Optum

Important New Evidence Service

In partnership with The Centre for Medicines Optimisation at Keele University

ScriptSwitch® Rapid Update 2 – May 2025

Prescribing: Repeat prescribing associated with patient deaths

This retrospective case series looked at coroners' Prevention of Future Deaths (PFDs) reports to identify where repeat prescribing processes contributed to medicines-related deaths. The investigators looked at all PFDs for a four-year period between January 2019 and December 2023 that reported a medicines-related death and involved repeat prescribing. Thematic analysis of the text of the reports identified key common themes.

The authors found 24 reports that related to medication repeat prescribing out of a total of 277 reports due to alcohol, drug or medication-related deaths; the most frequently reported drug class was opioids (76%). One third of the included PFDs described multiple repeat prescriptions (multi-drug toxicity) or medicines taken alongside acute prescriptions or over-the-counter medications. From textual analysis of the reports key themes were errors or discrepancies at the point of a transfer of care; the ability to obtain repeat prescriptions from multiple medication sources; and the absence of robust medication review, with the absence of review being the most commonly linked to patient deaths.

Reference: Thomson, C., Ross, L. & Davies, J. How has the repeat prescribing process contributed to or caused patient deaths in England? A systematic, collective case series of prevention of future deaths reports 2019–2023. *Drugs Ther Perspect* (2025). https://doi.org/10.1007/s40267-025-01159-z

What do we know already?

- Coroners investigate deaths that are violent, unnatural, or of unknown cause, and if they believe the death could have been preventable, they issue a report of the actions to be taken to prevent future deaths (PFDs) to the organisation or individual they believe has the power to act. A review of PFDs published between 2013 and 2022 found that 18% of reports involved medicines, and that opioids, antidepressants and hypnotics were the most common drugs involved.
- In 2019, the Care Quality Commission (CQC) highlighted concerns around patient safety associated with prescribing, monitoring and reviewing of medicines use, for example, the continued authorisation of repeat prescriptions with insufficient supporting medication reviews. Repeat prescriptions make up around three quarters of all prescription items, with such high volumes, it is essential that practices have a system in place to manage repeat prescriptions to ensure safety of patients and efficiency.
- The General Medical Council has professional guidance to support repeat prescribing by general practitioners (GPs), that suggests that 'where possible, reduce repeat prescribing'. It also stresses the need to set a medicines review date, and the importance of regular reviews.
- In November 2024, NHS England commissioned the Royal College of General Practitioners and the Royal Pharmaceutical Society to produce a repeat prescribing toolkit for primary care. The toolkit is a self-assessment tool covering all aspects of the repeat prescribing process, including five key elements: patient/carer responsibilities, administrative, clinical and technical under an over-arching organisational culture assessment. Patient/carer responsibilities include not over-ordering medications and engaging with the structured medication review process. Clinical responsibilities include setting out the duration of the repeat reauthorisation period, highlighting lack of monitoring data, and ensuring appropriate levels of medication review.

What does this evidence add?

- This study adds to the evidence available from coroner's reports in England that have attributed avoidable patient deaths to medicines use and specifically shows an association between deaths and repeat prescribing.
- The absence of medication review was one of the most frequently reported 'matters of concern'. As well as the potential harms from use of high-risk medicines without review, 65.3% of the medicines in the PFD reports related to controlled drugs either prescribed alone or in combination.
- Limitations of the study included the small sample size and the likelihood that most deaths were the result of more than one contributing factor. This period covered the COVID-19 pandemic, which may have affected clinical care, and also the response of organisations to the concerns raised in the PFD reports. The authors also comment that

only half of all deaths are reported to a coroner, therefore the level of fatal harm from repeat medicines may be higher.

Study details

- This study screened all Prevention of Future Death Reports published on the Courts and Tribunals Judiciary Webpage between 1 January 2019 and 31 December 2023 that reported on alcohol, drug, and medication-related deaths in England. The aim of the study was to identify where failures of repeat prescribing processes specifically contributed to or caused preventable medicine-related deaths.
- The investigators selected those reports where the "Matters for Concern" and "Circumstances of the Death" related to a failure of the repeat prescribing process or where the supply of prescription medication had caused or contributed to the death.
- Inductive thematic analysis was used to evaluate the reports. Three investigators independently coded the data and identified preliminary themes. The text was then collectively reviewed, and themes proposed to resolve any discrepancies and define chosen themes. Once a consensus was reached, the text was reviewed, the categorisation of PFDs finalised, and the selected representative text data identified to demonstrate the themes. Where required, PFDs were assigned multiple themes. The frequency of each theme throughout the collated reports was calculated.

Results

- Between January 2019 and December 2023 there were 2,337 PFD reports published. Of those, 277 (11.9%) were alcohol, drug or medication-related deaths, and 24 (8.7%) of these were related to medicines that were prescribed as a repeat prescription and were selected for inclusion in the final sample and thematic analysis.
- Most of the deaths involved females (67%, $p < 0.05$), with a median age of 44.5 years (youngest 19, oldest 87 years).
- There were 47 causes of death included in the final PFD patient sample (n = 24) as many coroners attributed deaths to a cumulation of multiple actions, medications or conditions. Of these, single-drug toxicity was referenced 12 times (25.5%), and multiple medications (multi-drug toxicity) were referenced 12 times (25.5%). The remaining 23 were attributed to other medical causes of death.
- Details of the medications prescribed were available in 21 of the reports. Forty-nine different medications were named, and of these 76% were opioid analgesics reported to have contributed to or caused the patient's death. The next highest drug classes mentioned were drugs for neuropathic pain (BNF chapter 4.7.3: e.g. gabapentin, nortriptyline), and anxiolytics.
- In total, 38% of the PFDs analysed reported that patient deaths were linked with multiple repeat prescription medicines or repeat prescriptions taken in parallel with acute prescriptions or over-the-counter (OTC) medications (median n = 1; interquartile range [IQR] = 2, 1–8). The highest number of medications described in a single case was eight.
- In four cases, patients were able to obtain medicines on a repeat prescription from more than one location, with the emergence of online and remote prescribing services.
- The most common recipients of PFDs were individual general practice surgeries (19.5%), NHS England (14.6%) and the Department of Health and Social Care (14.6%). Of them, 29 recipients (70.7%) responded, and 65.5% of these responses were within the statutory 56-day requirement. The remaining 9 (22.0%) remained overdue or unknown at the time of analysis.
- A total of 54 'matters of concern' were raised in the reports. Analysis of the description of these concerns identified three key themes related to repeat prescribing processes: absence of robust medication review (n = 23, 59%); the ability to obtain repeat prescriptions from multiple medication sources (n = 9, 23%); and errors or discrepancies in repeat prescribing at the point of a transfer of care (n = 7, 18%).
- The remaining 15 matters of concern were not related to medication prescribing and described limitations of information technology (IT) infrastructure (n = 5), poor documentation and monitoring (n = 4), regulatory concerns about individual pharmacies and processes (n = 3), poor history taking (n = 2) and lack of continuity of care (n = 1).

Level of Evidence: Level 3 (study based on a case series) according to the SORT criteria. **Study funding:** None