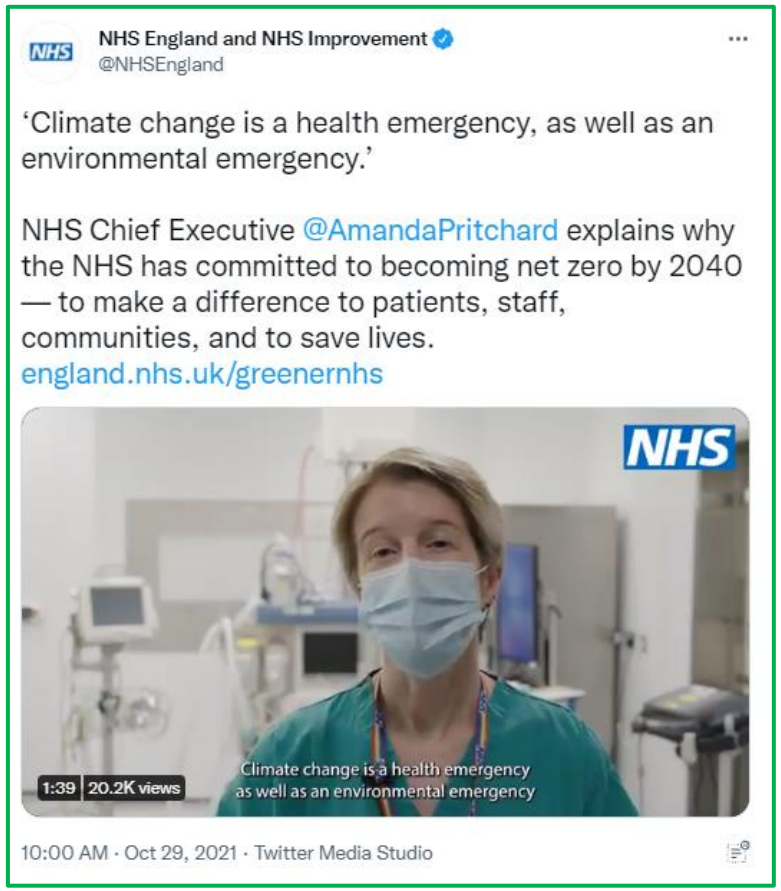
Greener Somerset – Scorecard Update

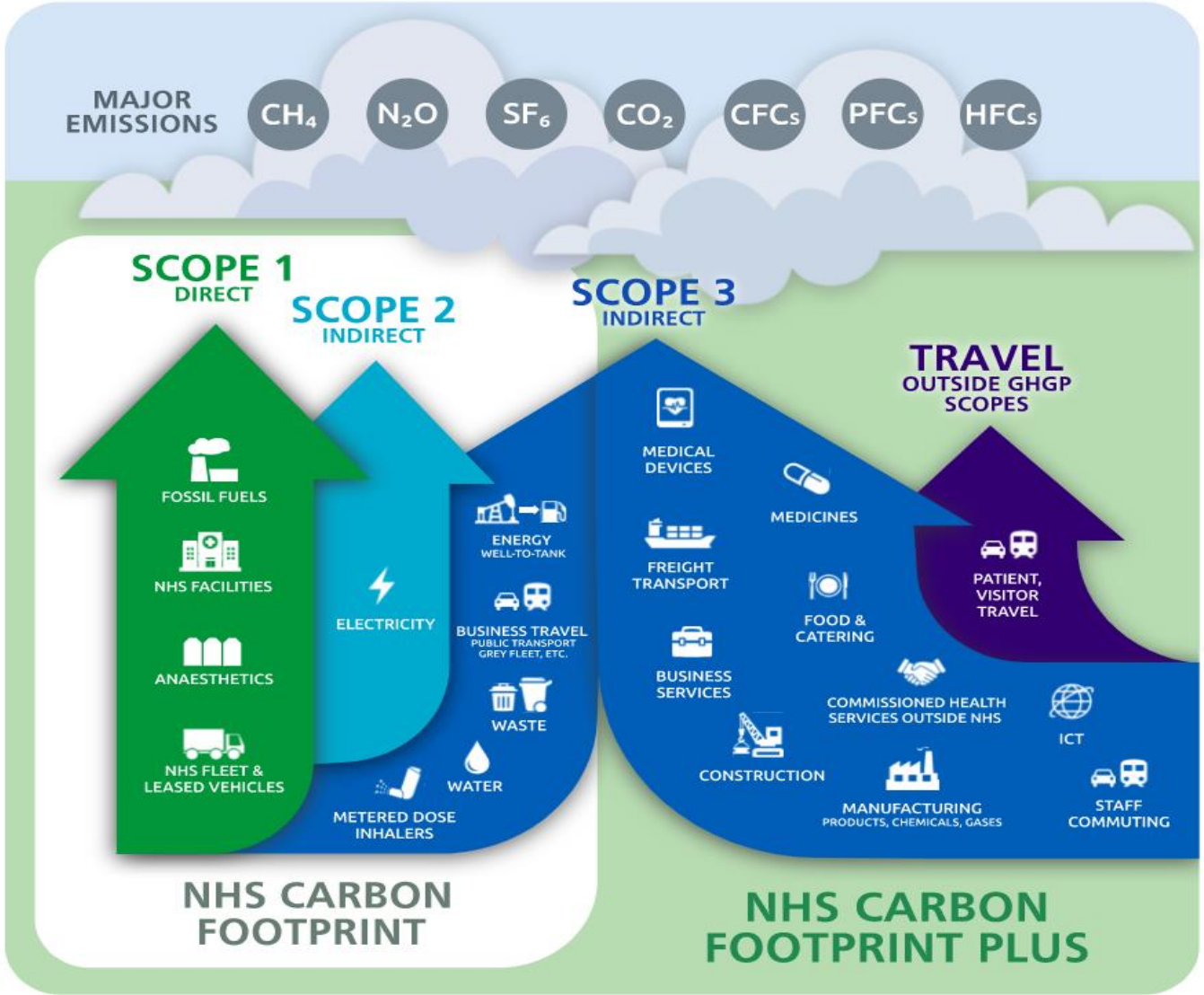
Prescribing Leads Meeting
11 May 2023

The NHS in England is responsible for an estimated 4.6% of the country's carbon footprint

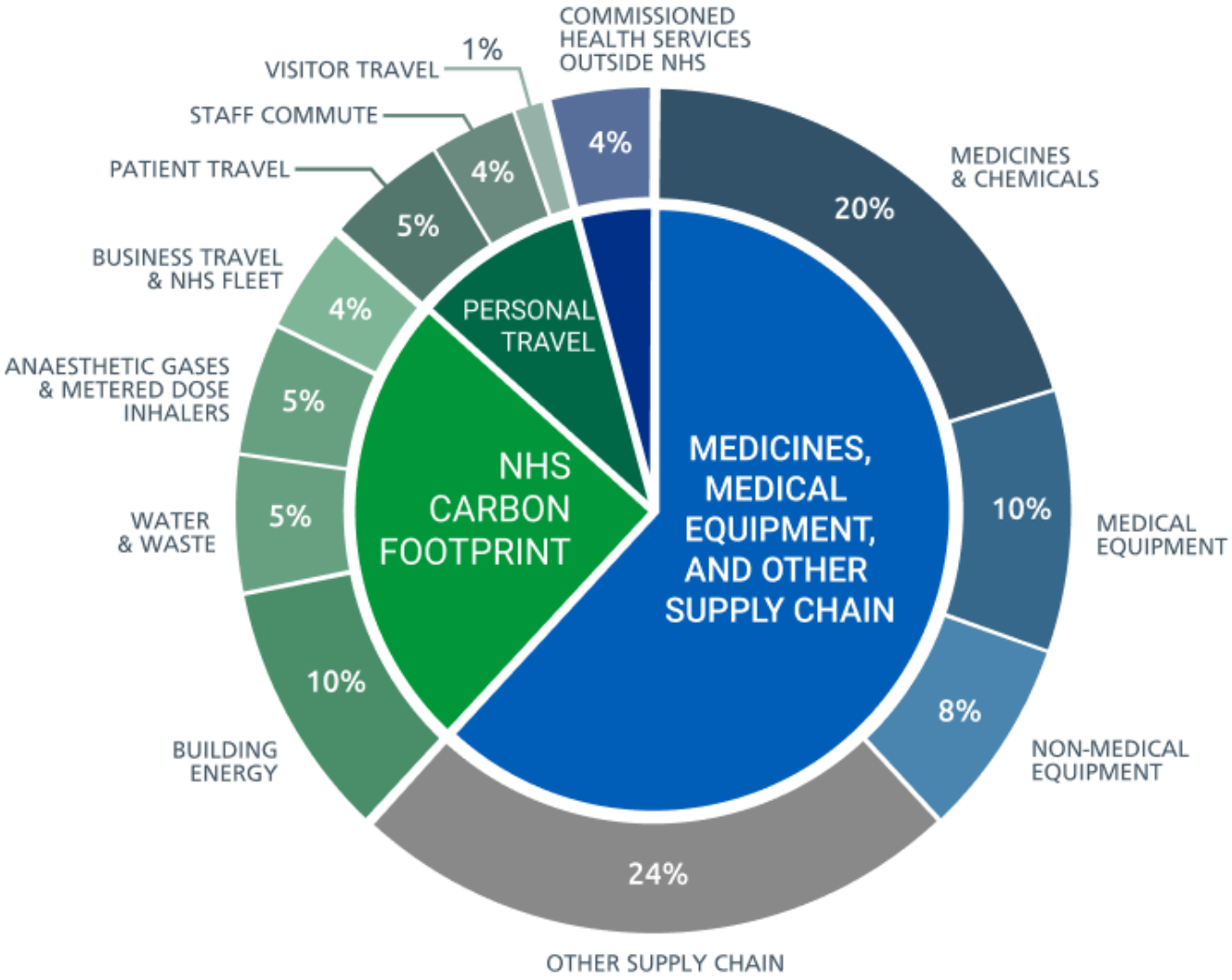


The key to stopping overprescribing is medicines optimisation: ensuring that patients are prescribed the right medicines, at the right time, in the right doses.

Carbon Footprint



Carbon Footprint



Carbon Footprint

AIM: To achieve long term sustainable reductions to overprescribing via delivery of systemic and cultural improvements within the NHS

Objectives							
	1. Work with **patients, carers and the system** to tackle overprescribing	**2.** Improve and implement **prescribing processes,** reviews and **guidance**	**3.** **Utilise digital technologies** to address overprescribing	**4.** Improve **data for feedback to clinicians** and commissioners to guide prioritisation and monitor success	**5.** Update **training and development** to reflect the growing understanding of overprescribing	**6.** Assess and support system action to **address the carbon impact of unnecessary prescribing** and medicines waste	**7.** Strengthen the **evidence base** for overprescribing and enhance the process of getting **evidence into practice**

EVALUATION FRAMEWORK: Effectively measure and monitor programme impact

Address health inequalities

Overprescribing consequences and solutions

- Patient harm from increased risk of both adverse drug reactions and drug dependency
- **Problematic** polypharmacy (increased prescribing which the patient doesn't clinically need or want causing harm or increased carbon footprint for no benefit)
- Increased wastage of **medicines; undermining NHS financial efficiency and efforts to address environmental impact of medicines use**

Sharing records and discharge letters standards	Medicine reconciliation at care transitions	Digital decision support tools	Align professional standards and training with programme
Revised prescribing competency framework	National toolkit for repeat prescriptions	Implementation programme and NCD for prescribing	Pharmacist initial training reforms
Review treatment guidelines	Expand use of structured medication reviews in primary care	Industry transparency	Educational framework for pharmacists
Information and insights for deprescribing	Awareness and behavioural change	Strengthen overprescribing evidence base	Improve data analytics capability
Templates for referrals for alternatives to medicines	Patient engagement and cultural competence	Research on overprescribing and health inequalities	Sustainability

Incentives – 16 are a continuation from last year

1. Practice achieving all their national antimicrobial prescribing targets and has an identified sepsis lead
2. Eclipse - Reduction in Radar Red and Amber alerts per 1000 Astro PU (excluded patients counted in indicator)
3. Percentage LD and Dementia patients prescribed antipsychotic medication
4. Reduction in anti-cholinergic burden prescribing

6. Reduction in patients on mixed inhalers
7. Cost effective DPI single and combo inhalers
8. Cost effective MDI single and combo inhalers

11. Patients with all 8 diabetes care processes undertaken in the last 12 months
12. Reduction in oral morphine solution prescribing

14. Reducing opiate prescribing (excluding injectables)
15. Reduction in hypnotic and anxiolytic prescribing
16. Potential generic savings
17. NHSE OTC selfcare indicators including hayfever
18. Cumulative sip feed spend per 1000 patients
19. Spend on preferred products as % spend on all emollients
20. Reduction in Calcium, vit D alone or combo prescribing for patients not prescribed a bone-sparing agent

Incentives – continuation from last year

1. Practice achieving all their national antimicrobial prescribing targets and has an identified sepsis lead

https://nhssomerset.nhs.uk/prescribing-and-medicines-management/antimicrobial/

Avoid Trimethoprim prescribing in patients aged 70 years plus, - If clinically indicated (symptoms not dipstick) use Nitrofurantoin or pivmecillinam. Do not use repeat Nitrofurantoin for prophylaxis. Do not use pivmecillinam tablets for prophylaxis, due to the possibility of carnitine depletion. Symptoms of carnitine depletion include muscle aches, fatigue, and confusion.

The MHRA has received a Coroner's report following the death of a patient who experienced acute pulmonary damage and respiratory failure after being treated with nitrofurantoin for a UTI for a 10-day course. The Coroner raised concerns about the known risk of acute pulmonary damage following nitrofurantoin treatment and the need to highlight this to healthcare professionals and patients.

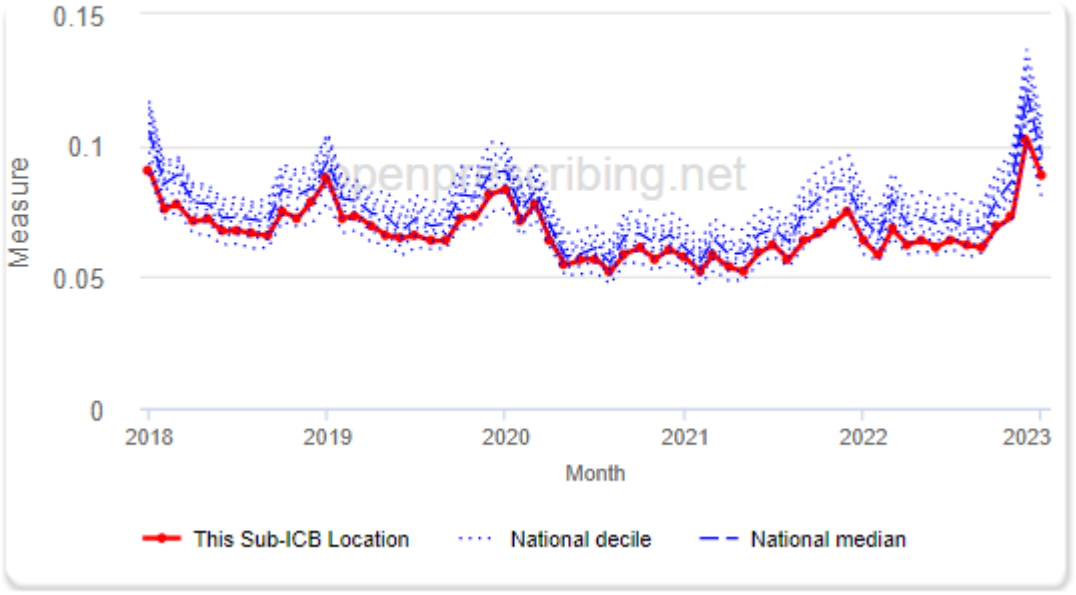
https://www.gov.uk/drug-safety-update/nitrofurantoin-reminder-of-the-risks-of-pulmonary-and-hepatic-adverse-drug-reactions

incentives – continuation from last year

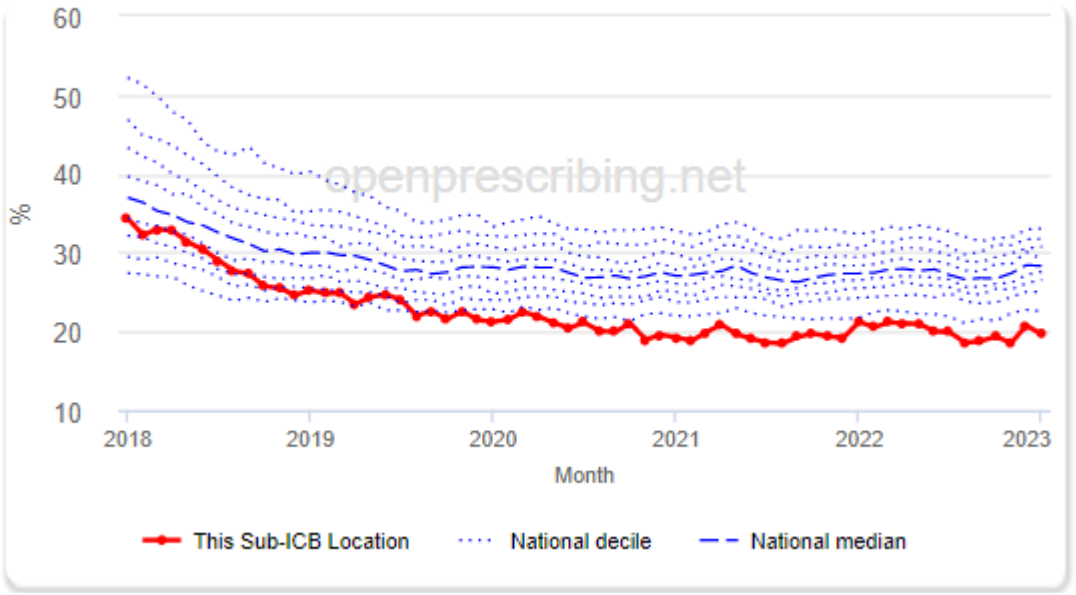
1. Practice achieving all their national antimicrobial prescribing targets and has an identified sepsis lead

https://nhssomerset.nhs.uk/prescribing-and-medicines-management/antimicrobial/

Number of prescription items for all antibacterial drugs (BNF 5.1) per oral antibacterials (BNF 5.1 sub-set) item-based STAR-PU.

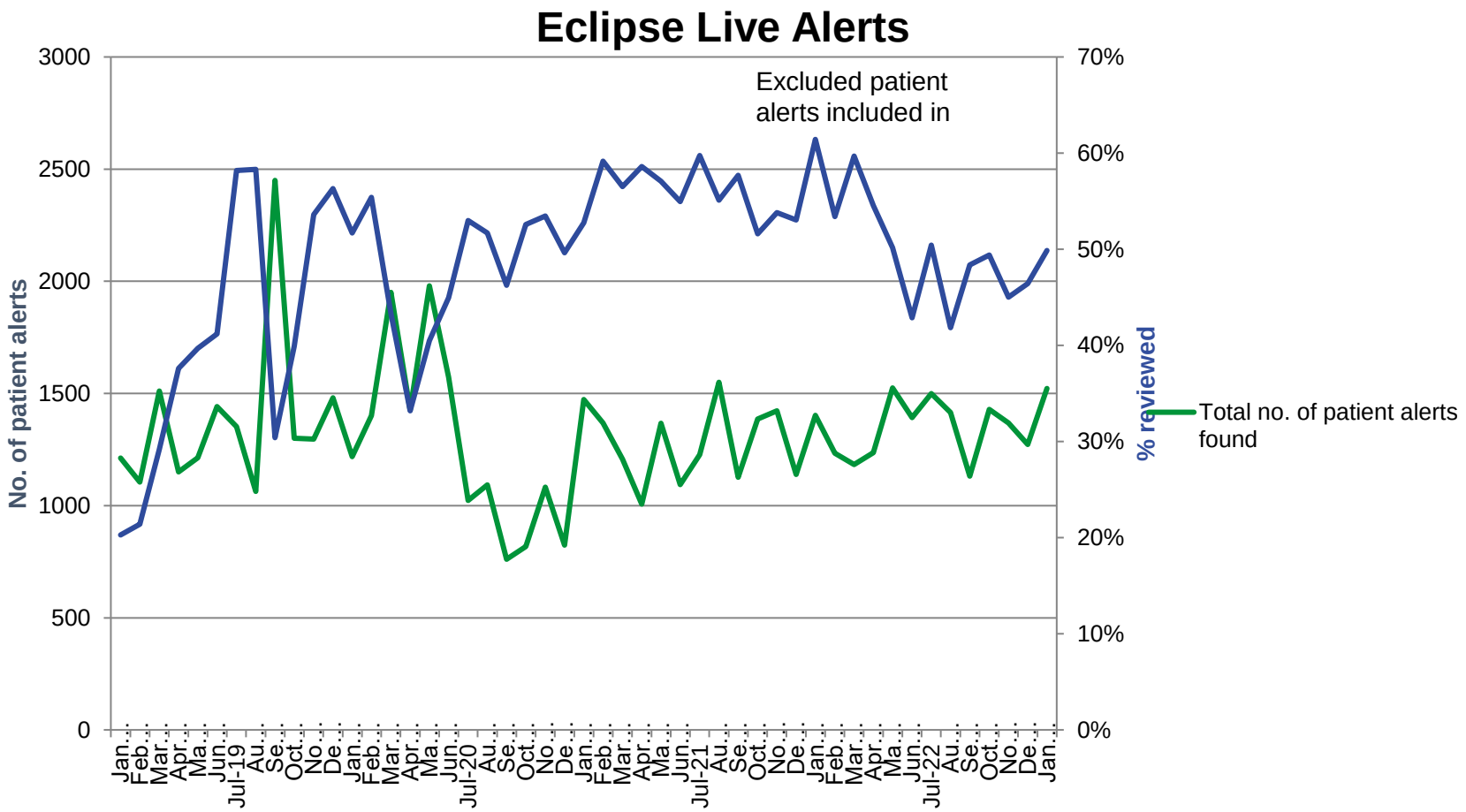


Trimethoprim as a percentage of prescribing of nitrofurantoin and trimethoprim



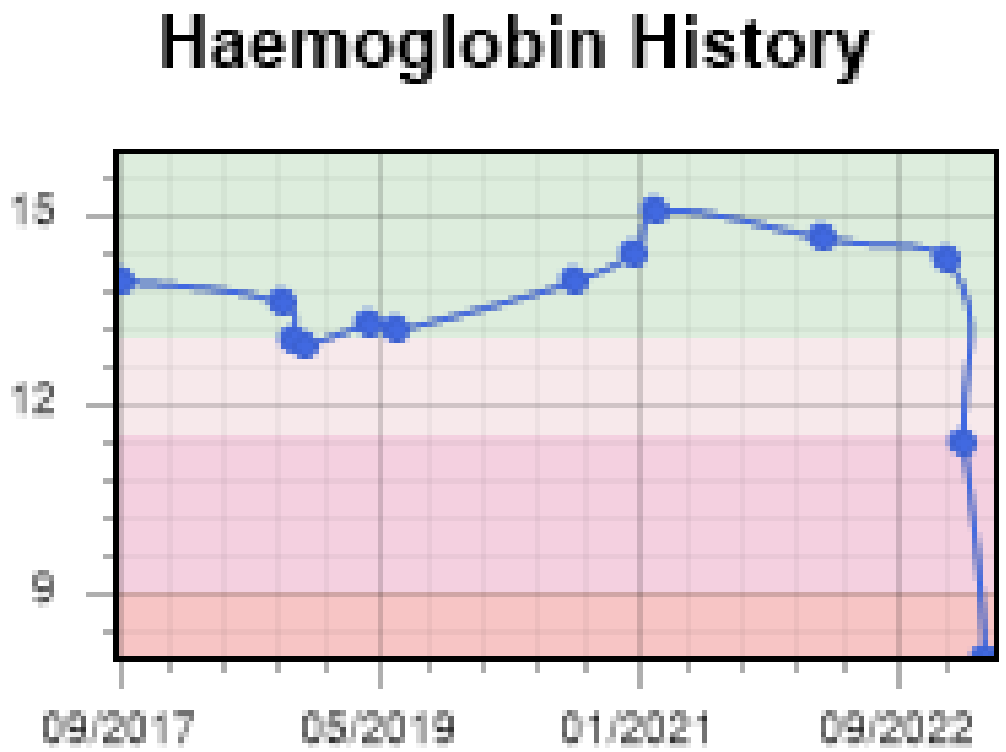
incentives – continuation from last year

2. Eclipse - Reduction in Radar Red and Amber alerts per 1000 Astro PU (excluded patients counted in indicator)



incentives – continuation from last year

Eclipse – The additional ICB alerts are just as important so practices ideally need a process to regularly review eg DOAC patients with anaemia



3 Inhaler incentives – continuation from last year

6. Reduction in patients on mixed inhalers

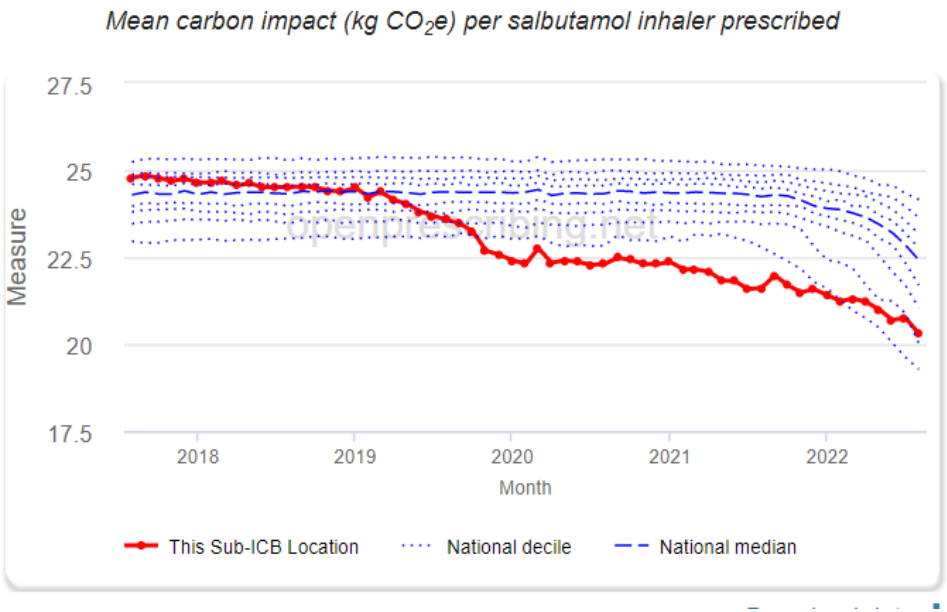
7. Cost effective DPI single and combo inhalers

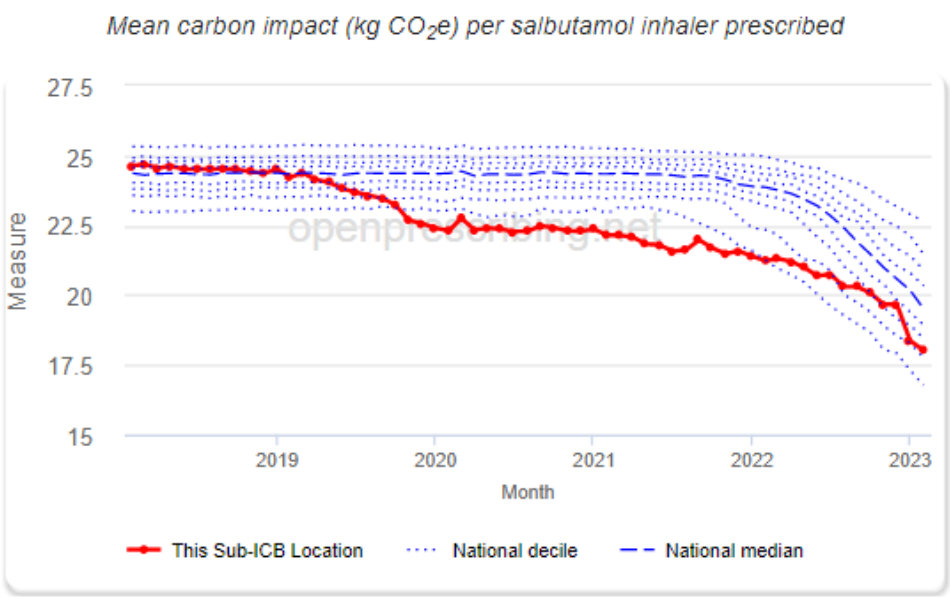
8. Cost effective MDI single and combo inhalers

NG80 Asthma inhalers and the environment patient decision aid (nice.org.uk)

MDI/dry powder combination Patients with mix of MDI and Dry powders issued in last 90 days. Please ignore any switches within that time period.	09/04/2023	**2080**

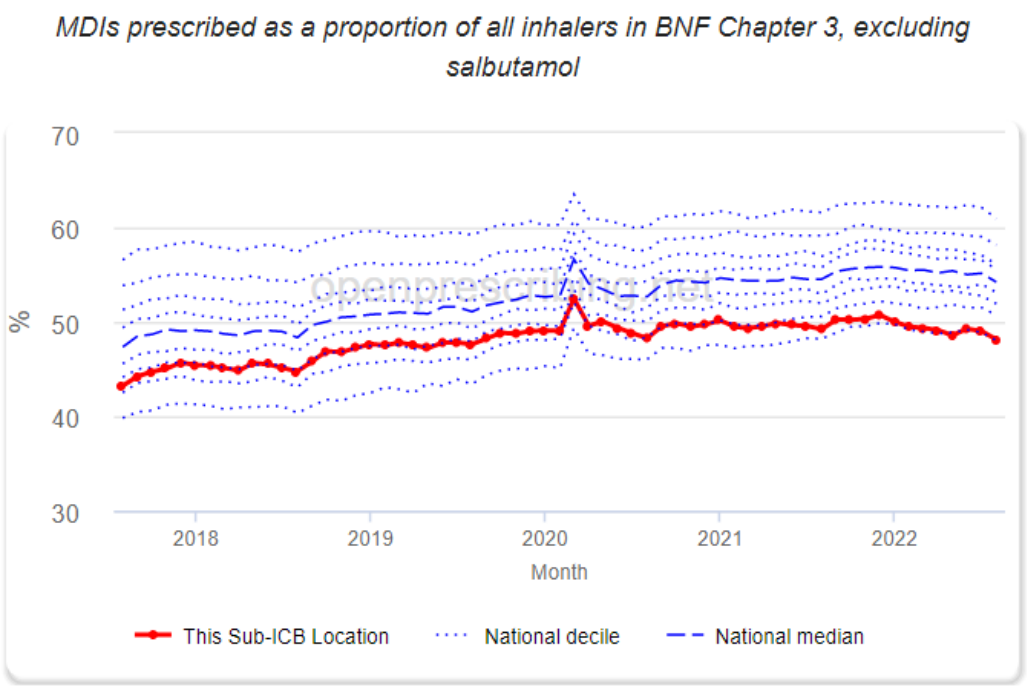
Inhalers (Aug 2022) (Feb 2023)

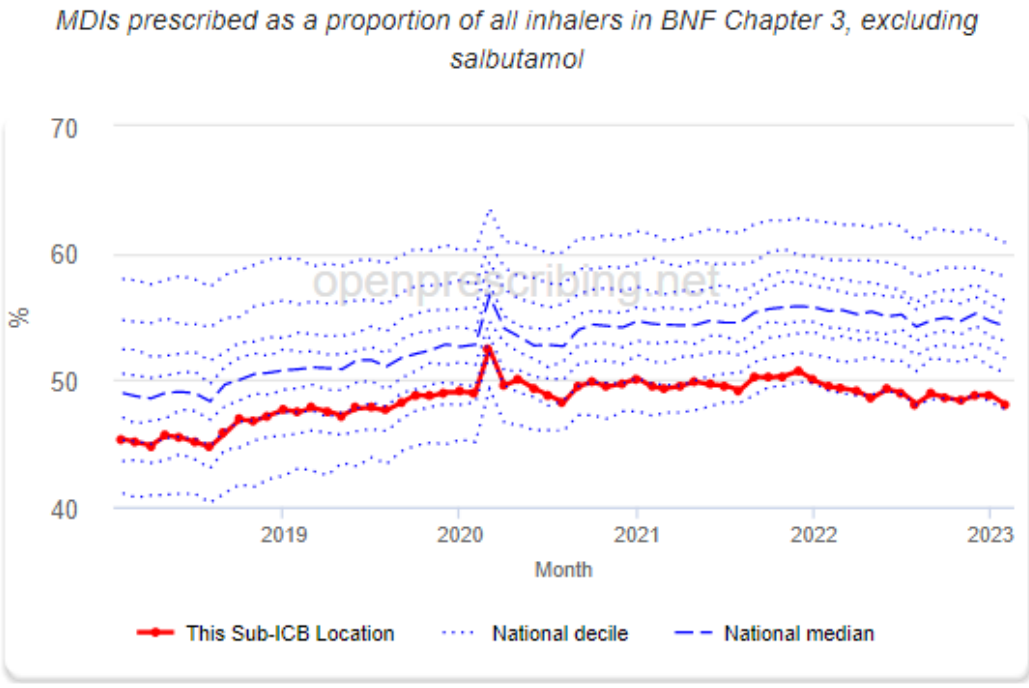




Somerset national target 13.4kg CO2e by March 2024

Inhalers (Aug 2022) (Feb 2023)

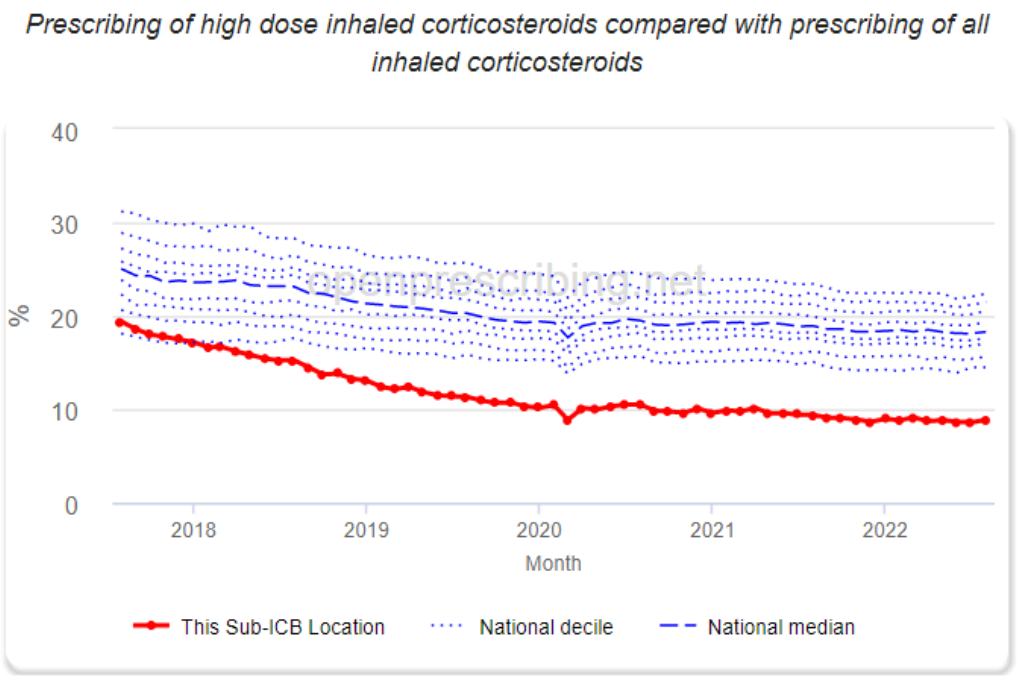


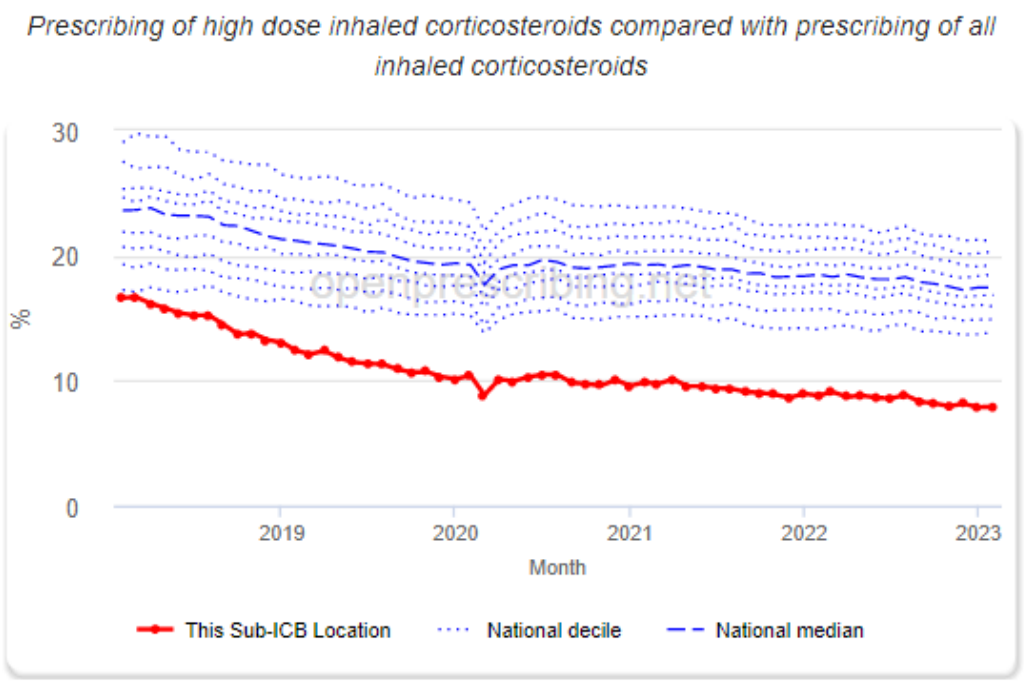


Somerset National target Decreasing the proportion of metered dose inhalers prescribed to 25% of all non-salbutamol inhalers prescribed by March 2024

Inhalers (Aug 2022)

(Feb 2023)

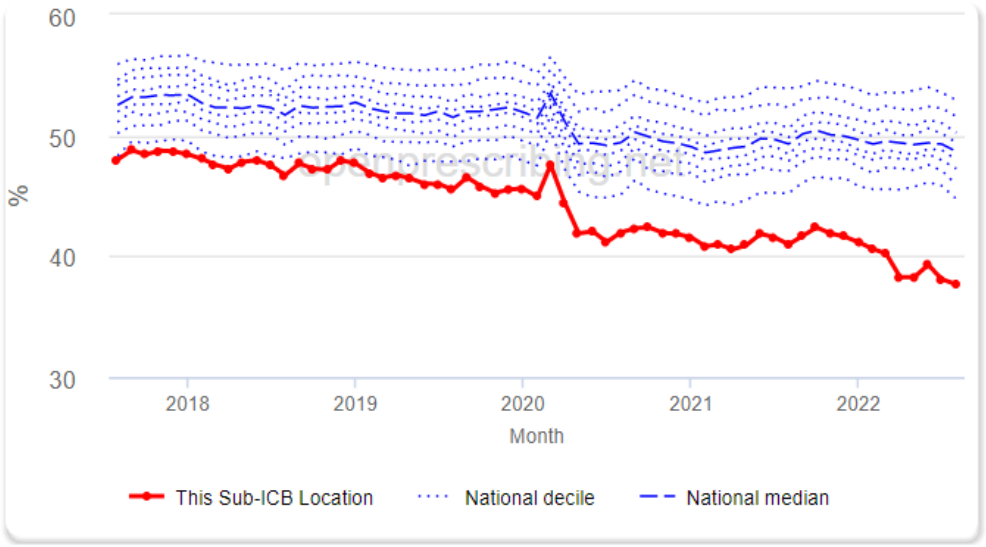




Better control – patient feels better less need for high dose steroid inhalers – but still need to choose Cost effective options

Inhalers (Aug 2022) (Feb 2023)

Prescribing of short acting beta agonist (SABA) inhalers - salbutamol and terbutaline compared with prescribing of inhaled corticosteroid inhalers and SABA inhalers



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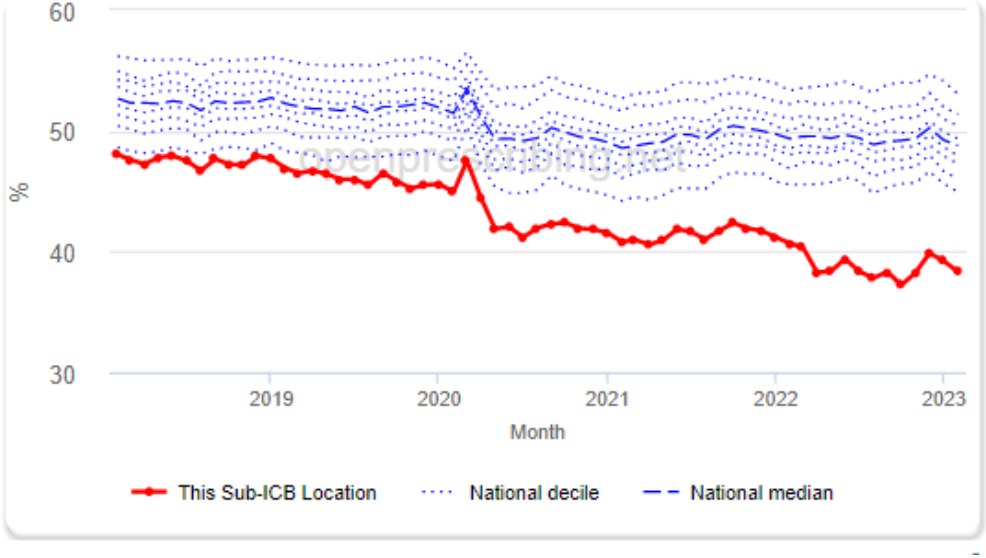

Better control – patient feels better less need for SABAs – patients less likely to over order DPI salbutamol
Put SABAs on acute request not repeat for most patients

Incentives – 16 are a continuation from last year

20. Reduction in Calcium, vit D alone or combo prescribing for patients not prescribed a bone-sparing agent

No vit D product or calcium and vit D product is licensed for fracture prevention when used without a bone sparing agent. (unable to get any trial evidence to support them gaining a license)

*Vitamin D and calcium supplement **as an adjunct to specific osteoporosis treatment** of patients who are at risk of vitamin D and calcium deficiency.*

The optimal duration of bisphosphonate treatment for osteoporosis has not been established. The need for continued treatment should be re-evaluated periodically based on the benefits and potential risks of alendronate **on an individual patient basis**, particularly after 5 or more years of use.

Care home providers are required to meet resident's full nutritional needs to sustain life and good health, and reduce the risks of malnutrition, in line with regulation 14 (Part A) of the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014. In addition to provision of nutritious meals, this should include food supplements where necessary, such as vitamin D.

Incentives – 16 are a continuation from last year

20. Reduction in Calcium, vit D alone or combo prescribing for patients not prescribed a bone-sparing agent

Below is link to another large trial showing no statistical fracture benefit from monthly high dose vit D. This joins a long list of trials which have failed to show fracture reduction benefit from supplementation of vit D or calcium and vit D.

https://www.thelancet.com/journals/landia/article/PIIS2213-8587(23)00063-3/fulltext

Findings
Between Feb 14, 2014, and June 17, 2015, we recruited 21 315 participants. For the current analysis, we included 20 326 participants (vitamin D 10 154 [50·0%]; placebo 10 172 [50·0%]). 9295 (45·7%) of 20 326 participants were women and the mean age was 69·3 years (SD 5·5). Over a median follow-up of 5·1 years (IQR 5·1–5·1), 568 (5·6%) participants in the vitamin D group and 603 (5·9%) in the placebo group had one or more fractures. **There was no effect on fracture risk overall (HR 0·94 [95% CI 0·84–1·06])**,

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OsteoporosisGP Evidence

For the primary prevention of fracture in the general population, RCTs and meta-analyses of supplementation with calcium or vitamin D do not show significant benefit, except in vitamin D-depleted patients in residential care. (significant risk of bias in the RCTs for a variety of reasons)

- mean age 85
- all female
- all ambulatory
- living in nursing homes or “apartment houses” (France)
- 14% with a history of previous fracture
- baseline vitamin D levels approx 30nmol/L

Chapuy MC, Arlot ME, Duboeuf F et al. Vitamin D3 and calcium to prevent hip fractures in elderly women. *N Engl J Med* **1992**

New incentives –

5. Increase in Ezetimibe prescribing -

9. reduction in Medications high risk in pregnancy prescribed without contraception

10. % triptorelin 22.5mg of all GnRH analogues

13. metformin/gliptin patients and blood glucose testing strips on repeat

New incentives –

5. Increase in Ezetimibe prescribing -

Increasing generic ezetimibe use will support the 2 new CVD focused indicators in QOF and adoption of the NICE lipid management guidance.
Using ezetimibe in those patients unable to tolerate high dose statins/any statin or not reaching LDL targets on their statin is a cost-effective way to get further lipid improvements, which is why we are now actively incentivising (subject to shared decision making agreed with the patient)
Those patients who then fail to reach their expected lipid targets despite correctly taking statin and ezetimibe, retain the option of escalation to one of the newer therapies should they fit the NICE criteria.

CHOL001. Percentage of patients on the QOF Coronary Heart Disease, Peripheral Arterial Disease, Stroke/TIA or Chronic Kidney Disease Register who are currently prescribed a statin, or where a statin is declined or clinically unsuitable, another lipid-lowering therapy Thresholds 70-95%

CHOL002. Percentage of patients on the QOF Coronary Heart Disease, Peripheral Arterial Disease, or Stroke/TIA Register, who have a recording of non-HDL cholesterol in the preceding 12 months that is lower than 2.5 mmol/L, or where non HDL cholesterol is not recorded a recording of LDL cholesterol in the preceding 12 months that is lower than 1.8 mmol/L Thresholds 20-35%

New incentives –

Increase in Ezetimibe prescribing -

EXTENT OF LIPID LOWERING WITH AVAILABLE THERAPIES

Approximate reduction in LDL-C					
Statin dose mg/day	5	10	20	40	80
Fluvastatin			21%	27%	33%
Pravastatin		20%	24%	29%	
Simvastatin		27%	32%	37%	42%
Atorvastatin		37%	43%	49%	55%
Rosuvastatin	38%	43%	48%	53%	
Atorvastatin + Ezetimibe 10mg		52%	54%	57%	61%

Low intensity statins will produce an LDL-C reduction of 20-30%

Medium intensity statins will produce an LDL-C reduction of 31-40%

High intensity statins will produce an LDL-C reduction above 40%

Simvastatin 80mg is not recommended due to risk of muscle toxicity

- **Rosuvastatin** may be used as an alternative to atorvastatin if compatible with other drug therapy. Some people may need a lower starting dose (see BNF).
- Low/medium intensity statins should only be used if intolerance or drug interactions.
- **Ezetimibe** when combined with any statin is likely to give greater reduction in non-HDL-C or LDL-C than doubling the dose of the statin.

In an analysis of eight clinical trials comparing ezetimibe 10mg daily to a placebo, the patients on ezetimibe had a reduction in triglycerides of 8%.

New incentives –

Increase in Ezetimibe prescribing -

Somerset still has

29 patients prescribed simvastatin 80mg

95 patients prescribed Fluvastatin

1985 patients prescribed pravastatin

New incentives –

9. reduction in Medications high risk in pregnancy prescribed without contraception

This will support safer prescribing discussions and avoidance of harm – focussing on the drugs CQC will review - but including others

Valproate, valproic acid, carbimazole, modafinil, topiramate and pregabalin: teratogenicity risk

We would however remind prescribers that many other drugs need risk/benefit assessment when prescribing in women who may become pregnant – we have additional eclipse live pathways alerts running for many of these which we would also recommend are regularly reviewed.

https://www.cqc.org.uk/guidance-providers/gps/gp-mythbusters/gp-mythbuster-12-accessing-medical-records-during-inspections

https://nhssomerset.nhs.uk/prescribing-and-medicines-management/medicines-in-pregnancy-children-and-lactation/medicines-used-in-pregnancy/

New incentives –

10. % triptorelin 22.5mg of all GnRH analogues

The recommended dose of Decapeptyl SR 22.5 mg is 22.5 mg of triptorelin (1 vial) administered every six months (twenty four weeks) as a single intramuscular injection. Switching suitable patients currently prescribed 3 monthly GnRH – will support the ICB carbon footprint reduction strategy – 2 fewer devices used each year, 2 fewer patient journeys for administration. It will also free up nursing time so supporting the access agenda.

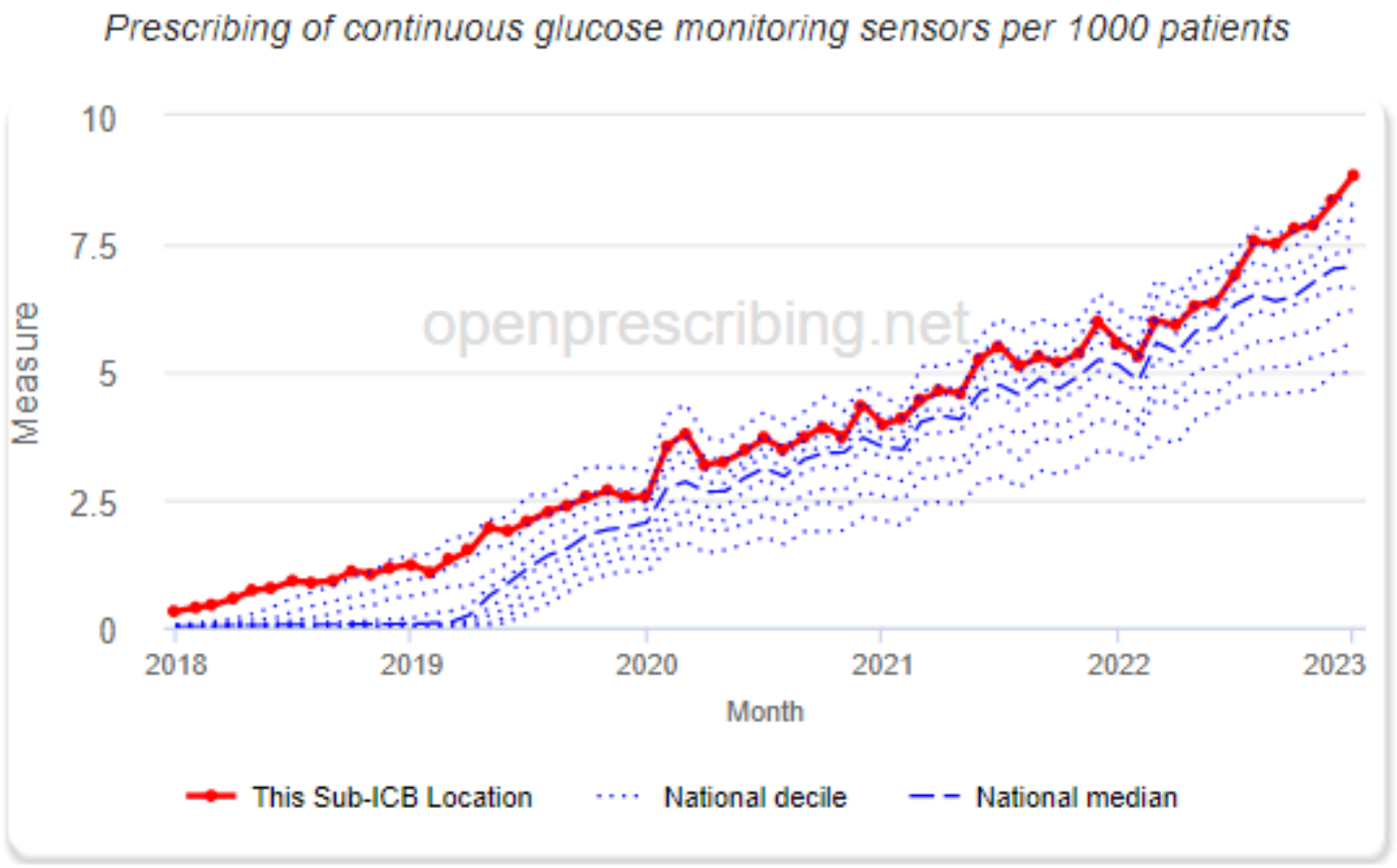
New incentives –

13. metformin/gliptin patients and blood glucose testing strips on repeat

Patients with Type 2 Diabetes prescribed Metformin +/- gliptin do not require regular blood glucose monitoring and so should not be prescribed blood glucose testing strips on repeat. Reducing such prescribing will again support the ICB carbon footprint reduction strategy (similarly these patients will not require lancets), reduce waste and ensure patients are not having inappropriate finger prick tests. The cost savings will support the ICB roll out of real time CGM in patients with Type 1 Diabetes.

Diabetics on metformin and/ or DPP4 only who test blood glucose NICE says not necessary. Scorecard indicator 2023/24	13/04/2023	**618 patients**

Achieving the scorecard targets as quickly as possible allows us to address our patients unmet needs



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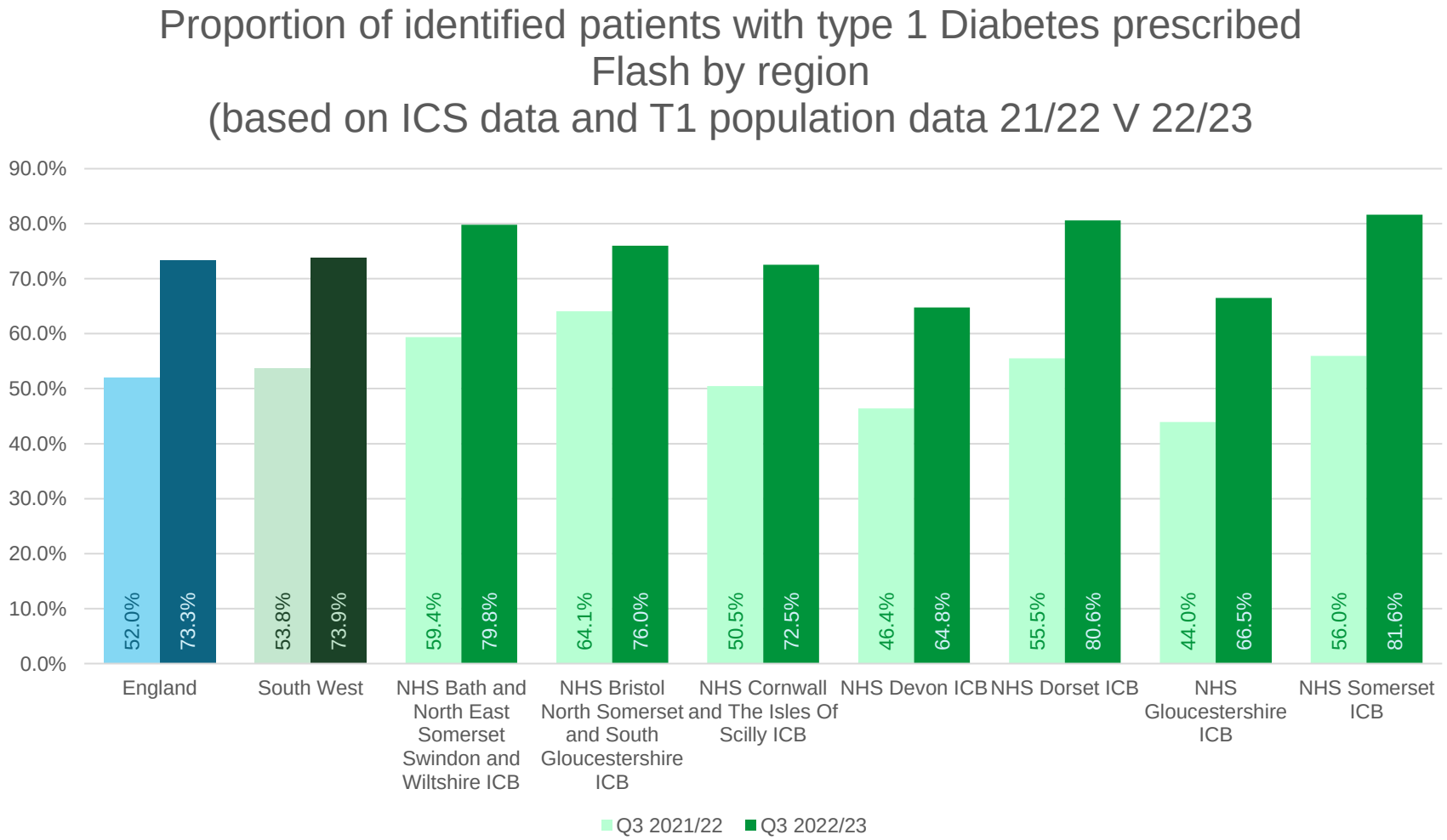

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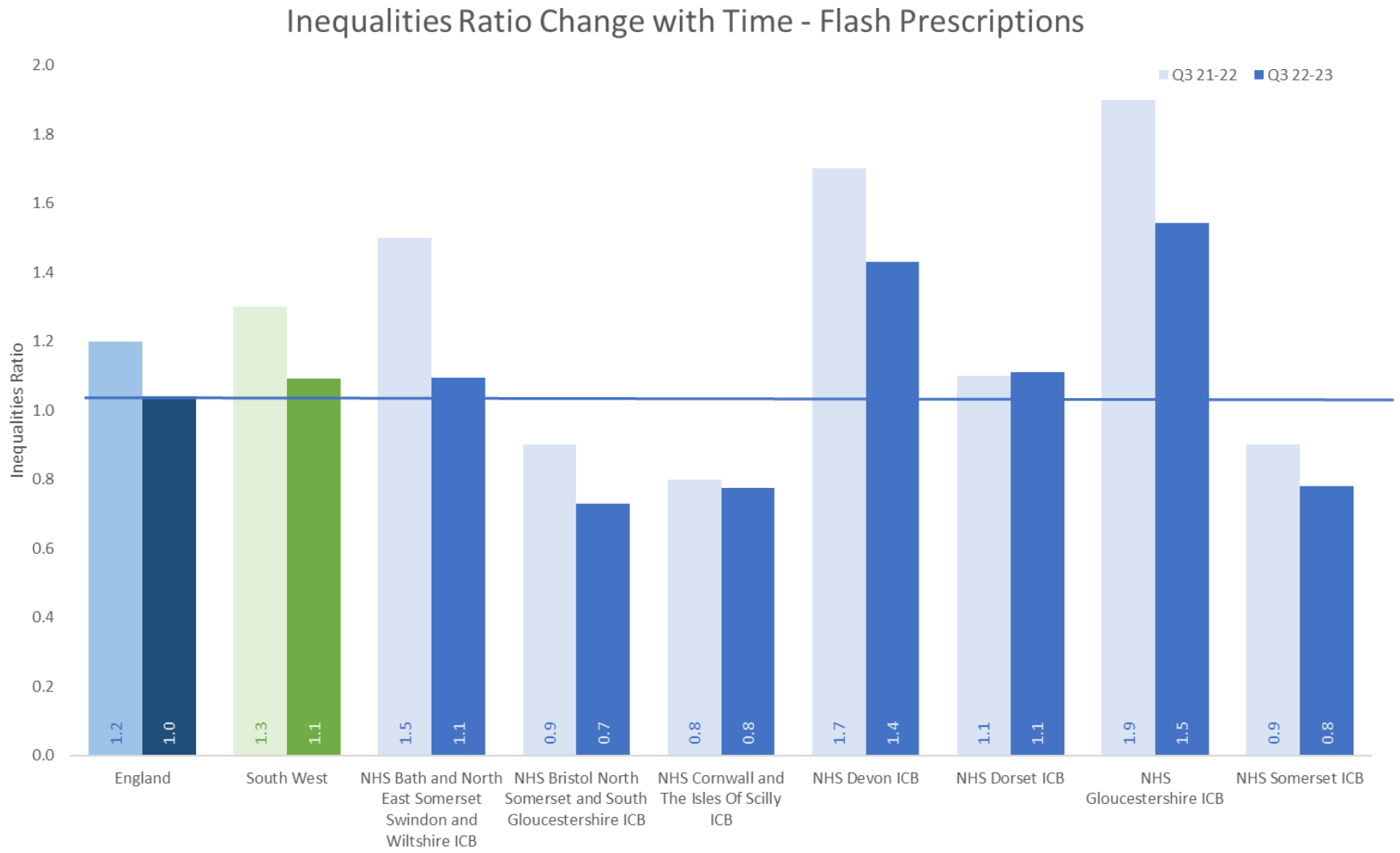

CGM Carbon Footprint

Diabetes Specialist Nurse Forum UK	Freestyle Libre 2	Dexcom One	GlucoRx AiDEX
Real-time CGM	No	Yes	Yes
MARD	9.2	9.0	9.1
Published accuracy data	Yes (T1 n=133)	Yes (T1 n=260)	Yes (T1 n=14)
Sensor life	14 days	10 days	14 days
Sensor warm up time	60 mins	120 mins	60 mins
Transmitter Life	N/A	3 months	4 years
Reader available	Yes	Yes	No
App needed	LibreLink	Dexcom One	GlucoRx AiDEX
Capillary glucose calibration	No	No	No
High & low alarms	Yes	Yes	Yes
Predictive alarms	No	No	No
Stand-alone use	Yes	Yes	Yes
Pump compatibility	No	No	No
Closed loop compatibility	No	No	No
Data share HCP	Libreview	Clarity	CGM Viewer
Data share friends/family	Yes	No	Yes
RCT data	Yes	Yes (G4/5/6)	No
UK approved wearable site	Upper arm	Buttocks + abdomen upper arm	Abdomen upper arm

need 1.4 Dexcom sensors for every 1 Aidex sensor

Need 16 Dexcom Transmitters for every 1 Aidex transmitter

COST SAVING RECOMMENDATIONS

2023 will be an extremely challenging year financially.

We will continue to make and implement cost saving recommendations throughout the year to try and ensure prescribing contributes to the overall system savings plan.

Money spent on medication patients are not taking is a significant waste of NHS resources and bad for the environment

Any Questions?