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## Background

This pilot study on medicines waste in care homes is part of a whole systems approach to improving sustainability and tackling overprescribing. It will estimate the medicines waste in care homes, particularly arising from use of medicines compliance aids (MCAs) to assess whether the volume of waste is higher associated with its use.

A medicines waste audit was conducted in two South East London (SEL) care homes and verbal interviews were conducted with care home staff, GPs, pharmacists and community pharmacists to gather their perspectives on medicines waste.



## Known issues related to MCAs

- Repeat medicines withheld for clinical reasons or declined due to patient factors result in medicines waste in MCAs.
- Staff are unable to identify and record medicines in MCA if they are withheld, accidentally dropped, or spat out.
- Difficult to enact medication changes with MCAs which is especially problematic post hospital discharge.
- Deskill of care home staff in medicines management using MCAs.
- Excessive packaging waste associated with MCAs.
- Batch ordering of 7-day scripts are costly for the NHS in comparison to monthly original pack dispensing.

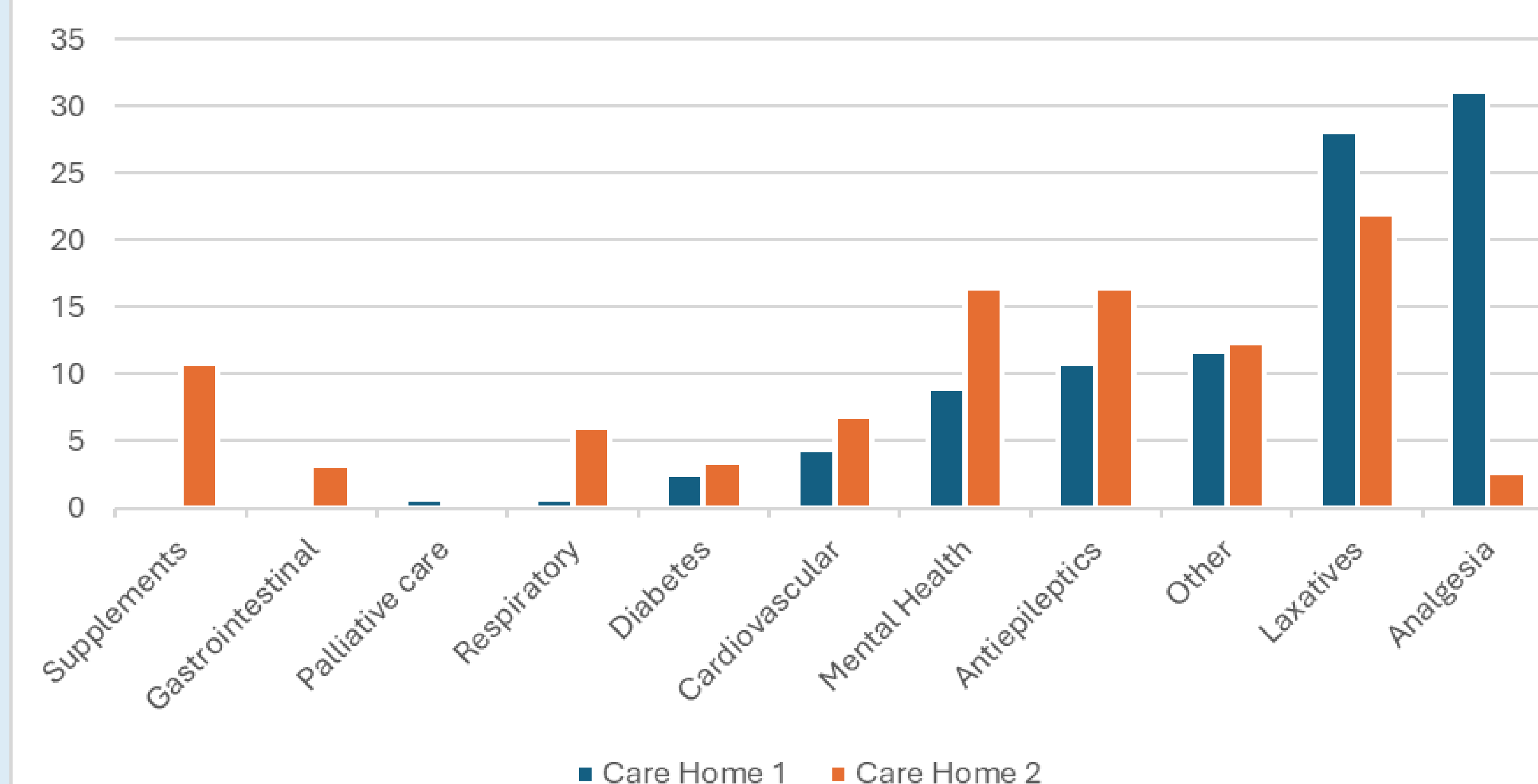
## Care Home 1

- Up to 98 residents across 4 floors - younger adults, older people with frailty and dementia
- Medicines ordered electronically by care home managers
- Repeat medicines dispensed in MCAs and leftover discarded when starting new monthly cycle
- PRN medicines dispensed in original containers and discarded monthly
- All medicines waste returned to community pharmacy for disposal
- Medicines waste physically recorded in register monthly
- Supported by 1 x GP pharmacist

## Care Home 2

- Up to 128 residents across 5 units - age >65 years, dementia and palliative care
- Medicines ordered via NHS Proxy App by senior care home staff
- Repeat medications dispensed in original packaging
- PRN medicines dispensed in original packaging and carried over monthly for use and discarded when overstocked
- Medicines waste discarded in clinical bins at care home
- Medicines waste recorded electronically
- Supported by 1 x GP pharmacist

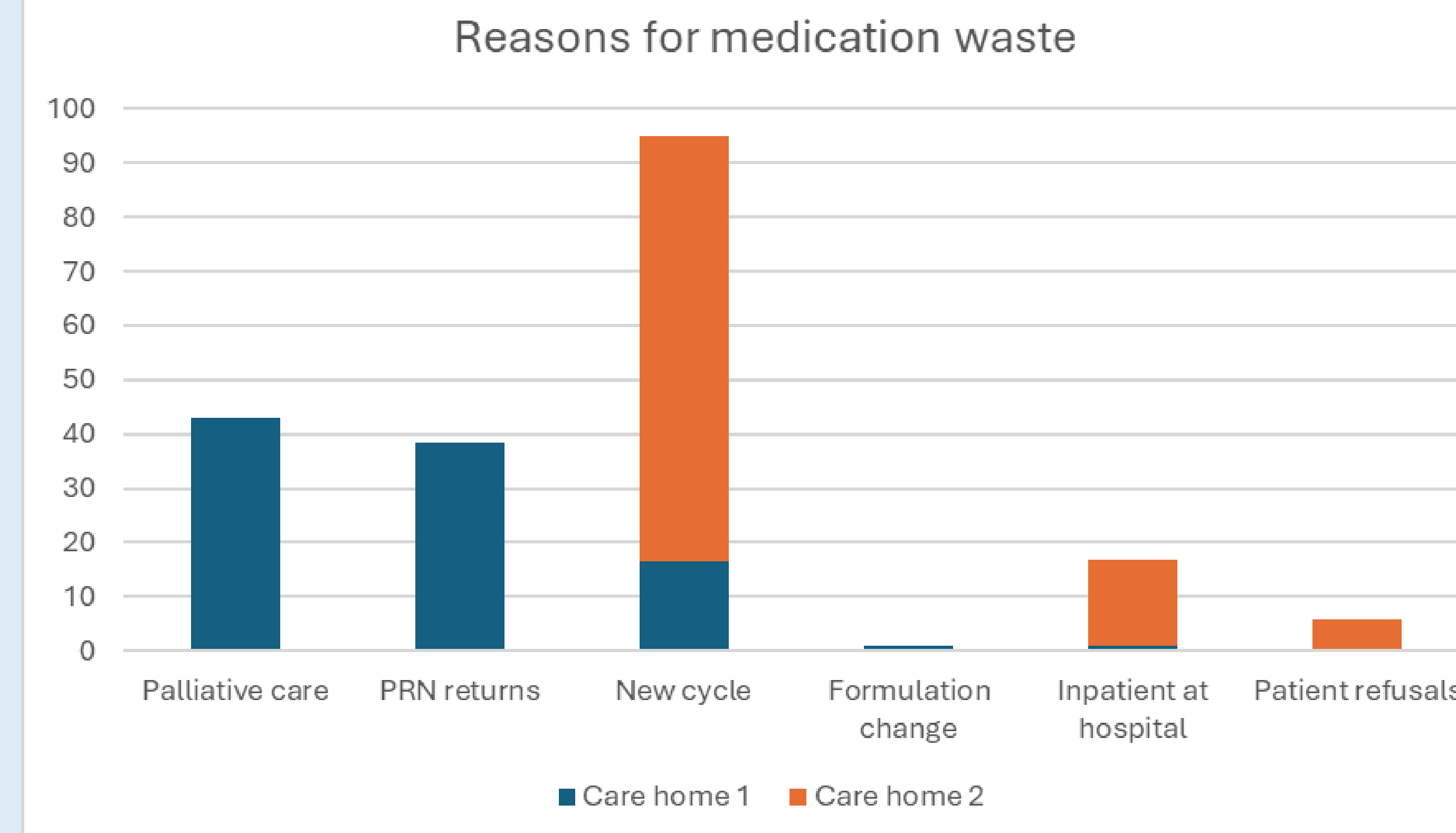
## Medicines waste by categories



Consistent with previous national evaluation [1], most medications wasted in this audit are analgesia (mainly paracetamol) and laxatives (mainly macrogol sachets).

## Aims

- Raise awareness and access information relating to medicines waste, pollution, and safe disposal.
- Gain insights to drivers of waste and non-adherence including MCAs.
- Estimate the extent of waste medicines in carbon and monetary terms.



Estimated total cost of medicines waste from both care homes:

**£653.87 per month**  
= **£7,846.44 per year!**

**CO2e of medicines waste from both care homes:**  
378 kg CO2e per month

Equivalent to driving 967 miles in an average petrol car [2]!

## Recommendations for Care Home 1

- Consider implementation of NHS proxy access to improve medicines ordering process
- Discuss transitioning from MCAs to original pack dispensing with support from SEL ICB
- Educate and train staff on carrying over PRN medicines for use monthly and not ordering additional PRN medicines when they are still in-date
- GP practice staff to continue reviewing over ordering of dressings, creams and emollients
- Discuss implementation of "homely remedies" with support from SEL ICB
- Community pharmacy to notify GP practice staff when medicines are out of stock well ahead of time with suggested alternatives available

## Recommendations for Care Home 2

- Better use of NHS proxy to order medicines without adjusting for minor discrepancies
- Educate and train staff about counting the existing amount of PRN medicines left before ordering more
- Clinicians to monitor PRN medicines usage and remove medicines from eMAR when they are not used regularly
- Unit managers to continue sending copies of eMAR with patients upon hospital admission
- GP staff to liaise with community pharmacy team for prompt medicines reconciliation post discharge

## References

- [1] Trueman PP, Lowson DK, Blighe A, Meszaros DA, Wright D, Glanville J, et al. Evaluation of the Scale, Causes and Costs of Waste Medicines. Nov 2010. YHEC/School of Pharmacy, University of London.
- [2] Department for Environment Food & Rural Affairs. UK and England's carbon footprint to 2020 [Internet]. GOV.UK: Department for Environment Food & Rural Affairs; 2023 Aug. Available from: <https://www.gov.uk/government/statistics/uks-carbon-footprint>