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Overprescribing

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What this session will cover

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- What is Overprescribing?
- Why does it matter?
- What are the causes?
- How are we doing in Calderdale?
- Balancing risks and benefits of medicines and discussing these with people
- Resources to support
- What might help?
- What can you do?

National Overprescribing Review

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Overprescribing – the use of a medicine where there is a better non-medicine alternative, or the use is inappropriate for that patients' circumstances and wishes

National Overprescribing Review was commissioned to evaluate the extent, causes and consequences of overprescribing


Department of Health & Social Care

Good for you, good for us, good for everybody

A plan to reduce overprescribing to make patient care better and safer, support the NHS, and reduce carbon emissions

Published 22 September 2021

The key to stopping overprescribing is medicines optimisation: ensuring that patients are prescribed the right medicines, at the right time, in the right doses.

https://www.gov.uk/government/publications/national-overprescribing-review-report

Why should I care about Overprescribing? Patients

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I take eleven medicines now after having a heart attack 12 years ago. Some of the tablets deal with the side effects of the other ones.

Open access Original research

BMJ Open

Adverse drug reactions, multimorbidity and polypharmacy: a prospective analysis of 1 month of medical admissions

Rostam Osanlou ,[1,2] Lauren Walker,[1,2] Dyfrig A Hughes ,[3] Girvan Burnside,[4] Munir Pirmohamed [1,2]

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► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2021-055551).

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ABSTRACT

Objective To ascertain the burden and associated cost of adverse drug reactions (ADRs), polypharmacy and multimorbidity through a prospective analysis of all medical admissions to a large university teaching hospital over a 1-month period.

Design Prospective observational study.

Setting Liverpool University Hospital Foundation National Health Service (NHS) Trust, England.

Participants All medical admissions with greater than 24-hour stay over a 1-month period.

Main outcome measures Prevalence of admissions due to an ADR and associated mortality, prevalence and association of multimorbidity and polypharmacy with ADRs, and estimated local financial cost of admissions where an ADR was a contributing or main reason for admission with projected costs for NHS in England

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ Over 1000 medical admissions were individually reviewed by specialists in clinical pharmacology and general internal medicine in this prospective analysis of adverse drug reactions (ADRs).
⇒ Standardised criteria, as listed in methods, were used to identify and classify ADRs. This improves the objectivity and reproducibility of the analysis.
⇒ Extrapolating the cost analysis nationally based on medical admissions locally may be unreliable due to differences including local population and services.
⇒ This study does not take into account how commonly each medicine that caused an ADR is prescribed in the local community.

https://bmjopen.bmj.com/content/12/7/e055551

Why should I care?
Workload

Why should I care?
Environment

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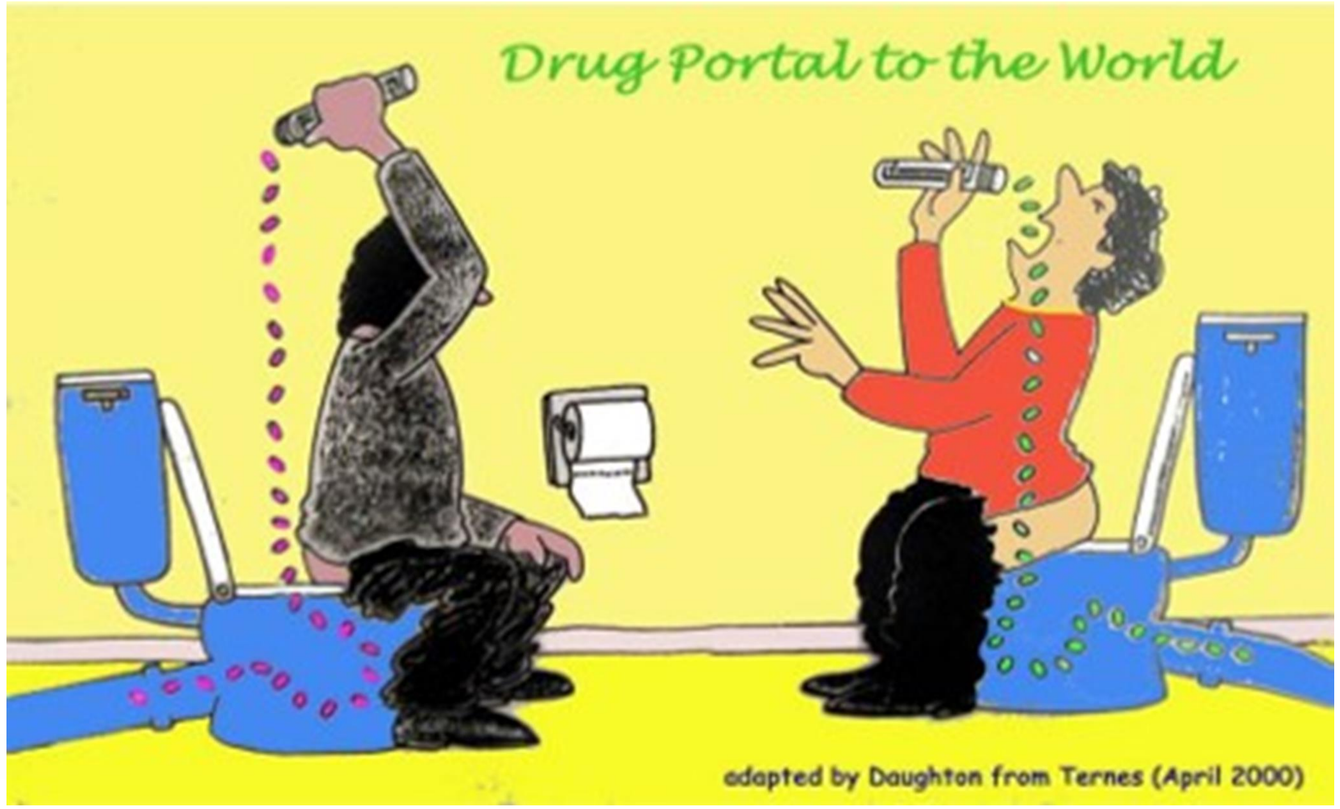

PHOTO COURTESY OF RUTH INNES, NHS HIGHLAND

Adapted with permission from Prof Sharon Pfleger, Consultant in Pharmaceutical Public Health, NHS Highland

Why should I care?
System

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Why does Overprescribing happen?

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Multiple prescribers if not joined up

Lack of shared records/ digital connectivity documentation of decisions/ changes

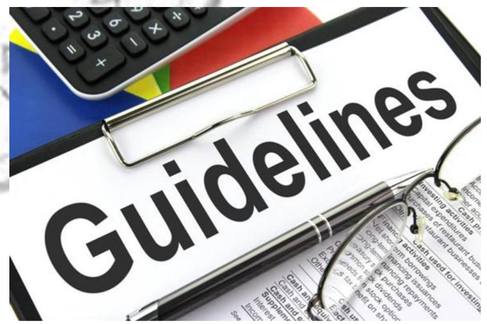
Not involving people in decisions as much as they'd like

Dealing with symptoms not causes

Using medicines when non-medicine options would be better

People not knowing who to ask/ feeling confident to raise issues

People and their wishes change but their medicines don't



Single condition guidelines, lack of evidence/ guidance on reducing stopping medicines

Polypharmacy Dashboard Data

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Polypharmacy Prescribing comparators: Number of patients receiving:

- 8, 10, 15, 20 or more unique medicines
- Average number of unique medicines per patient
- Anticholinergic burden score of 6, 9, 12 or more
- Number of medicines with low- moderate ACB (4, 5 or 6 or more medicines)
- Number of medicines with moderate-high ACB (2, 3 or 4 or more medicines)
- 5 or more analgesics
- Multiple prescribing of anticoagulants and antiplatelets
- NSAID and 1 of more medicine(s) likely to cause kidney injury
- 2 or more medicines likely to cause kidney injury
- Medicines that can have unintended hypotensive effect (2, 3 or 4 or more medicines)
- SSRI or SNRI with other medicines known to increase risk of bleeding (2, 3 or 4 other medicines)

NHS Business Services Authority

ePACT2

Opioid dashboard

- Opioid pain medicines per 1,000 patients
- Opioid pain medicines by duration
- Opioid pain medicines in combination with other medicines known to increase the risk of harm
- High Oral Morphine Equivalent volume of opioids
- High Oral Morphine Equivalent volume of opioids in combination with other medicines known to increase the risk of harm
- Multiple items of Morphine sulfate 10mg/5ml oral solution
- High volume of Morphine sulfate 10mg/5ml oral solution

https://www.nhsbsa.nhs.uk/access-our-data-products/epact2

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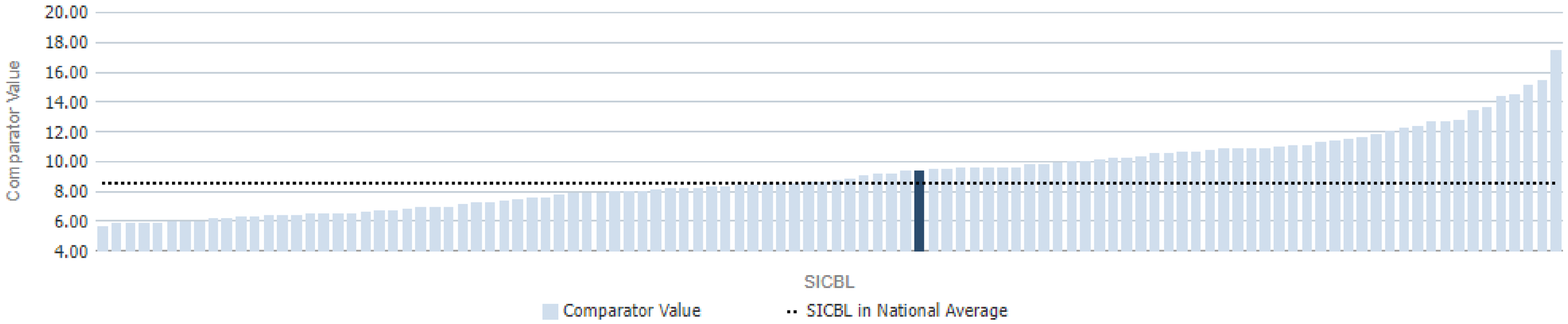
Calderdale data

NHS
Business Services Authority

ePACT2

Percentage of patients prescribed 10 or more unique medicines - Aged 65 and over

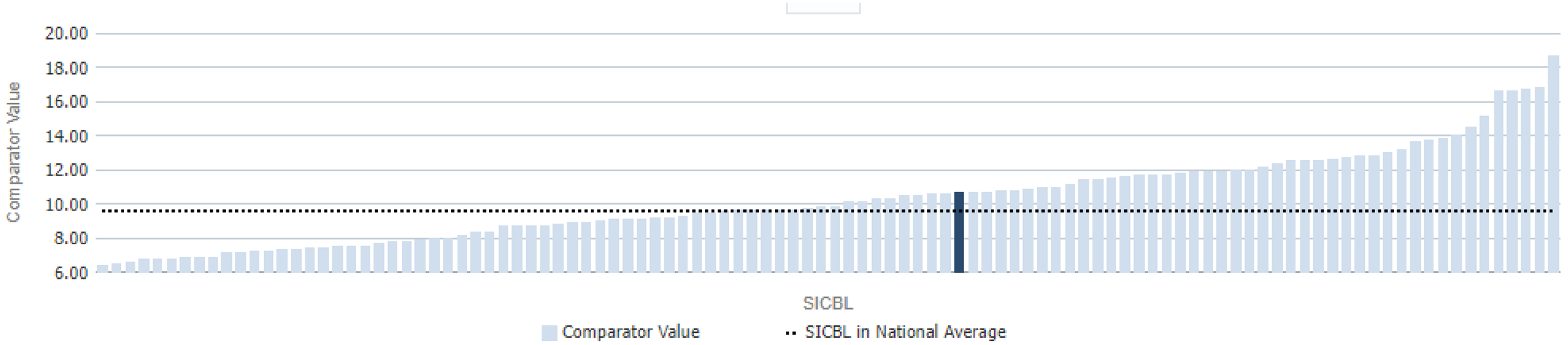
NHS WEST YORKSHIRE ICB – 02T highlighted within results for all SICBLs during Sept-23
Numerator Definition: Number of patients prescribed 10 or more unique medicines
Denominator Definition: Total number of patients prescribed one or more medicines from BNF chapters 1 to 4 & 6 to 10



SICBL Value	SICBL in National Average
9.47	8.61

Percentage of patients prescribed 10 or more unique medicines - Aged 75 and over

NHS WEST YORKSHIRE ICB – 02T highlighted within results for all SICBLs during Sept-23
Numerator Definition: Number of patients prescribed 10 or more unique medicines
Denominator Definition: Total number of patients prescribed one or more medicines from BNF chapters 1 to 4 & 6 to 10



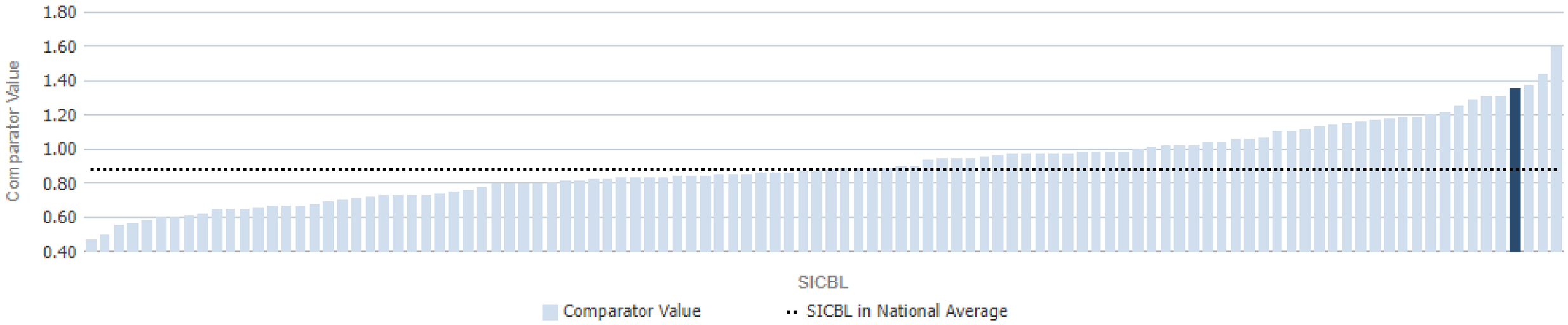
SICBL Value	SICBL in National Average
10.74	9.64

Percentage of patients with an anticholinergic burden score of 6 or more - All Ages

NHS WEST YORKSHIRE ICB – 02T highlighted within results for all SICBLs during Sept-23

Numerator Definition: Number of patients prescribed one or more anticholinergic medicines with a combined anticholinergic burden (ACB) score of 6 or greater

Denominator Definition: Total number of patients prescribed one or more medicines from BNF chapters 1 to 4 & 6 to 10



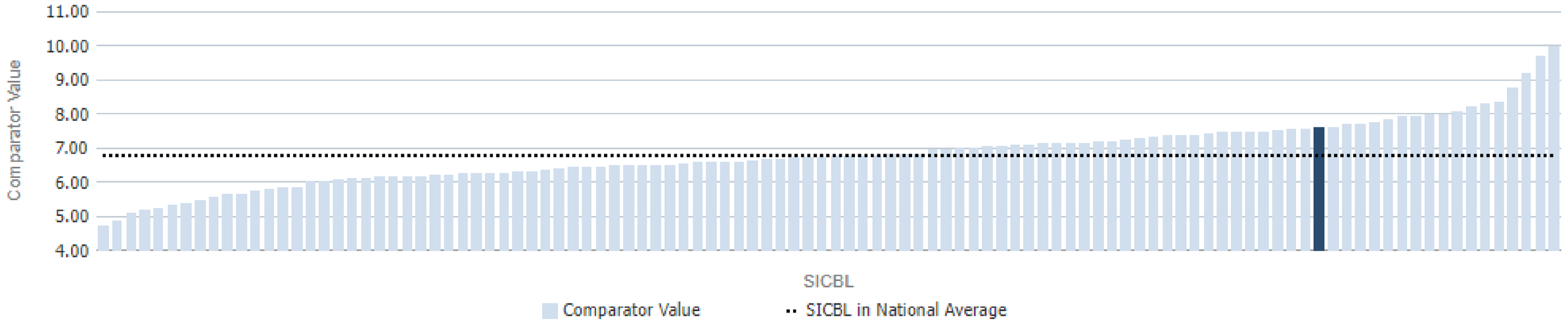
SICBL Value	SICBL in National Average
1.35	0.89

Percentage of patients prescribed 2 medicines with moderate to high anticholinergic burden - All Ages

NHS WEST YORKSHIRE ICB – 02T highlighted within results for all SICBLs during Sept -23

Numerator Definition: Number of patients prescribed 2 unique medicines (chemical substances) with moderate to high anticholinergic burden in the same reporting period

Denominator Definition: Number of patients prescribed one or more medicines (chemical substances) with moderate to high anticholinergic burden



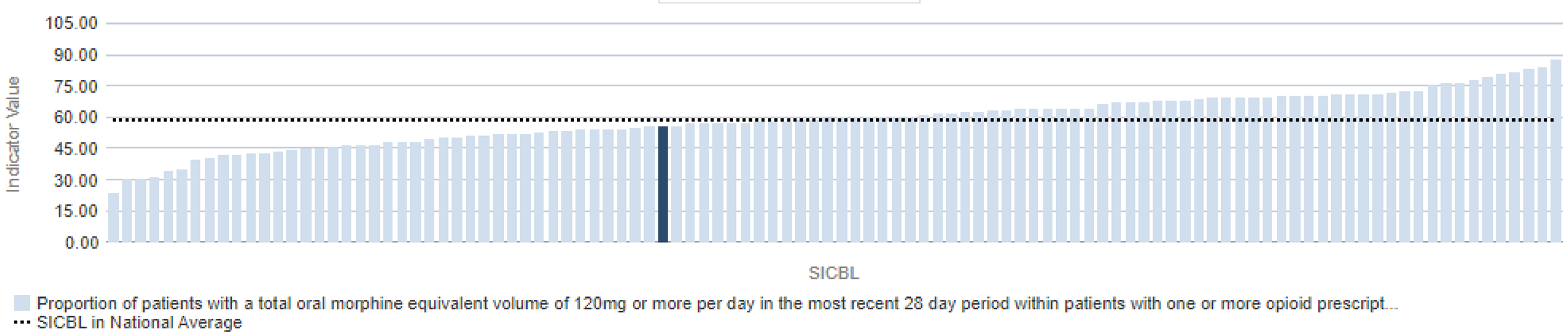
SICBL Value	SICBL in National Average
7.62	6.83

High Oral Morphine Equivalent volume of opioids

NHS WEST YORKSHIRE ICB – 02T ccompared to all SICBLs
Period 05 October 2023 to 01 November 2023 **Gender** Female, Male **Age Range** (All Column Values)

Numerator Definition: Number of patients with a total oral morphine equivalent volume of 120mg or more per day in the most recent 28 day period

Denominator Definition: Number of patients with one or more opioid prescription in the most recent 28 day period



SICBL Value	SICBL in National Average
55.49	58.92

WY Overprescribing Task & Finish Groups

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Structured Medication Reviews
Anticholinergic Burden
Opioids

Common Themes:
Resource repositories and where to host
E&T- healthcare professionals and the public
Directory of services and sign-posting to non-medical support
Transfer of care

Specific work currently underway:
What is a SMR resource
Patient preparation/ participation in SMRs
ACB guidance/ patient information
WY medicines waste campaign- insight work first
WY Overprescribing website
Polypharmacy masterclasses
Improving transfer of care information/ follow up
Pain cafes

Prescribing/ Deprescribing: balance risks and benefits

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Quality of Life not just Quantity depending on patient wishes

Benefits of medicines,
life expectancy
personal aims

NNTs
Appropriate targets e.g. BP
Medicines support incl.
supporting behaviour

Treatment burden,
ADRs,
risks of harm

NNHs
Applying general vs adapted targets e.g. HbA1c
Regimen complexity, adherence issues, OD, interactions
Potentially inappropriate meds (use tools to ID)

Beware of maintaining the status quo: 85-year-olds followed over 11 years, each additional medication prescribed was associated with a 3% increased risk of mortality

Davies LE. Is polypharmacy associated with mortality in the very old: Findings from the Newcastle 85+ Study BJCP 2022 https://doi.org/10.1111/bcp.15211

Adapted from Deprescribing presentation by Nina Barnett with permission

Number needed to treat/ harm

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NNT- idea of level of effect for an individual patient

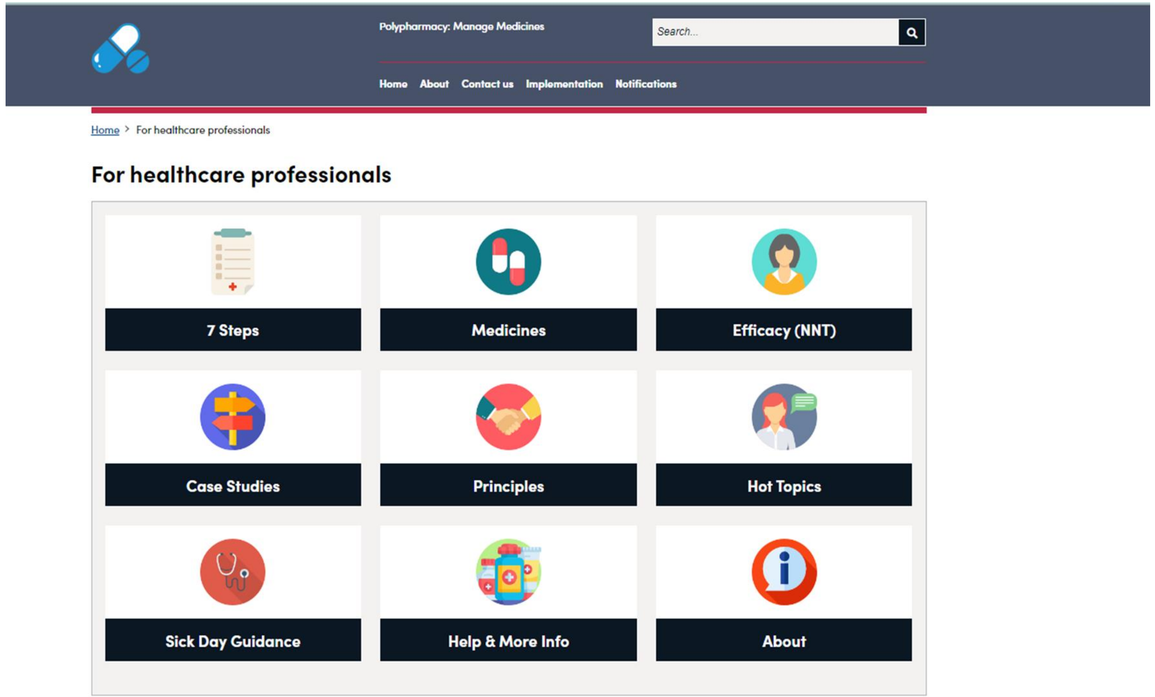
Consider if the outcome is meaningful to patient

What period does benefit occur – compare to life expectancy
NNT= 1 would help everyone who took it

The higher the NNT, the lower the likelihood of effectiveness
An NNT of 25 over 1 year would be considered to have significant benefits for individuals

NNH- idea of level of harm/ ADRs for an individual

Remember data usually from trials of younger people without multimorbidity or frailty!



Scottish Polypharmacy Guidance https://managemeds.scot.nhs.uk/

NICE database of treatment effects spreadsheet

GP Evidence https://gpevidence.org/

Medstopper https://medstopper.com/

How to do it- BRAN

Benefits

Risks

Alternatives

Do Nothing

https://www.choosingwisely.co.uk/about-choosing-wisely-uk/
https://www.sps.nhs.uk/articles/understanding-informed-consent-in-medicines-related-conversations/

SDM Resources

https://aqua.nhs.uk/resources/shared-decision-making-ask-3-questions/

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https://meandmymedicines.org.uk

Personalised Care Institute https://learn.personalisedcareinstitute.org.uk/login/index.php
Training modules on SDM (30mins) and Teach Back (15 mins) https://learn.personalisedcareinstitute.org.uk/course/view.php?id=8
https://learn.personalisedcareinstitute.org.uk/course/view.php?id=128

Anticholinergic Burden

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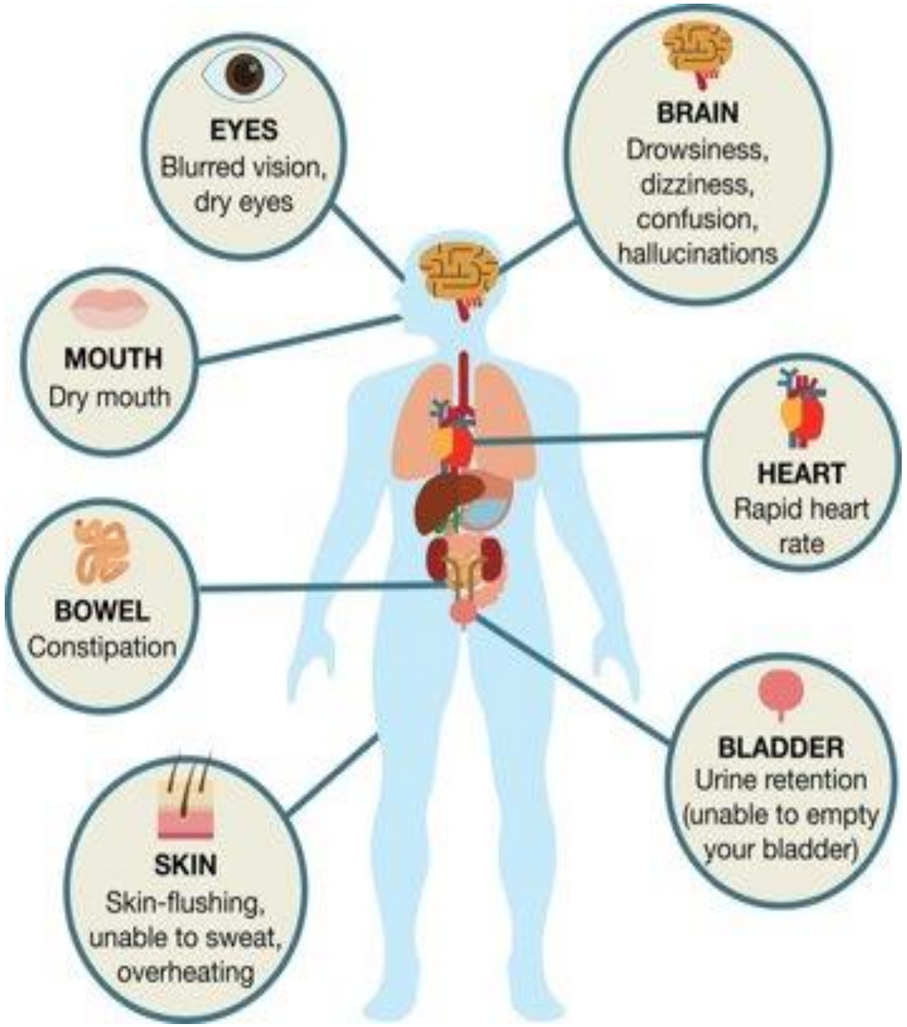
- Many medicines have anticholinergic properties
- In older people, cause adverse events e.g. confusion, dizziness and falls and associated with increased mortality
- Calculators to work out the Anticholinergic Burden (ACB)
- ACB score of 3+ is associated with an increased cognitive impairment and mortality- guide not absolute

- Calculators

ACB Calculator https://www.acbcalc.com/

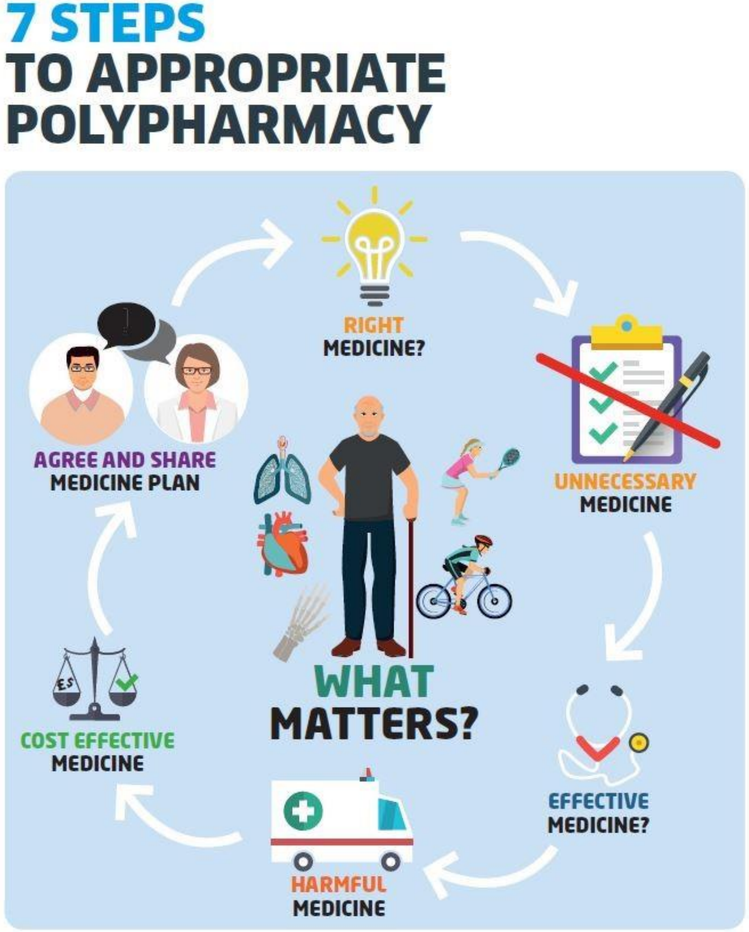
Medichec https://medichec.com/



Deprescribing

"Starting medicines is like the bliss of marriage and stopping them is like the agony of divorce"
Doug Darforth

"If we just keep on adding and never subtracting medicines, we will just multiply the problems"
Steve Williams



Scottish Polypharmacy Guidance
https://managemeds.scot.nhs.uk/

Medstopper https://medstopper.com/

Overcoming barriers to deprescribing video (3 mins)
https://www.deprescribingnetwork.ca/whiteboard-videos

Medstopper https://medstopper.com

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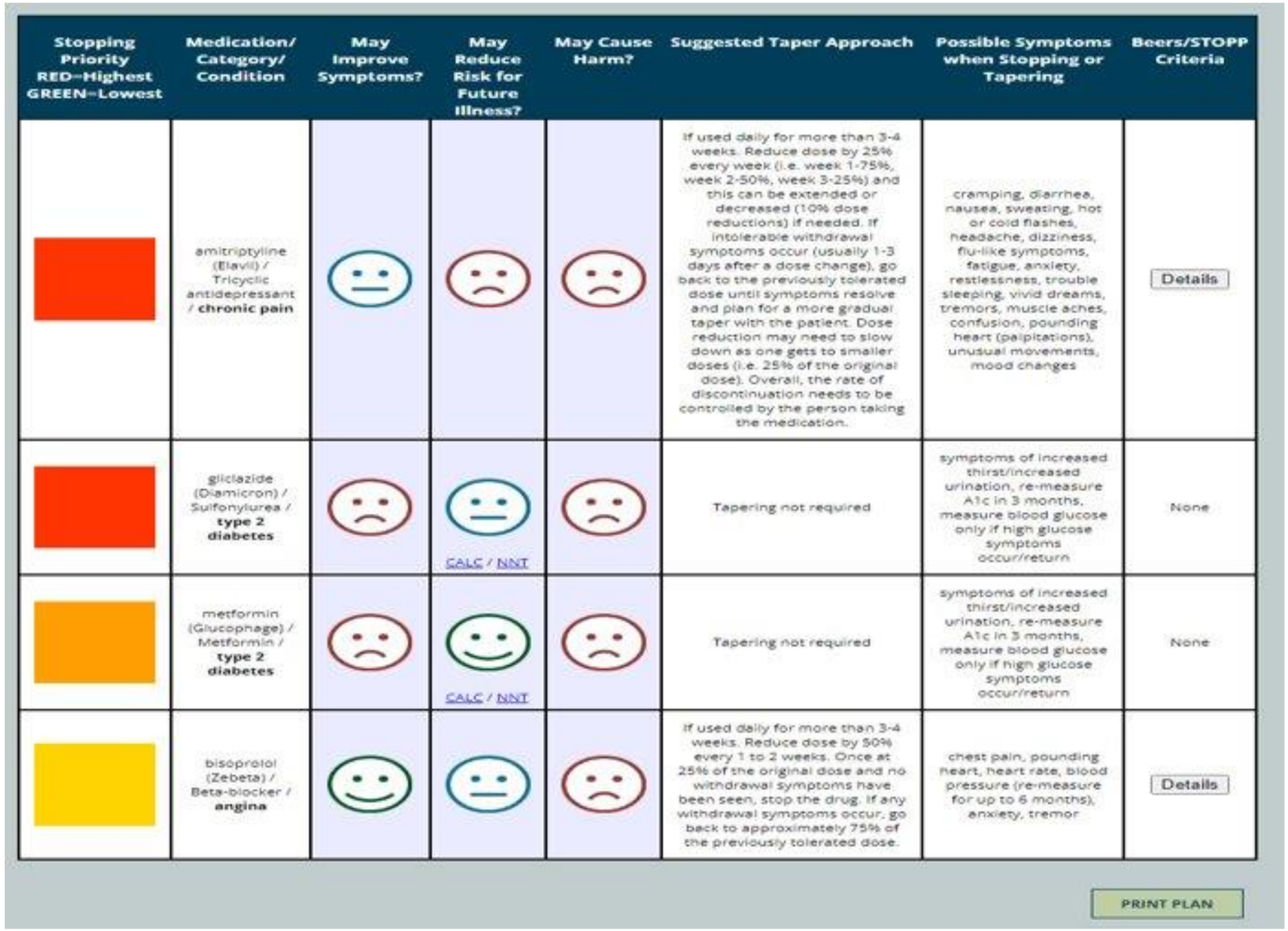

Stopping Priority RED=Highest GREEN=Lowest	Medication/ Category/ Condition	May Improve Symptoms?	May Reduce Risk for Future Illness?	May Cause Harm?	Suggested Taper Approach	Possible Symptoms when Stopping or Tapering	Beers/STOPP Criteria
	amitriptyline (Elavil) / Tricyclic antidepressant / **chronic pain**				If used daily for more than 3-4 weeks. Reduce dose by 25% every week (i.e. week 1-75%, week 2-50%, week 3-25%) and this can be extended or decreased (10% dose reductions) if needed. If intolerable withdrawal symptoms occur (usually 1-3 days after a dose change), go back to the previously tolerated dose until symptoms resolve and plan for a more gradual taper with the patient. Dose reduction may need to slow down as one gets to smaller doses (i.e. 25% of the original dose). Overall, the rate of discontinuation needs to be controlled by the person taking the medication.	cramping, diarrhea, nausea, sweating, hot or cold flashes, headache, dizziness, flu-like symptoms, fatigue, anxiety, restlessness, trouble sleeping, vivid dreams, tremors, muscle aches, confusion, pounding heart (palpitations), unusual movements, mood changes	Details
	gliclazide (Diamicron) / Sulfonylurea / **type 2 diabetes**		CALC / NNT		Tapering not required	symptoms of increased thirst/increased urination, re-measure A1c in 3 months, measure blood glucose only if high glucose symptoms occur/return	None
	metformin (Glucophage) / Metformin / **type 2 diabetes**		CALC / NNT		Tapering not required	symptoms of increased thirst/increased urination, re-measure A1c in 3 months, measure blood glucose only if high glucose symptoms occur/return	None
	bisoprolol (Zebeta) / Beta-blocker / **angina**				If used daily for more than 3-4 weeks. Reduce dose by 50% every 1 to 2 weeks. Once at 25% of the original dose and no withdrawal symptoms have been seen, stop the drug. If any withdrawal symptoms occur, go back to approximately 75% of the previously tolerated dose.	chest pain, pounding heart, heart rate, blood pressure (re-measure for up to 6 months), anxiety, tremor	Details

PRINT PLAN

Language of Prescribing/ Deprescribing

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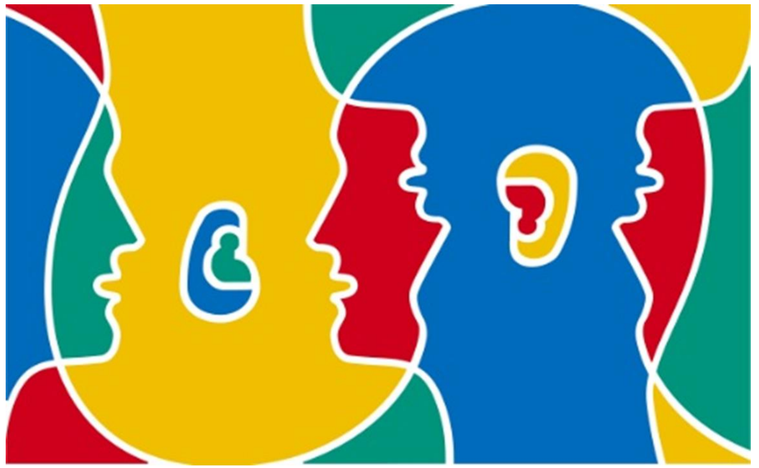
Use helpful vs unhelpful language to explain treatments, deprescribing and manage patient expectations/ future expectations

- No "life-long" medicines when starting Tx- use "longer-term" e.g. anticoagulants for AF
- Use simple language and check back on understanding
- Avoid terms like "pain killers": person may then expect all pain to be removed (unrealistic in older people)
- "Trial without" vs "stopping"
- "Trial" when starting and advise will stop if no benefit or ADRs
- Ask if medicines are providing benefit rather than "are you ok on this?" - ADRs not always obvious to person e.g. cognitive side effects of anticholinergics



Structured Medication Reviews survey WY results (n=90)

"SMRs are a comprehensive and clinical review of a patient's medicines and detailed aspects of their health……delivered by facilitating shared decision-making conversations with patients aimed at ensuring that their medication is working well for them"

Average time required = 30 mins

Do you feel confident that your colleagues understand what a SMR is?

WY as a whole		CORE 20	
Yes	33	Yes	6
Somewhat	41	Somewhat	13
No	11	No	11

Do you feel that SMRs are a priority in your PCN/practice/place of work?

WY as a whole		CORE 20	
Yes	62	Yes	14
No	23	No	8

Clinician/ peer support facilitator for more complex cases

Respondents felt additional support would be helpful

Deprescribing was **safe, effective and acceptable** if done in a structured way
No single approach was identified as "best"

What the literature tells us about *how we do* tailored prescribing

- When healthcare providers feel like they cannot make justifiable decisions that are supported by guidelines they may be reluctant to make changes to medications because they are afraid of negative consequences

- When healthcare professionals don't have dedicated time they may be less likely to make changes to patients' medication because they do not have the emotional or cognitive capacity to consider complex issues

- When patients and their carer/family are asked to change their usual medication by a healthcare professional they are unfamiliar with, they may be reluctant, because they are concerned the person does not know what is best for them personally

- When healthcare professionals know they will be able to follow up a patient, they are more likely to try deprescribing, because they are reassured they can manage potential harms

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What helps deprescribing in Primary Care?

Clarity about caring outside guidelines

Access to relevant data e.g. goals, background

Discussing plans to stop a medicine when first prescribed

Trust and good relationships

What does this mean for you?

Permission to do structured tailored deprescribing

….. but don't feel you've got to do this on your own

Permission to flag this as a problem

Exploring learning resources for own professional development

https://evidence.nihr.ac.uk/alert/how-to-safely-deprescribe-medications-for-people-with-multiple-long-term-conditions/

https://www.wisegp.co.uk/post/tailor-thinking-differently-about-prescribing-a-new-knowledge-work-resource

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What can I/ my team do to reduce Overprescribing?

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Prescribers:

- When prescribing SDM/ BRAN, think about your language and ask yourself
  - what outcome am I trying to achieve?
  - does it matter to the person I'm prescribing for?
  - is a medicine the best solution?
- Support/ deliver or refer patients on for structured medication reviews

All staff:

- Look out for people who might be having problems with their medicines
- Support patient campaigns such as Me and My Medicines https://meandmymedicines.org.uk
- Refer on for structured medication reviews

What can I/ my team do to reduce Overprescribing?

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If conducting SMRs/ Long-term condition reviews:

- Prepare patients for, and support SDM in, SMRs/ medication reviews
- Understand the person's perspective/ goals- what matters to you?
- What does the research evidence say? NNT/ NNH
- Balance risks and benefits as much as possible using available tools, resources and common sense
- Pragmatism might be needed- what can the person actually manage?
- Beware of maintaining the status quo- risks might not be apparent until it's too late

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Thank you for listening

Questions?

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