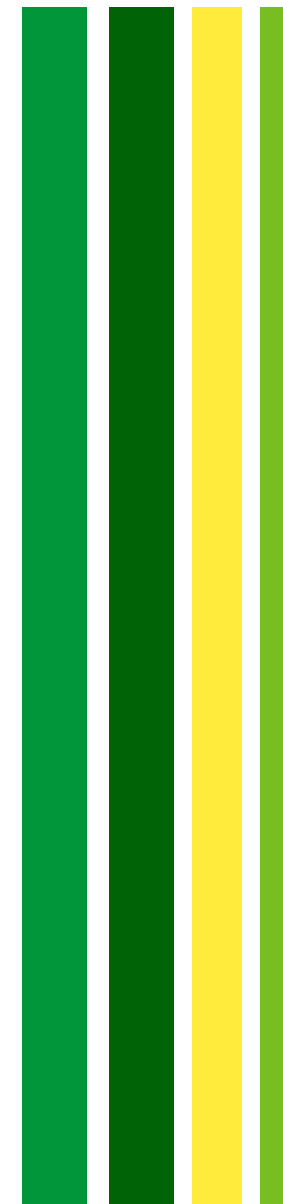




# Greener Somerset – Scorecard Update

Prescribing Leads Meeting  
11 May 2023

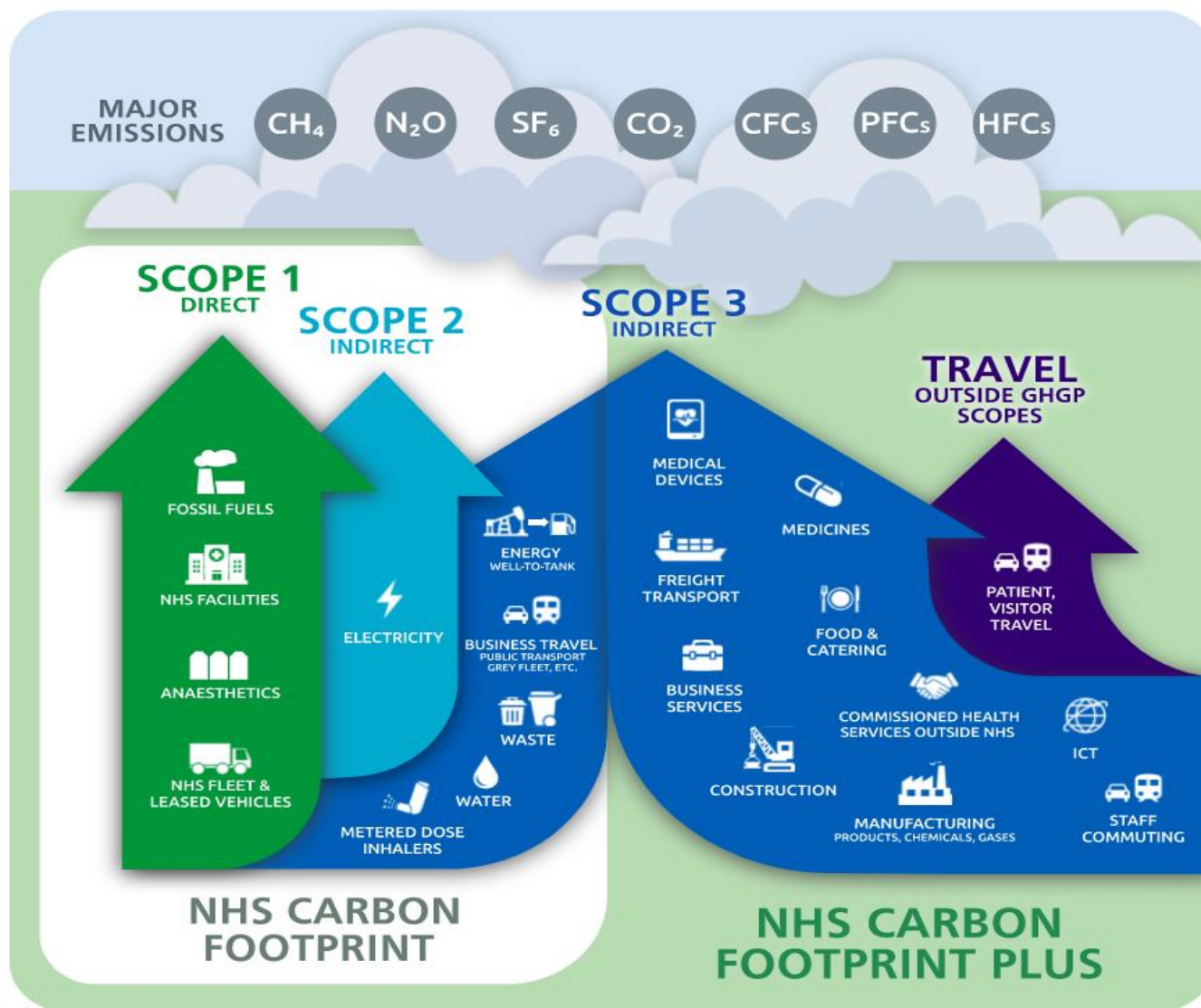


## The NHS in England is responsible for an estimated 4.6% of the country's carbon footprint

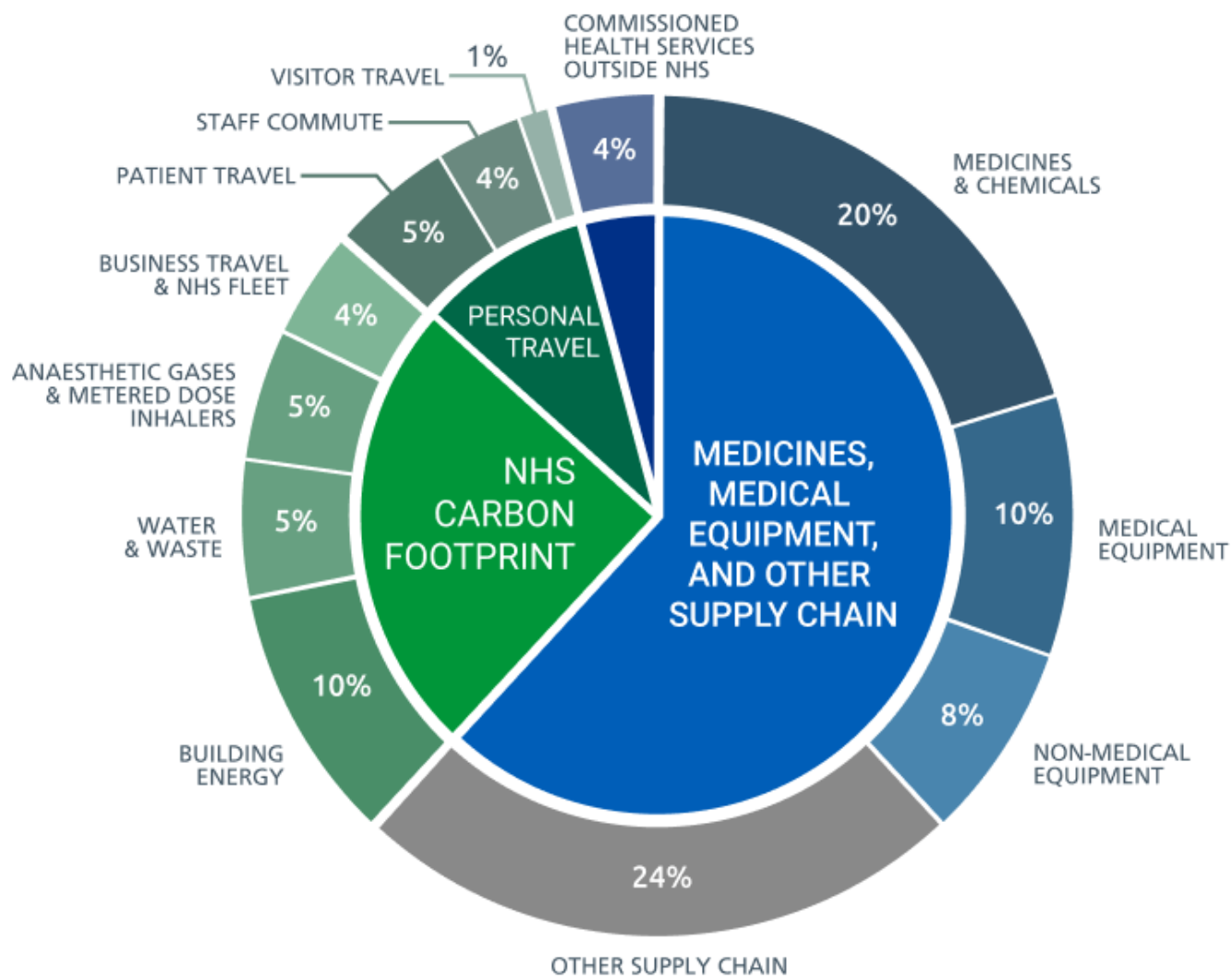


**The key to stopping overprescribing is medicines optimisation: ensuring that patients are prescribed the right medicines, at the right time, in the right doses.**

# 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 <b>patients, carers and the system</b> to tackle overprescribing	2. Improve and implement <b>prescribing processes, reviews and guidance</b>	3. <b>Utilise digital technologies</b> to address overprescribing	4. Improve <b>data for feedback to clinicians and commissioners</b> to guide prioritisation and monitor success	5. Update <b>training and development</b> to reflect the growing understanding of overprescribing	6. Assess and support system action to <b>address the carbon impact of unnecessary prescribing and medicines waste</b>	7. Strengthen the <b>evidence base</b> 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

## Somerset Prescribing and quality improvement scorecard

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The practice achieves a green scorecard rating on 16 or more of the 20 indicators on the ICB overall prescribing scorecard = **65p per patient**

or

The practice achieves a green scorecard rating on 14 or more of the 20 indicators on the ICB overall prescribing scorecard = **50p per patient**

or

The practice achieves a green scorecard rating on 12 or more of the 20 indicators on the ICB overall prescribing scorecard = **30p per patient**

or

The practice achieves a green scorecard rating on 9 or more of the 20 indicators on the ICB overall prescribing scorecard = **20p per patient**

or

The practice achieves a green scorecard rating on 7 or more of the 20 indicators on the ICB overall prescribing scorecard = **10p per patient**

## **incentives – 16 are a continuation from last year**

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- 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

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### 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.

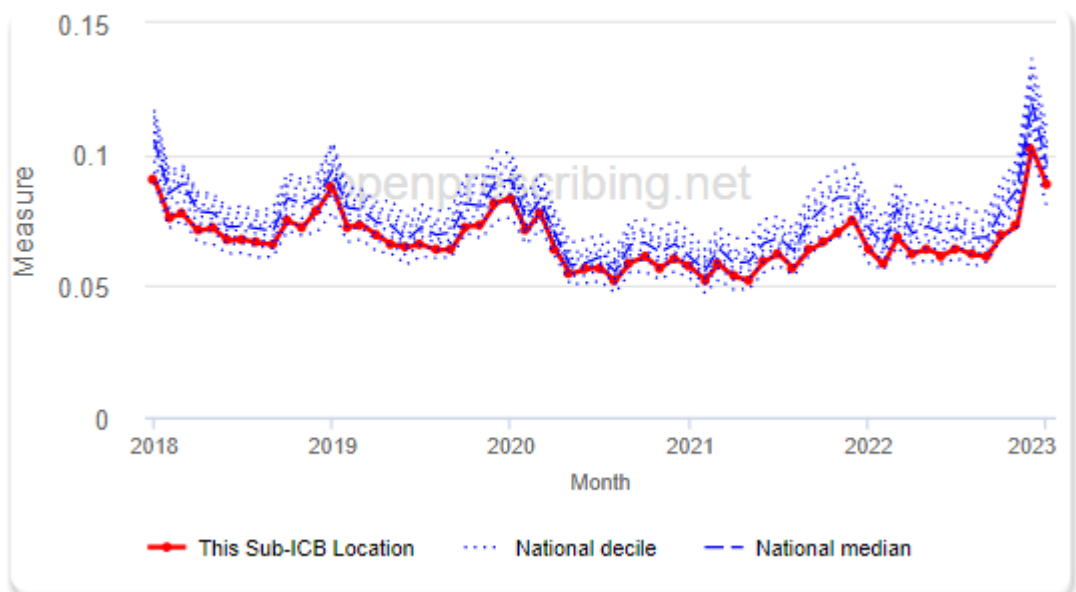
<https://www.gov.uk/drug-safety-update/nitrofurantoin-reminder-of-the-risks-of-pulmonary-and-hepatic-adverse-drug-reactions>

# incentives – continuation from last year

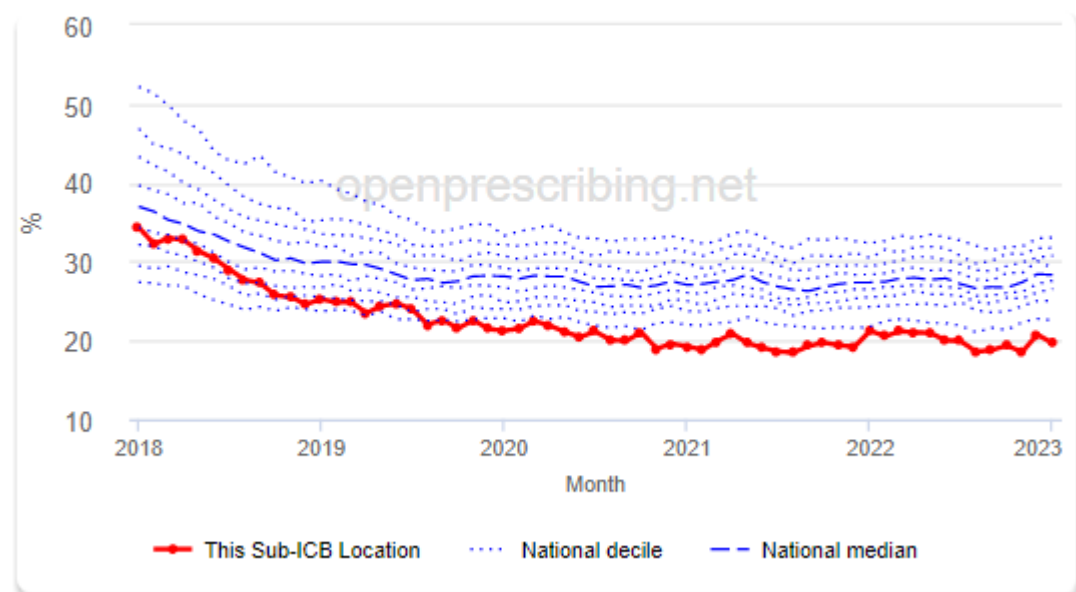
## 1. Practice achieving all their national antimicrobial prescribing targets and has an identified sepsis lead

<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.

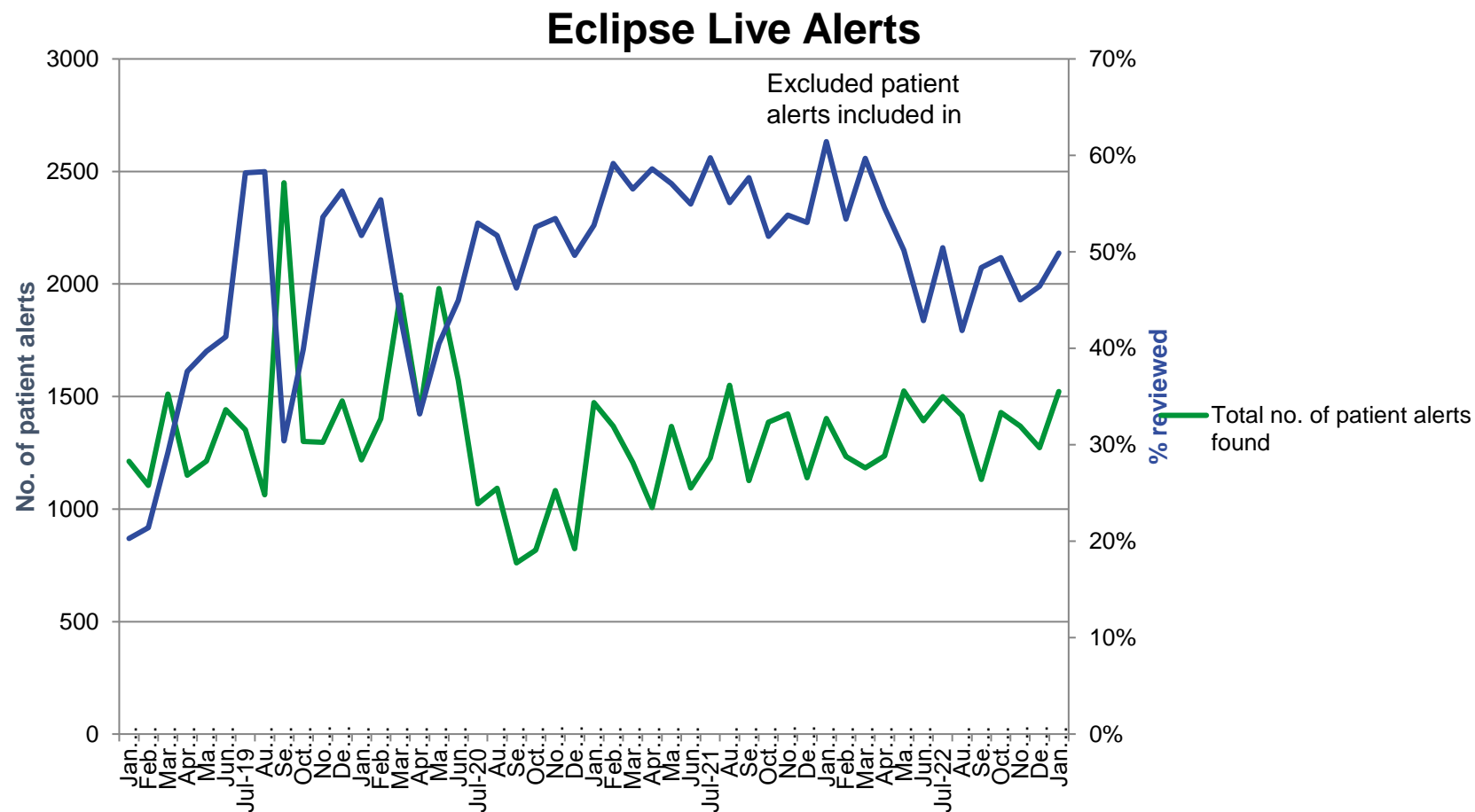


Trimethoprim as a percentage of prescribing of nitrofurantoin and trimethoprim



## incentives – continuation from last year

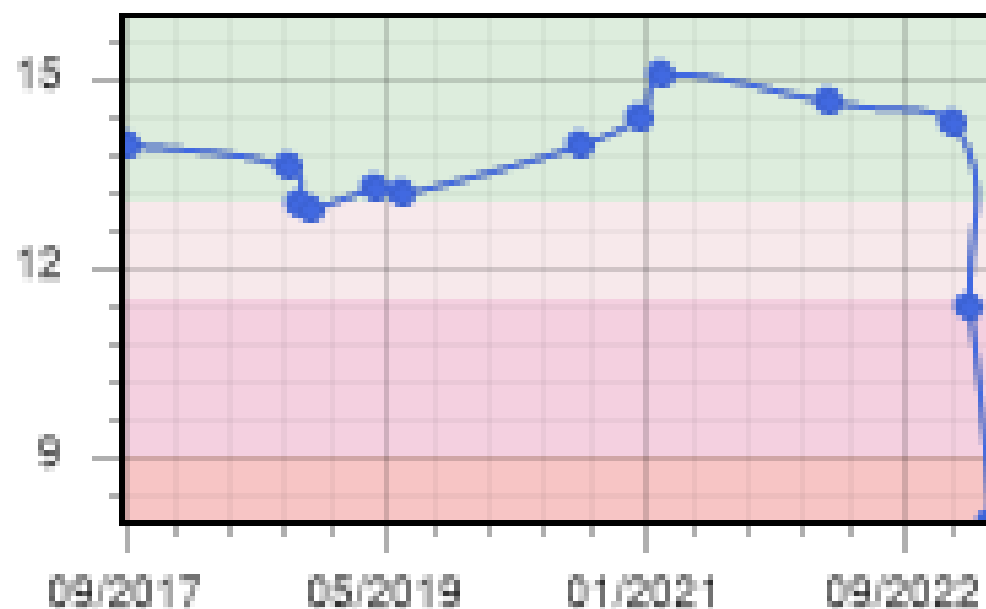
### 2. Eclipse - Reduction in Radar Red and Amber alerts per 1000 Astro PU (excluded patients counted in indicator)



## 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

### Haemoglobin History



### 3 Inhaler incentives – continuation from last year

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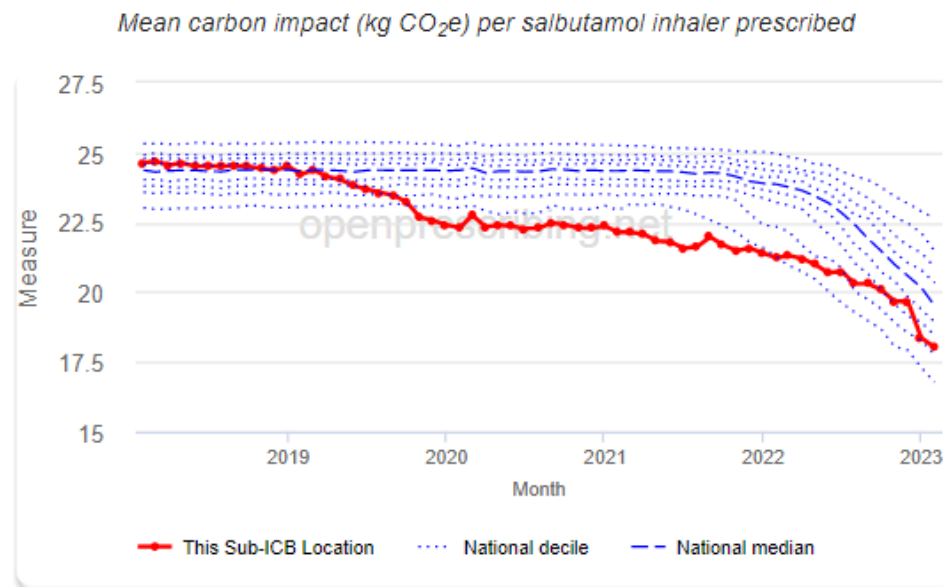
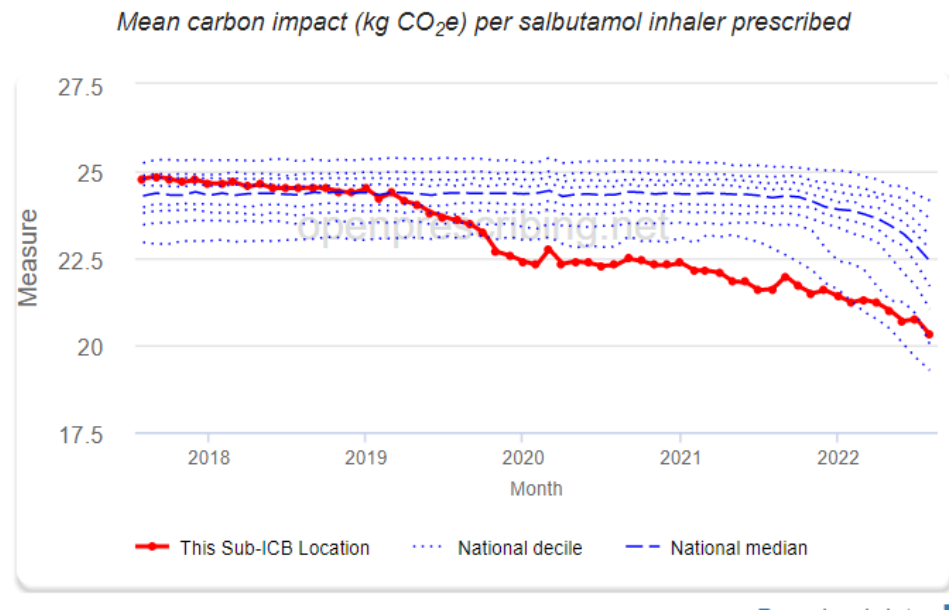
- 6. Reduction in patients on mixed inhalers
- 7. Cost effective DPI single and combo inhalers
- 8. Cost effective MDI single and combo inhalers

[NG80 Asthma inhalers and the environment patient decision aid \(nice.org.uk\)](https://www.nice.org.uk/NG80)

<b>MDI/dry powder combination</b> Patients with mix of MDI and Dry powders issued in last 90 days. Please ignore any switches within that time period.	09/04/2023	<b>2080</b>
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## Inhalers (Aug 2022)

## (Feb 2023)

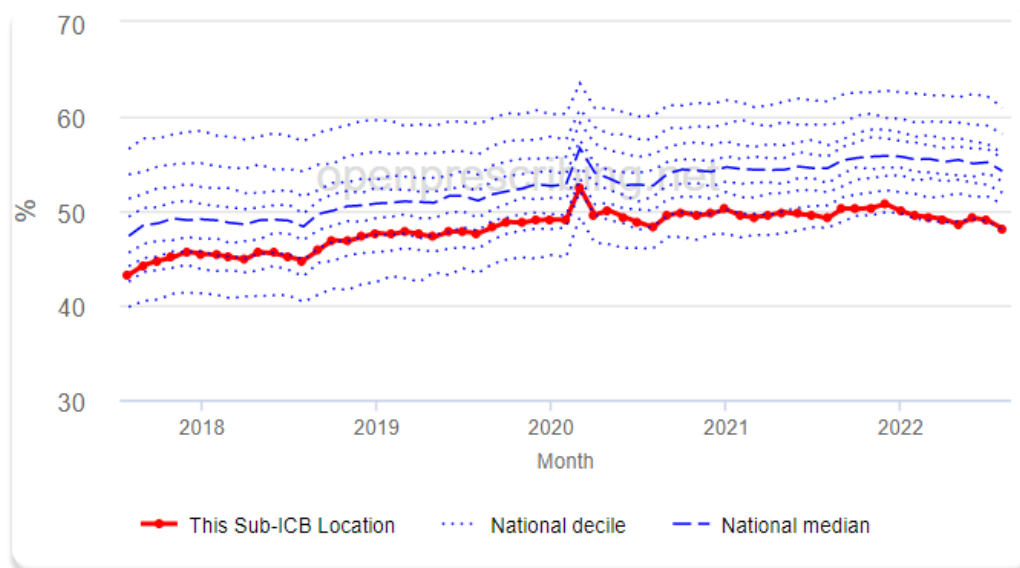


Somerset national target 13.4kg CO<sub>2</sub>e by March 2024

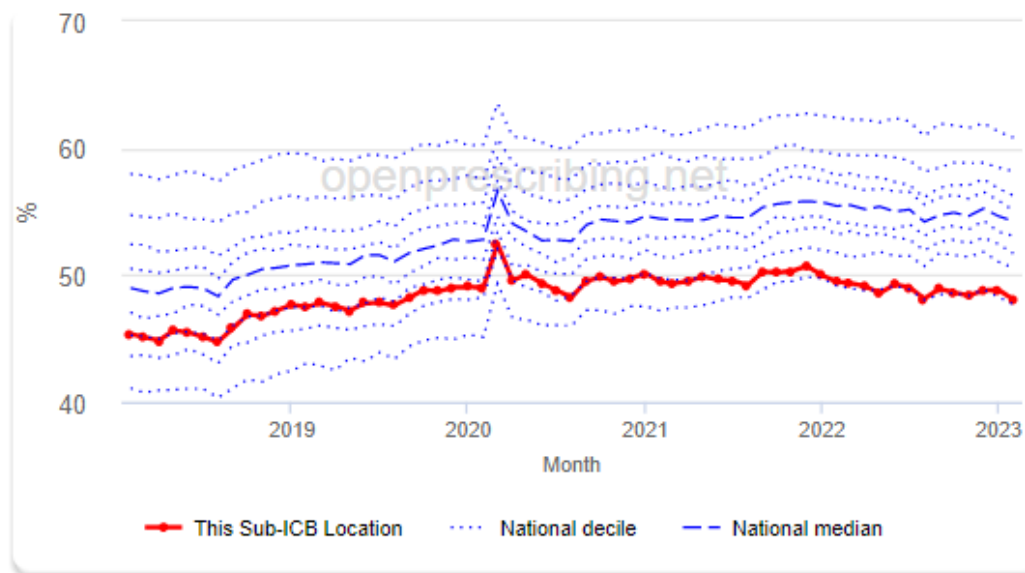
# Inhalers (Aug 2022)

# (Feb 2023)

MDIs prescribed as a proportion of all inhalers in BNF Chapter 3, excluding salbutamol



MDIs prescribed as a proportion of all inhalers in BNF Chapter 3, excluding salbutamol

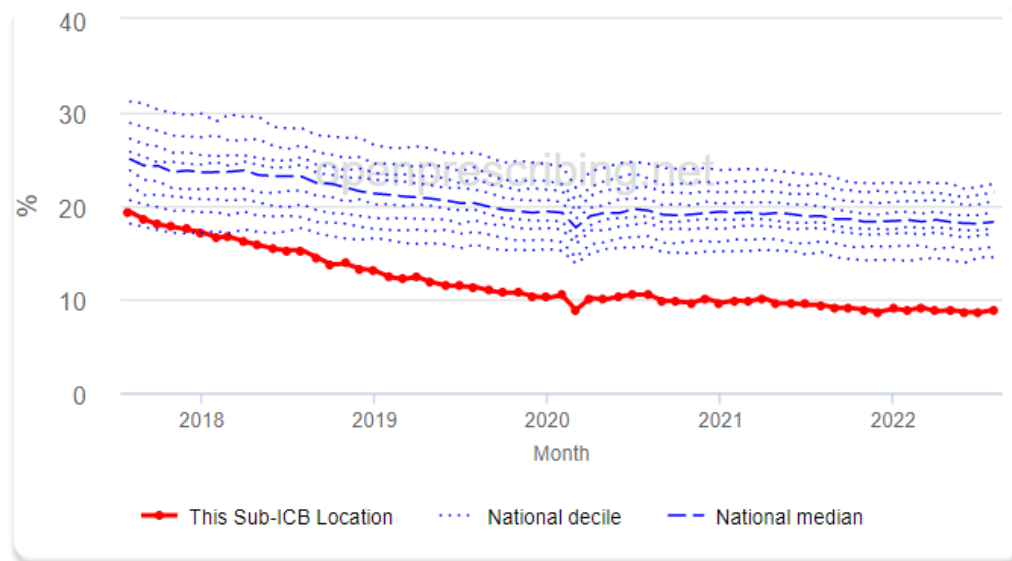


Somerset National target Decreasing the proportion of metered dose inhalers prescribed to 25% of all non-salbutamol inhalers prescribed by March 2024

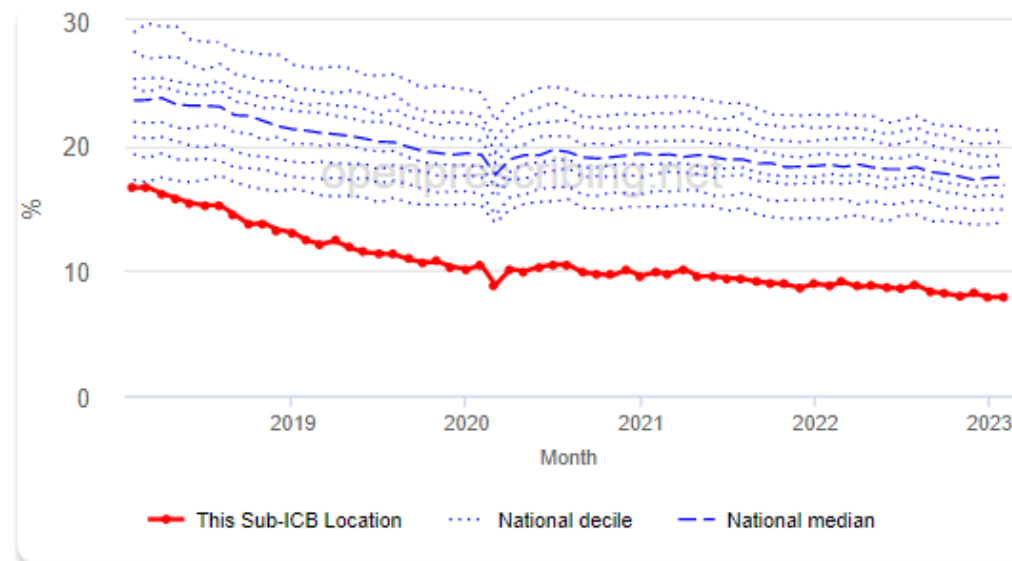
## Inhalers (Aug 2022)

## (Feb 2023)

Prescribing of high dose inhaled corticosteroids compared with prescribing of all inhaled corticosteroids



Prescribing of high dose inhaled corticosteroids compared with prescribing of all inhaled corticosteroids



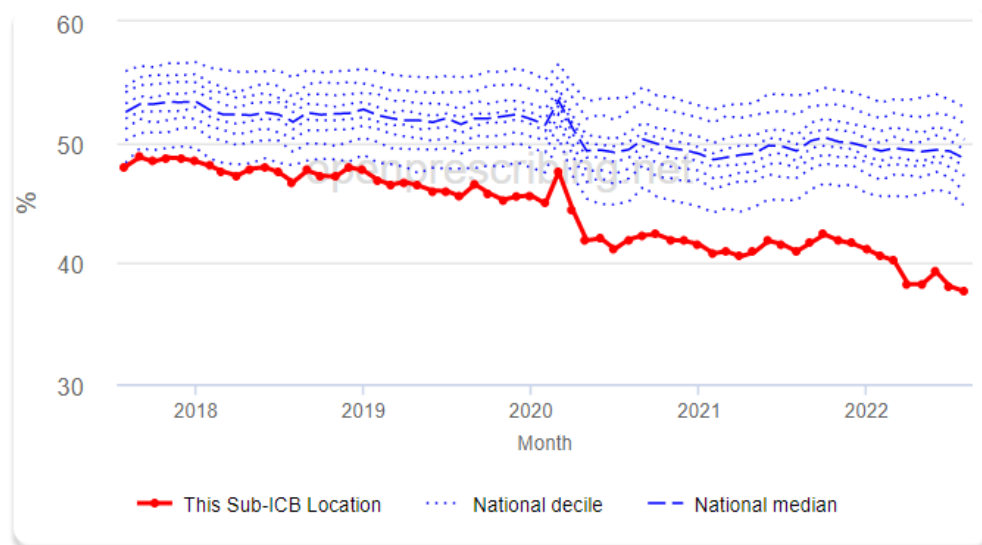
**Better control – patient feels better less need for high dose steroid inhalers – but still need to choose Cost effective options**



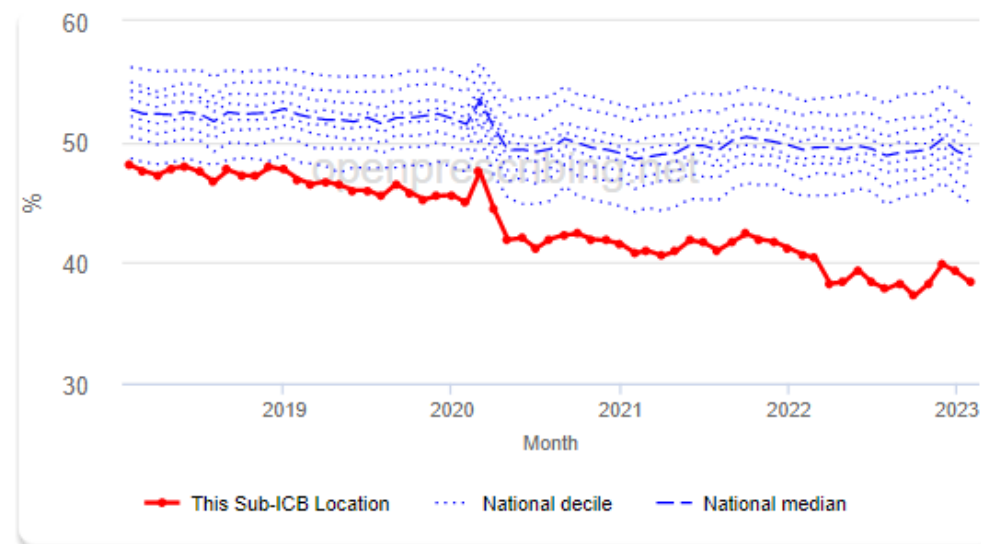
## Inhalers (Aug 2022)

## (Feb 2023)

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



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



**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

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### 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

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### 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](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]),**

## incentives – 16 are a continuation from last year

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### 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.

#### [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 –

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**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 –

### 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 –

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**Increase in Ezetimibe prescribing -**

Somerset still has

29 patients prescribed simvastatin 80mg

95 patients prescribed Fluvastatin

1985 patients prescribed pravastatin



## New incentives –

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### 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 –

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### 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 –

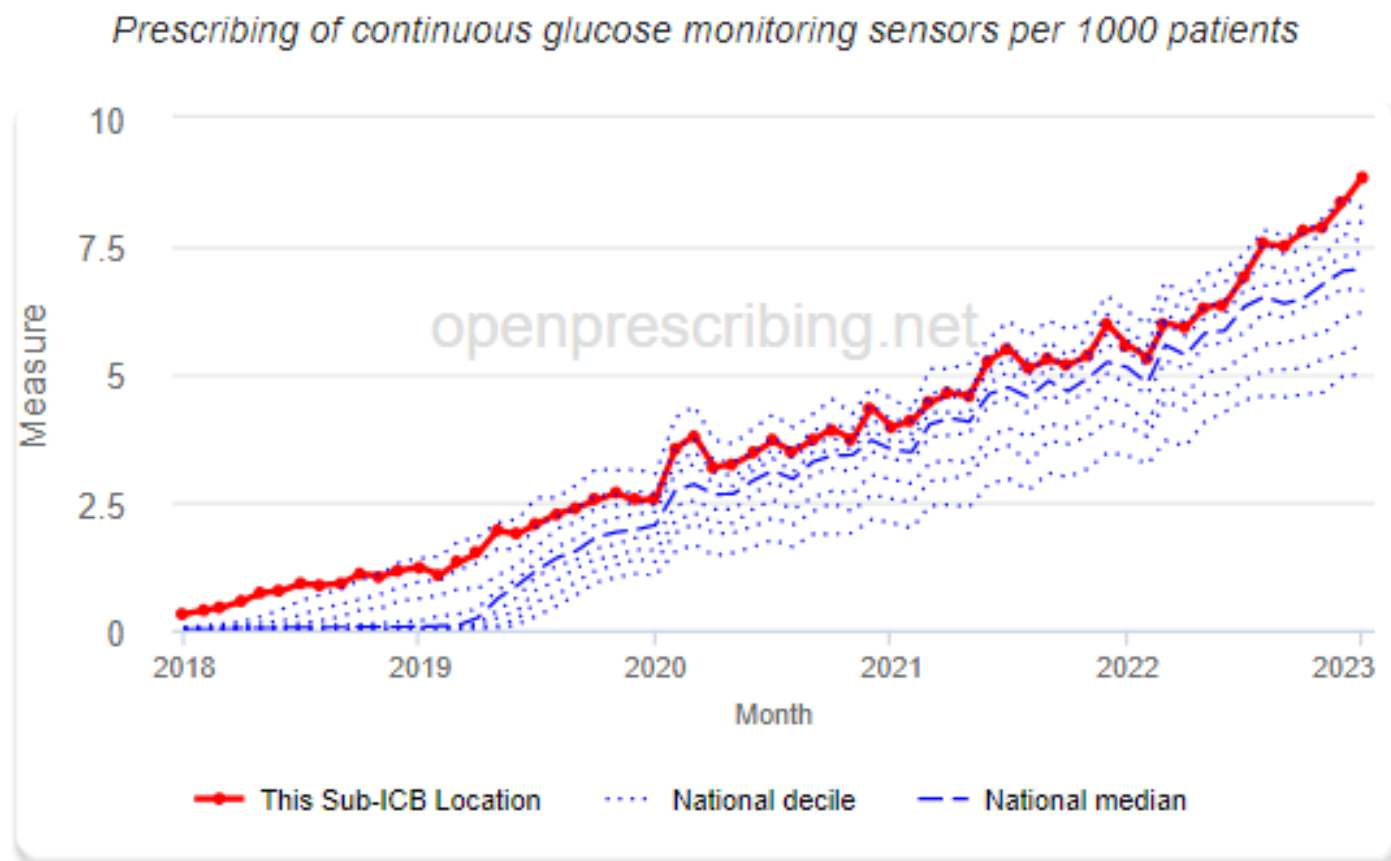
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### 13. metformin/gliptin patients and blood glucose testing strips on repeat

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.

<p><b>Diabetics on metformin and/ or DPP4 only who test blood glucose</b> NICE says not necessary. Scorecard indicator 2023/24</p>	<p>13/04/2023</p>	<p><b>618 patients</b></p>
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## Achieving the scorecard targets as quickly as possible allows us to address our patients unmet needs



# CGM Carbon Footprint

Diabetes Specialist Nurse Forum UK	Freestyle Libre 2
Real-time CGM	No
MARD	9.2
Published accuracy data	Yes (T1 n=133)
Sensor life	14 days
Sensor warm up time	60 mins
Transmitter Life	N/A
Reader available	Yes
App needed	LibreLink
Capillary glucose calibration	No
High & low alarms	Yes
Predictive alarms	No
Stand-alone use	Yes
Pump compatibility	No
Closed loop compatibility	No
Data share HCP	Libreview
Data share friends/family	Yes
RCT data	Yes
UK approved wearable site	Upper arm

Dexcom One	GlucoRx AiDEX
Yes	Yes
9.0	9.1
Yes (T1 n=260)	Yes (T1 n=14)
10 days	14 days
120 mins	60 mins
3 months	4 years
Yes	No
Dexcom One	GlucoRx AiDEX
No	No
Yes	Yes
No	No
Yes	Yes
No	No
No	No
Clarity	CGM Viewer
No	Yes
Yes (G4/5/6)	No
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**

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**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?**