopted to include giving clear information to allow an informed decision

Quality services, better health

Why medication review is important in falls prevention

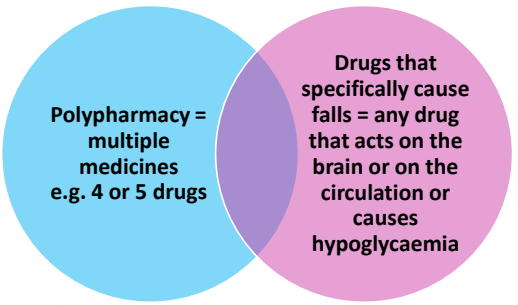
Medications are among the **most common causes** of increased fall risk in older people

Medications are usually among the **easiest** risk factors to change

Medication-based risks are **often missed** by busy healthcare professionals

Quality services, better health

Medication-based falls risks



Quality services, better health

10 Commonly Used Types of Medications that Increase Fall Risk in the elderly

Medications that affect the brain ("psychoactives")

1. Benzodiazepines: to help people sleep, or for anxiety

Habit-forming and associated with developing dementia; should always be tapered

2. Non-benzodiazepine sedatives: for insomnia or sleep difficulties.

Impair balance — and thinking — in the short-term.

3. Antipsychotics: treat schizophrenia & other illnesses with psychotic symptoms commonly for difficult behaviours in Alzheimer's and other dementias; or for depression. Associated with increased falls.

4. Anticonvulsants/Mood-stabilizers: to treat seizures, also to stabilize mood e.g. bipolar disorder, difficult dementia behaviours, nerve pain. Associated with increased fall risk. Tend to also have many other problematic s/e in older adults.

5. Antidepressants: for depression, or for anxiety. Associated with increased falls.

Quality services, better health

Medications that affect the brain ("psychoactives") continued

6. Opioid (narcotic) analgesics: mainly used for the treatment of pain.

Cause drowsiness, as well as other side-effects.

7. Anticholinergics: over-the-counter sleeping aids, as well as a variety of other prescription drugs. Block neurotransmitter acetylcholine. Many drugs from different classes have strong anticholinergic activity. Commonly cause sedation, cloud thinking and associated with developing dementia. 'AC burden' or ACB

Medications that affect blood pressure

8. Anti-hypertensives: different medications used to treat high blood pressure.

9. Other medications that affect BP: some commonly used medications not usually prescribed for hypertension, lower BP or increase postural BP changes in many older people. e.g. alpha-blockers for prostate problems in men

Medications that lower blood sugar (in diabetes)

10. Medications that lower blood sugar: most diabetes medications can cause or worsen hypoglycaemia (too low blood sugar). Metformin causes minimal hypoglycaemia, unless taken in combination with insulin or other diabetes drugs (especially sulfonylureas).

Quality services, better health

Anticholinergic burden & effects

Atropine dose equivalent	Digestive tract	Urinary tract	Skin	Eyes	Cardio-vascular	CNS
10mg			red, hot, dry	+++ mydriasis +++ blurred vision	+++ tachycardia fast and weak pulse	ataxia agitation delirium hallucinations delusions coma
5mg	decreased gut motility	urinary retention	hot and dry	++ mydriasis	++ tachycardia	restlessness fatigue headache
2mg	++ mouth dryness			+ mydriasis blurred vision	+ tachycardia palpitations	
1mg	+ dry mouth thirst			mydriasis	tachycardia	
0.5mg	dry mouth		anhidrosis			

AVOID IF POSSIBLE Highly anticholinergic drugs	**CAUTION** Drugs with some anticholinergic activity	**Alternatives and general notes**
Antidepressants		
Tricyclic antidepressants	**SSRIs*** **Mirtazapine**	**Venlafaxine**, **trazodone** and **duloxetine** have low anticholinergic activity *SSRIs, **Sertraline** best choice. Avoid **paroxetine**
Antipsychotics		
Fluphenazine **Chlorpromazine** **Clozapine** **Doxepin** **Levomepromazine**	**Olanzapine** **Quetiapine** **Risperidone** **Haloperidol**	**Aripiprazole** is an acceptable choice **Trifluoperazine** and **per-phenazine** have unknown activity (conflicting data)

Quality services, better health

Nausea and vertigo		
	Prochlorperazine	**Metoclopramide** has unknown activity (conflicting data). However, carries specific caution regarding parkinsonian and cognitive side effects. (**See MHRA Alert regarding long term use**) **Domperidone** does not usually penetrate the CNS, but caution is required for QT prolongation Nausea treatments all cause potential problems. Keep courses as short as possible

Urinary antispasmodics		
Oxybutynin **Tolterodine** **Fesoterodine** **Flavoxate** **Darifenacin** **Solifenacin** **Propiverine**	**Dosulepin**	**Mirabegron** has no recorded anticholinergic activity and may be an option. It is essential to ensure that medication is effective and stop if not.
Sedatives		
		Zolpidem and **zopiclone** no anticholinergic activity but falls risk Avoid sedative antihistamines Non-drug measures are preferred

Antihistamines		
Chlorphenamine **Promethazine** **Hydroxyzine** **Clemastine** **Cyproheptadine**	**Cetirizine** **Loratadine** **Fexofenadine**	Consider locally acting products for hayfever symptoms If taken for seasonal conditions check this is happening
H2-receptor antagonists		
	Ranitidine **Cimetidine**	PPIs have no anticholinergic burden. Prescribe at the lowest dose to control symptoms **Omeprazole** or **pantoprazole** may be preferred over **lansoprazole**. Caution with increased risk of *C. diff* infection
Drugs used in Parkinson's Disease		
Procyclidine **Trixehiphenidyl (benzhexol)** **Orphenadrine**	**Amantadine** **Bromocriptine**	**Entacapone** may have a small potential for anticholinergic activity. **Co-careldopa, pramipexole, ropinirole** and **selegiline** have no significant anticholinergic activity

Spasticity		
Tizanidine	**Baclofen** **Diazepam** **Methocarbamol**	
Analgesia		
	Opiates*	**Paracetamol** and NSAIDs are not thought to have anticholinergic activity. **Gabapentin** has minimal anticholinergic activity
Others		
Atropine **Hyoscine** **Propantheline** **Dicycloverine** **Ipratropium**	**Loperamide** **Carbamazepine** **Theophylline** **Lithium**	**Furosemide** and **digoxin** have unknown anticholinergic activity. The following have no or negligible anticholinergic activity: **Corticosteroids, statins, beta-blockers, ACE inhibitors, calcium channel blockers, triptans, valproate, phenytoin, phenobarbitone, topiramate**.

Tools and resources for patients

- Medication review z-card
- The Mo video

The **first Mo video** was produced to encourage patients - who take several types of medicine - to book a review with their local pharmacist. This is because, over time, people who take many different types of medicines for different reasons can find their treatments sometimes do not work well together.

A medicines review can help prevent trips to the GP or even hospital, and most importantly, help people feel better. A local pharmacist is a good place to have this conversation.

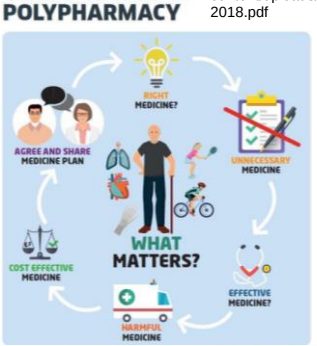
So the benefits of a medicines review can help everyone: less pressure on GPs and hospital services, fewer medicines prescribed, and, overall, help patients feel better and manage their health.

You can also email the **medicines optimisation team** for more information.

CONTACT US

7 STEPS TO APPROPRIATE POLYPHARMACY

http://www.therapeutics.scot.nhs.uk/wp-content/uploads/2018/04/Polypharmacy-Guidance-2018.pdf



quality services, better health

Case study 1

- Female age 87
- Nursing Home, Severely Frail
- Constipation (2018)
- Malignant neoplasm of breast (2017)
- Iron deficiency anaemias (2016)
- Closed reduction of fracture (2016)
- OA, LVF, T2DM (2015), Depression (2014)

Relevant tests
Hb – 124g/L (120-150)
BP - 106/54mmHg (Aug 17)
eGFR –73ml/min/1.73m² (Oct 17)
HbA1c – 47mmol/mol (May 17)

quality services, better health

Medications 1 Case 1

1. GlucoRx Nexus test strips – since 2017 -T2DM
2. Gliclazide 80mg OD cc – practice reg 2015 -T2DM
3. Spironolactone 25mg – 12.5mg (Half) OD – 2017 -LVF
4. Furosemide 80mg OD – practice reg 2015 -LVF
5. Aspirin 75mg OD – practice reg 2015 – CVD risk red
6. Bisoprolol 5mg OD – practice reg 2015 - LVF
7. Losartan 25mg OD - practice reg 2015 – CVD risk red
8. Omeprazole 40mg OM - practice reg 2015 - ??
9. Tamoxifen 20mg OD – 2016 – breast ca
10. Zapain 30mg/500mg 1-2QDS prn) – practice reg 2015 - OA
11. Morphine MR 10mg 1 every 12hr – 2017 - ??
12. Morphine $SO_4$10mg/5ml 5ml BD headaches up to QDS – 2017 -headaches
13. Oramorph 10mg/5ml 2.5-5ml BD PRN - practice reg 2015 - ??
14. Ibuprofen 5% gel – 2016 - OA
15. Lorazepam 1mg 1TDS for anxiety - practice reg 2015- anxiety
16. Zopiclone 7.5mg prn nocte - practice reg 2015 - hypnotic

Medications 2 Case 1

17. Mirtazapine 15mg ON – 2015 then 2017
18. Lofepramine 70mg BD – practice reg 2015
19. Risperidone 500mcg 1/2 OM – OPMH 2016 – psychotic symptoms
20. Prochlorperazine 5mg 1TDS PRN sickness - 2017
21. Senna 7.5mg 2-4 ON PRN – 2017 constipation
22. Mag OH Mixt 10- 20MLS BD PRN – 2017 constipation
23. Hyoscine butylbromide 10mg 1-2 TDS PRN – GU spasm 'tense & stressed unable to PU'
24. Ferrous fum 210mg OD with glass fresh OJ.
Avoid milk/tea/coffee 2hrs either side of iron tabs. 2016 – Fe-def anaemia
25. Cetirizine 10mg nocte PRN itch – 2015 – itchy skin
26. Beconase 2 sprays BD – 2015 – rhinitis??
27. Calamine lotion PRN – itchy skin
28. Doublebase gel – 2017 dry skin
29. Dermol 500 lotion Skin/ soap substitute – 2015 ??
30. Thick & Easy powder MDU – 2017 food thickener

quality services, better health

Medications – changes Case 1

GlucoRx Nexus test strips – *consider still required but low Hb anaemia*
Gliclazide 80mg OD cc – EOL since 2015 - HbA1c – 47mmol/mol recommended stop - not done
Spironolactone 25mg – 12.5mg (Half) OD – *check alt days (halving unscored tablet)*
Furosemide 80mg OD – eGFR 73ml/min
Aspirin 75mg OD – stopped by GP 2017 but left on repeat
Bisoprolol 5mg OD – stopped BP 106/54
Losartan 25mg OD - stopped BP 106/54
Omeprazole 40mg OM – *consider gradual dose reduction then stopping?*
Tamoxifen 20mg OD – ca breast
Zapain 30mg/500mg 1-2QDS prn) – *assess pain relief in OA*
Morphine MR 10mg 1 every 12hr – *assess pain relief*
Morphine $SO_4$10mg/5ml 5ml BD headaches up to QDS – *as above*
Oramorph 10mg/5ml 2.5-5ml BD PRN – duplicate removed
Ibuprofen 5% gel – assess pain relief in OA
Lorazepam 1mg 1TDS for anxiety – *assess anxiety*
Zopiclone 7.5mg prn nocte – *assess insomnia*

Medications – changes Case 1

Mirtazapine 15mg ON – *sedative antidepressant*
Lofepramine 70mg BD - not taking removed past drugs – High ACB
Risperidone 500mcg 1/2 OM – *review ongoing need*
Prochlorperazine 5mg 1TDS PRN sickness - not taking removed past drugs
Senna 7.5mg 2-4 ON PRN – *review if still required*
Mag OH Mixt 10- 20MLS BD PRN – *as above*
Hyoscine butylbromide 10mg 1-2 TDS PRN - not taking removed past drugs. High ACB
Ferrous fumurate 210mg OD with glass fresh OJ.
Avoid milk/tea/coffee 2hrs either side of iron tabs. – not taking removed past drugs
Cetirizine 10mg nocte PRN itch – not taking removed past drugs
Beconase 2 sprays BD – not taking removed past drugs
Calamine lotion PRN - not taking removed past drugs
Doublebase gel – *consider change to Isomol?*
Dermol 500 lotion Skin/ soap substitute - recommended stop - not done
Thick & Easy powder MDU – recommend assess use

quality services, better health

Case study 2

- Female age 90
- Care Home, Severely Frail (eFI 0.361)
- Mixed dementia 2016
- IHD 2007 (prev practice)
- Osteoporosis 2007
- Depression 2004
- Vasculitis 2004
- RA 2003
- HTN 1993

Revelant Tests
Hb 154g/l (120- 150g/l)
Cholesterol 3mmol/L LDL 1.5 mmol/L
BP 110/63 mm Hg
CrCl 31ml/min
Wt 51kg

Medications 1 Case 2

1. Methotrexate PO – 2004 RA
2. Folic Acid – 2004 MTX rescue
3. Clopidogrel - 2007 IHD
4. Simvastatin - 2007 IHD
5. Duloxetine - 2006 Depression
6. Lansoprazole - 2004 PPI cover steroids
7. Calcium & Vit D - 2002 Osteoporosis
8. Alendronic Acid - 2007 Osteoporosis
9. Ferrous Fumarate - 2015 Anaemia
10. Lorazepam - 2014 anxiety/agitation
11. Memantine - 2016 Dementia
12. Ramipril - 2004 HTN
13. Mirtazapine - 2006 Depression
14. Senna/Macrogols PRN - long-term constipation
15. Co-dydramol/Paracetamol - PRN long-term analgesia

Medications changes Case 2

1. Methotrexate PO – stopped poor renal function ADRs no benefit no secondary care
2. Folic Acid – 2004 MTX rescue stopped as MTX stopped
3. Clopidogrel - 2007 IHD – *consider stopping*
4. Simvastatin - 2007 IHD – *consider stopping*
5. Duloxetine - 2006 Depression – *consider stopping. Also on mirtazapine*
6. Lansoprazole – stopped no longer on steroids
7. Calcium & Vit D – stopped – non-weight-bearing and poor renal function
8. Alendronic Acid – stopped 11 years of treatment and non-weight-bearing
9. Ferrous Fumarate – stopped high Hb
10. Lorazepam - 2014 anxiety/agitation – *consider reduction*
11. Memantine - 2016 Dementia – *consider effectiveness*
12. Ramipril – reduced – poor renal function and low BP
13. Mirtazapine – reduced – very drowsy all day *mARS cat 1*
14. Senna/Macrogols PRN - *long-term constipation*
15. Co-dydramol/Paracetamol - PRN *long-term analgesia*

Case study 3

- Female; 81 years; Living at Home; Moderately Frail
- Knee OA – Oct 17
- # humerus – Apr 10
- AF – Apr 10
- Carpal tunnel release – Jul 07
- Diverticular disease – Oct 03
- Diagnostic gastroscopy – Aug 03
- Iron deficiency anaemias - Jul 03
- T2DM - 1998
- Obesity - 1993
- HTN - 1990

Relevant tests
Corrected Ca: 2.33mmol/L (Apr 13) (2.15 – 2.6)
CHA_2DS_2-VASc = 5 (May 16)
HbA1c: 46mmol/mol (Apr 17)
BMI: 31.6 (Apr 17)
BP: 106/60mmHg (Apr 17) NO HR since 2010
U&E: (Apr 17) Sr Sodium: 134mmol/l Sr Potassium: 4.3mmol/L Sr Cr: 69 µmol/L) eGFR: 72ml/min/1.73m^2
Cholesterol (Apr 17) Total Chol: 2.3 mmol/L Plasma Chol/HDL: 1.7

Medications 1 Case 3

1. Aspirin 75mg OM - Jul 10 - AF – previously on warfarin but GP switched to aspirin following falls.
2. Simvastatin 20mg ON – Sep 05 - CVD risk reduction 1^O prevention
3. Ramipril 2.5mg OD – Mar 07 – HTN
4. Bisoprolol 3.75mg OD – Apr 10 – AF
5. Furosemide 40mg 2OM – Jul 10 – pedal oedema
6. Metformin 500mg 2BD – 1997 – T2DM
7. Gliclazide 80mg 2OD – Aug 11- T2DM
8. Amitriptyline 10mg 1-2ON – Nov 16 – Mastodynia
9. Co-dydramol 10mg/500mg 1-2 QDS PRN Jun 02 - Initially – Headache. Subsequently –Sciatica, Carpal Tunnel and OA Knee Pain.
10. TheiCal-D3 1000mg/880unit 1OD – Oct 17 - Started by ICS pharmacist – Hx of low trauma fracture
11. Laxido Orange 1 OD MDU – Jul 16 - Prevention/Treatment of constipation – SE of co-dydramol
12. Flexion 25% Urea Heel Balm (EVERY DAY) – May 12 - Dry / Cracked skin on feet
13. Estriol 0.1% cream TWICE WEEKLY – Dec 13 - Vaginal Dryness (Last issued Jul 17)
14. GlucoRx lancets 0.31mm/30g mdu Sep 17 - Started by ICS pharmacist as pt on Sulphonylurea
15. GlucoRx Nexus testing strips mdu – as above

Medications changes 1 Case 3

1. Aspirin 75mg OM Suggested Feb 18: Stop aspirin and start an anticoagulant - indicated for AF. CHA2DS2-VASc = 5 (May 16) Risk/Benefit of anticoagulant vs antiplatelet – choose anticoagulant. Cardiology recommended anti-coagulation at diagnosis of AF.
2. Simvastatin 20mg ON
3. Ramipril 2.5mg OD
4. Bisoprolol 3.75mg OD : Monitor Pulse as no HR recorded since AF diagnosis 2010 and review bisoprolol.
5. Furosemide 40mg 2OM Suggested Feb 18: Trial dose reduction to see what effect this has on legs/breathlessness. Dose halved (Feb 18). Suggest repeat BP check and review of symptoms. Can this be stopped altogether? Started in June 10 due to swollen legs in advance of AF diagnosis. Latest BP Apr 17 = 106/60mmHg.
6. Metformin 500mg 2BD
7. Gliclazide 80mg 2OD Suggested Feb 18: Consider dose reduction / stopping altogether with review 3/12. Dose halved to 40mg/bd in Feb 18 after patient showed GP at home BMs (range 3.3-4.4mmol/l) After 3 months need to re-check HbA1c and review latest at home blood glucose results. Latest HbA1c Apr 17 < 53 mmol/mol. Pt at increased risk of hypoglycaemia.
8. Amitriptyline 10mg 1-2ON Suggested Jan 2018: Consider trial without amitriptyline to confirm on-going need. Started 08/11/2016 for Mastodynia - seen by breast surgeons multiple times - trying amitriptyline for possible nerve pain. The plan was to review after 4wks. No documented review to date. Amitriptyline – High ACB

Medications changes 2 Case 3

9. Co-dydramol 10mg/500mg 1-2 QDS PRN
10. TheiCal-D3 1000mg/880unit 1OD Suggested May 2018: Check if patient is taking these and monitor corrected Ca levels. High rates of non-compliance with CaVit D supplements. "chalky"
11. Laxido Orange 1 OD MDU Suggested May 2018: Check if patient is taking this and is it working? If to counter opioid effects consider a stimulant laxative?
12. Flexion 25% Urea Heel Balm (EVERY DAY)
13. Estriol 0.1% cream TWICE WEEKLY
14. GlucoRx lancets 0.31mm/30g (Use as directed)
15. GlucoRx Nexus testing strips (Use 1-3 times a week as directed)
16. Depo-Medrone 80mg/2ml suspension for injection vials

Case study 4

Female aged 86	**Relevant tests**
Nursing home; Severely Frail	HbA1c 42mmol/mol
BKA 2017	Cr 70micromol/L, wt 58Kg, CrCl 47ml/min
CVA 2016, AF 2017	Cholesterol 2.5mmol/L
BCC 2010	BP 120/70
PVD 2010	Pulse 74
IHD 1999, MI 1995	
T2DM 1996, HTN 1996	

Medications 1 Case 4

1. Loceryl nail lacquer ASD – Apr 2017 – Fungal nail infection
2. Simvastatin 40mg ON – Nov 2001 – secondary prevention IHD
3. Candesartan 8mg OD – Mar 2007 – HTN
4. Quinine 300mg ON – Mar 2006 – Leg cramps
5. Digoxin 125mcg OM – Nov 2010 – AF rate control
6. Furosemide 20mg OM – Feb 2015 – pitting oedema lower legs
7. Bisoprolol 10mg OD – Oct 2011 – rate control AF
8. Apixaban 2.5mg BD – Jan 2016 – SPAF
9. Linagliptin 5mg OD – Jul 2017 – T2DM
10. Amitriptyline 10mg ON – Jul 2017 – neuropathic pain in feet from amputation
11. Gliclazide 40mg OD – Jul 2017 – T2DM
12. Paracetamol 500mg-1gQDS - Jul 2017 – pain
13. Buprenorphine patch 10mcg/hr one weekly - Aug 2017 – pain BKA
14. Senna 7.5mg ON – Jul 2017 – constipation
15. Citalopram 10mg OD – Nov 2017 – Low mood following amputation

Medications changes Case 4

1. Loceryl nail lacquer ASD - stopped - no longer requires; amputation
2. Simvastatin 40mg ON stopped - r/v risk-benefit in view of frailty
3. Candesartan 8mg OD – stopped - low BP, falls risk
4. Quinine 300mg ON – stopped - QT prolongation, on SSRI plus can increase digoxin level
5. Digoxin 125mcg OM – stopped - pulse stable on bisoprolol for rate control
6. Furosemide 20mg OM -
7. Bisoprolol 10mg OD – *consider reducing BP 120/70 HR = 74*
8. Apixaban 2.5mg BD
9. Linagliptin 5mg OD
10. Amitriptyline 10mg ON – to be reviewed in future (recent amputation)
11. Gliclazide 40mg OD – stopped HbA1c 42 risk of hypo/falls
12. Paracetamol 500mg-1g QDS
13. Buprenorphine patch 10mcg/hr one weekly
14. Senna 7.5mg ON
15. Citalopram 10mg OD

Case study 5

Female aged 89	**Relevant tests**
Living at home; Severely Frail, housebound	eGFR 40 ml/min
Fe-def anaemia Nov 2017	Creatinine clearance 19.8 ml/min
Allergy house dust mite Apr 2016	BMI 20.5
Low back pain Sep 2012	BP 100/60 mmHg
Acute back pain thoracic 2009	Pulse 76 beats/min
AF Feb 2007	Cholesterol 3.5 mmol/l
HTN 2006, Osteoporosis 2005, Diverticulitis 2005	

Medications 1 Case 5

1. Adcal D3 – Feb 2005 – Osteoporosis
2. Butec patches (20mg + 10mg) – Jun 2011 – Back pain (OA + OP)
3. Candesartan 16mg + 8mg – May 2013 – HTN
4. Cefalexin 250mg ON – Oct 2004 – UTI prevention
5. Chloamphenicol 1% eye oint – Jul 2015 – eye symptoms
6. Cetirizine 10mg OD – Jul 1995 – allergy symptoms
7. Digoxin 125mcg OD – May 2006 – AF rate control
8. Furosemide 20mg OD – May 2007 – ankle swelling
9. Latanoprost eye drops – Apr 2015 – glaucoma
10. Nasofan nasal spray – Apr 2013 – allergy symptoms
11. Omeprazole 20mg BD – Oct 2014 – NSAID GI cover
12. Paracetamol 500mg, 2 QDS – Jan 2013 – OA OP
13. Rivaroxaban 15mg OD – Apr 2017 – SPAF
14. Seretide 250 Evohaler – Mar 2006 - asthma

Medications 2 Case 5

15. Singular 16mg – Jun 2007 – asthma/mucus
16. Ventolin 100mcg Evohaler – Nov 2004 – asthma
17. Zapain 30/500mg PRN – OP/OA pain

quality services, better health

Medications Changes 1 Case 5

1. Adcal D3
2. Butec patches (20mg + 10mg) *assess analgesia*
3. Candesartan 16mg + 8mg reduced to 8mg BP 100/60 falls risk, housebound frailty
4. Cefalexin 250mg ON – changed to trimethoprim 100mg ON cefalexin not preferred AB
5. Chloamphenicol 1% eye oint *review on-going need*
6. Cetirizine 10mg OD changed to prn. Polypharmacy *mARS cat 2* not needed every day
7. Digoxin 125mcg OD *consider dose reduction in view of renal function dig levels*
8. Furosemide 20mg OD stopped symptoms reviewed patient 'dry' stop and monitor
9. Latanoprost eye drops
10. Nasofan nasal spray *consider reviewing ongoing needs*
11. Omeprazole 20mg BD stopped
12. Paracetamol 500mg, 2 QDS - *consider ongoing need*
13. Rivaroxaban 15mg OD – *dose correct for renal function*
14. Seretide 250 Evohaler - *check inhaler technique*

Medications Changes 2 Case 5

15. Singular 16mg – stopped – patient not taking
16. Ventolin 100mcg Evohaler - *check inhaler technique*
17. Zapain 30/500mg PRN –stopped risk s/e and dependence. Butec + paracetamol

quality services, better health