Title (required) Usually in the form of a question (Include any punctuation)

Coroners' perspective of medicines use in care homes: a five-year review of preventing future death letters in England and Wales.

The Problem (required) What is the problem you are addressing? Why did you do the work? How is it original? Please describe your study aims clearly. (estimate 50 words) actual 40 words

Papers and regulators inspection reports have been published describing the rate and types of incidents involving medicines in care homes. Nevertheless, little information has been published on the impact or severity and causes of incidents involving medicines in these settings.

The Approach (required) Please set out clearly your chosen study design and explain the methods and methodological approach that you have taken. (estimate 100 words) actual 90 words

Coroners' preventing future death (PFD) letters and associated responses published between 2017 and 2021 on the judiciary.uk website classified as 'Care Home Health related deaths' were downloaded for review.

These were classified by year of publication and publishing coroner. Inclusion criteria were medicines or medicines related processes in the PFD letter. In addition, the letters were analysed and classified by location of residence, medicine, medicines process, the impact of the medicine or medicines process on the persons' death, other contributory factors (such as falls, care planning or escalation of care).

Findings (required) Please describe your findings and your conclusions. For work in progress describe interim findings/conclusions or progress. (estimate 200 words) actual 213 words

Hundred and fifty-six 'Care Home Health related deaths' were published. Thirty per cent (n=47) were published by three coroner areas Manchester South (n=30), Birmingham & Solihull (n=11), Derby & Derbyshire (n=6). PFD letters for 29 people described medicines or medicines processes, involving people living in care homes with or without nursing (n=24), five lived at other locations.

Across the 29 PFD letters reviewed, 37 references to medicines (n=31) or medicines processes (n=6) were made. Escalation of care (n=10), care plans (n=7), communication (n=7) and falls, hoist or trauma (n=7) represented 84% of contributary concerns. Impact of medicine and medicines process on persons' death were quantified as no impact (n=6), contributory (n=9) and direct (n=22). The main three classes of medicines that either contributed or directly led to death were cardiovascular (n=8), central nervous system (n=7), endocrine (n=3). Among the deaths related to cardiovascular medicines, eight were associated with anti-coagulants, five with inadequate escalation following falls, two inappropriately administered, one was not administered in error. Central nervous system medicines were associated with toxicity or overdose (n=4), excess sedation (n=2) and sensitivity (n=1). Two deaths relating to endocrine medicines involved patients living with dementia, refusing insulin and staff not escalating the risk. The other involved the administration of insulin when the person was already hypoglycaemic.

Implications (required) What do your findings mean and why do they matter? For work in progress consider the potential to influence outcomes. (estimate 100 words) actual 93 words

Coroners PFD letters concerning 'Care Home Health related deaths' have an uneven distribution across England and Wales. However, these letters provide insight into the potential association between medicines and the administration site. Emerging themes were the overuse of medicines leading to toxicity, overdose, excess sedation, and failure to obtain additional professional advice appropriately. The combination of the medicines and the event led to the persons' death. The findings suggest the need to conduct further research into this area to improve patients' safety and understand the rationale for the distribution of Coroners' PFD letters.

Co-authors Please enter the name of your institution, and the names of any other institutions belonging to the co-authors (please separate with commas)

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Presenter (required) Enter the name of the person who will be presenting at the conference

TBC

Presenter's Twitter handle Optionally enter the Twitter handle of the presenter e.g.: Twitter for @Twitter

Funding acknowledgement Enter any acknowledgements for your abstract

M Irons is an employee of the Care Quality Commission who have also funded year 4 of their part time PhD fees