Written evidence submitted by Dr Georgia Richards (TCS000058)

Learning lessons from coroners' reports: *The Preventable Deaths Tracker*

Dr Georgia Richards, a Health Research Scientist, Epidemiologist and Teaching Fellow at the University of Oxford, is making this submission to the Justice Select Committee's inquiry into *'The Coroner Service: follow-up'* on behalf of an interdisciplinary group of seven academics, clinicians and a practising coroner who run the Preventable Deaths Tracker (https://preventabledeathstracker.net/) and have decades of expertise in epidemiology, public health, clinical pharmacology, general practice, hospital medicine and pharmacy. The purpose of our submission is to showcase how the Coroner Service can learn lessons from Prevention of Future Deaths reports (PFDs).

Executive summary

In 2020 we launched the Preventable Deaths Tracker (1), the first and only open database of all published coroners' PFDs in England and Wales (https://preventabledeathstracker.net/). The need for this tool was identified after using PFDs to conduct several studies (2,3) and experiencing difficulties with the Judiciary website in accessing, searching and analysing reports as described in the First Report on The Coroner Service (4). The Preventable Deaths Tracker uses a computer program to automatically collect PFDs from the Judiciary website every week. The computer program cleans and processes the information, turning it into an accessible and searchable database with over 10 years of data, which is used for real-time analytics and research, including the thematic analysis of coroners' concerns in self-inflected deaths/suicides (5), medicines (6), falls (7), sepsis (8), opioids (9), and deaths during the COVID-19 pandemic
(10). The Preventable Deaths Tracker website received over 84,000 individual users in 2023 alone, which included bereaved families, coroners, lawyers, healthcare professionals, public bodies, charities, the media, academics, and the public. Despite the growing impact of the Preventable Deaths Tracker, the time spent building, updating, and maintaining the website as well as the research has been self-funded or voluntary as there is currently no funding available to support such work. In this submission, we share insights from the Preventable Deaths Tracker database and how it addresses several recommendations made in the 1st Report on The Coroner Service as well as provides the data infrastructure for a National Oversight Mechanism. In summary, we have five key recommendations:

1. A reproducible computer program, as provided by the Preventable Deaths Tracker, should be resourced to automate the systematic and timely collection and statistics of coroners' PFDs.

2. The Chief Coroner's Office (CCO) should work with the Office for National Statistics (ONS) to categorise PFDs on the Judiciary website using the globally recognised International Classification of Diseases (ICD-10) codes and research should be funded to co-produce a national evidence-based categorisation system to catalogue PFDs so that lessons and trends can be easily identified for action.

3. Commission research to investigate the facilitators and barriers to writing PFDs, the drivers of variation in the writing of PFDs, and a quality improvement audit of PFDs. Create a dedicated list of recipients that is accessible and regularly updated with correct contact details to guide coroners on who should be sent such reports. Update the form used to write PFDs to ensure essential demographics such as age, year and causes of death are included.

4. Recipients of PFDs should openly share their internal procedures for how PFDs are processed and publish their actions taken following such deaths. Support should be provided to enable regular and high-quality statistics on the responses to PFDs and research to understand the facilitators and barriers to responding to PFDs that can be used to improve the Coroner Service.

5. Resource an independent and highly skilled team to conduct regular epidemiological and thematic research, publishing quarterly and annual insights on the lessons learnt from PFDs.

1: Statistics of coroners' PFDs

Each May the Ministry of Justice (MOJ) publishes annual coroners' statistics. However, statistics on coroner's PFDs have only been published since May 2022 (11) in response to the 1st Report on The Coroner Service. The PFD statistics provided by the MOJ are static, outdated by the time of publication, and the process of obtaining such data from 81 coronial areas is resource intensive. By using a reproducible and automated computer program, the Preventable Deaths Tracker provides weekly updates on PFD statistics. With over ten years of data, our statistics include an analysis of the trends over time to assist in the monitoring of PFDs: https://preventabledeathstracker.net/trends-over-time/. As of 14 January 2024, there were 4,800 PFDs published, equating to an average of 459 PFDs each year. In 2023 alone, there were 531 PFDs published on the Judiciary website with 8 PFDs published thus far in 2024. Without the Preventable Deaths Tracker, these statistics would be unknown and very difficult to obtain.

Recommendation 1: A reproducible computer program, as provided by the Preventable Deaths Tracker, should be resourced to automate the systematic and timely collection and statistics of coroners' PFDs.

2: Categorisation of PFDs

How deaths are categorised is critical to patient and public safety. Incorrectly reporting the cause of death can profoundly affect policy decisions, which can alter global economies and the day-to-day lives of citizens. The Chief Coroner's Office classifies PFDs into 19 arbitrary categories. These categories overlap, are un-evidence-based, and there is no clear guidance or details available on how PFDs are classified. As of 14 January 2024, the majority of PFDs were classified as 'hospital-related' (n=1997), followed by 'Other related deaths' (n=662), and 'Prevention of future deaths' (n=559), which is likely a category created in error due to the

manual data-entry approach used to publish PFDs on the Judiciary website. As most people spend the final days of their lives in hospital (12), the 'hospital-related' category is unhelpful in learning lessons. Likewise, the use of the 'other' category without any guidance as to what types of deaths this may include is confusing. Similarly, the use of a 'Wales' category is obsolete as the Preventable Deaths Tracker database can rapidly provide statistics on the number of PFDs published in Wales or England. If age at death was routinely reported by coroners in PFDs, the 'Child death' category would also be obsolete. There are currently three categories for emergency-related deaths, which we've combined to help understand these trends: https://preventabledeathstracker.net/database/death-categories/ Similarly, we've combined the categories of 'Suicide' and 'Mental health' as our systematic research of PFDs involving self- inflected death found that only one in five suicides were included in the 'suicide' category on the Judiciary website (5). Unfortunately, many studies outside of our research group have used the Chief Coroner's Office categorises to identify deaths (13,14), which introduces selection biases and hugely underestimates the number of deaths. Finally, these categories are not routinely reviewed and updated to reflect emerging issues that may be causing or contributing to preventable deaths. For example, introducing a category for COVID-19-related deaths in 2020 to assist the Government's learning for future pandemics. This was a key recommendation from our research on PFDs during the COVID-19 pandemic (10). Therefore, the Chief Coroner's Office's current categorisation of PFDs is not fit for purpose.

Recommendation 2: The Chief Coroner's Office (CCO) should work with the Office for National Statistics (ONS) to categorise PFDs on the Judiciary website using the globally recognised International Classification of Diseases (ICD-10) codes and research should be funded to co-produce a national evidence-based categorisation system to catalogue PFDs so that lessons and trends can be easily identified for action.

3: Variation in the writing of PFDs

Regulation 28 of the Coroners (Investigations) Regulations 2013 outlines the duty of a coroner to make a report to prevent other deaths as well as the requirements for sending the report for actions (15). The first Coroner Attitude Survey conducted in 2020 (16) illustrates that preventing future deaths is regarded by coroners as one of their most important functions. However, less than 2% of inquests have a PFD written. As of 14 January 2024, only 58% of coroners had written a PFD. Of those who write reports, the volume ranges from 1 to 182 PFDs depending on the coroner, with one-third of all PFDs being written by only 30 coroners: https://preventabledeathstracker.net/database/coroner-names/. Over the past 10.5 years, most PFDs were written in Greater Manchester (n=397) and Inner North London (n=245) with very few written in Ceredigion (n=1) and Northumberland South (n=1): https://preventabledeathstracker.net/database/geographical-variation/. There may be valid reasons for these differences, including mortality rates, population densities, and the number of inquests held across coroner areas. Although differences in local procedures, coronial practices, resourcing, and training limitations may also explain this variation, which if addressed would improve the equity and efficiency of the Coroner Service. There is also variation in who the coroner lists as a recipient or interested persons, where the report is sent, and the level of information contained in the report - with age, year of death, and cause of death often missing.

Recommendation 3: Commission research to investigate the facilitators and barriers to writing PFDs, the drivers of variation in the writing of PFDs, and a quality improvement audit of PFDs. Create a dedicated list of recipients that is accessible and regularly updated with correct contact details to guide coroners on who should be sent such reports. Update the form used to write PFDs to ensure essential demographics such as age, year and causes of death are included.

4: Responses to PFDs

Regulation 29 of the Coroners (Investigations) Regulations 2013 outlines the duties of recipients of PFDs, specifying the duty to respond to the coroner with details of actions taken within 56 days of the date on which the report is sent (15). The Preventable Deaths Tracker is the only database in the country that can help understand statistics on the responses to coroners' PFDs. As of 14 January 2024, only one-third of PFDs had expected responses published: https://preventabledeathstracker.net/database/responses/. We have found that NHS England, the Department of Health and Social Care, the Care Quality Commission, HM Prison and Probation Service, the Department for Transport, the Home Office, and the Ministry of Justice receive the most PFDs from coroners. With support, the Preventable Deaths Tracker can generate a full list of recipients, provide further statistics, and monitor the response rates for all individual organisations that receive PFDs. Once PFDs are sent, there is a lack of transparency regarding the internal processes for how reports are handled and when action is or is not taken. Sharing such information would aid in creating a learning culture and illustrate that these deaths are being taken seriously with standard procedures and transparency on when actions are or will be taken promptly to prevent a similar death. The National Institute for Health and Care Excellence (NICE) has demonstrated a model for how an individual organisation could review and learn from their PFDs collectively (17), which could be used and adopted by others.

Recommendation 4: Recipients of PFDs should openly share their internal procedures for how PFDs are processed and publish their actions taken following such deaths.
Support should be provided to enable regular and high-quality statistics on the responses to PFDs and research to understand the facilitators and barriers to responding to PFDs that can be used to improve the Coroner Service.

5: Thematic patterns and research trends

By reviewing and thematically analysing PFDs, repeat hazards and lessons can be identified that can safeguard the public and aid public health surveillance and patient safety initiatives. The Preventable Deaths Tracker database has been used to conduct more than 25 investigations: https://preventabledeathstracker.net/research/ Our research has found that one in four PFDs involved a self-inflected death/suicide (5); one in five PFDs involved cardiovascular diseases (18) and medicines (6); one in ten PFDs involved falls (7); one in 20 PFDs involved sepsis (8) and opioids (9); and one in 100 PFDs involved cycling (19). The Preventable Deaths Tracker database has also been used to understand emerging issues such as deaths during the COVID-19 pandemic (10), the growing issue of deaths from purchasing drugs online (20), and the rise in fatal fires from people using emollient and paraffin-based creams (21). We have also

used the Preventable Deaths Tracker database to conduct investigations in response to Government policies such as changes to the Dangerous Dogs Act (22) and the banning of nitrous oxide (23). Journalists have similarly worked with us to use the Preventable Deaths Tracker database, including a recent investigation by *The Times* on deaths from clozapine (24) and the *IOSH Magazine* on suicides and deaths in the workplace (25). Together, our research illustrates that analysing PFDs collectively has the potential to significantly reduce the years of life lost. The time spent conducting such a volume of studies and our epidemiological and academic skills have allowed us to develop a systematic and evidence-based approach to conducting such research. However, none of this research has been funded to date and there is no dedicated support to continue this important work.

Recommendation 5: Resource an independent and highly skilled team to conduct regular epidemiological and thematic research, publishing quarterly and annual insights on the lessons learnt from PFDs.

We thank you for considering this written evidence and our recommendations. Please send any correspondence to Dr Georgia Richards (georgiarichardscebm@gmail.com), who can supply further information and oral evidence.

January 2024

References

1. Richards GC, Aronson JK, Heneghan C. Coroners' concerns to prevent harms: a series of coroners' case reports to serve patient safety and educate the public, clinicians and policy-makers. BMJ Evid Based Med. 2020 Dec 1;26(2):37–8.

2. Ferner RE, Easton C, Cox AR. Deaths from Medicines: A Systematic Analysis of Coroners' Reports to Prevent Future Deaths. Drug Saf. 2017 Aug;41(1):103–10.

3. Ferner RE, Ahmad T, Babatunde Z, Cox AR. Preventing Future Deaths from Medicines: Responses to Coroners' Concerns in England and Wales [Internet]. Vol. 42, Drug Safety. 2018. p. 445–51. Available from: http://dx.doi.org/10.1007/s40264-018-0738-z

4. Neill R. UK Parliament. 2021 [cited 2023 Jul 12]. The Coroner Service. Available from: https://committees.parliament.uk/work/430/the-coroner-service/publications/

5. Anthony G, Aronson JK, Brittain R, Heneghan C, Richards GC. Preventable suicides involving medicines before the covid-19 pandemic: a systematic case series of coroners' reports in England and Wales (pre-print) [Internet]. medRxiv. 2023. Available from: http://dx.doi.org/10.1101/2023.07.02.23292130

6. France HS, Aronson JK, Heneghan C, Ferner RE, Cox AR, Richards GC. Preventable Deaths Involving Medicines: A Systematic Case Series of Coroners' Reports 2013-22. Drug Saf. 2023 Apr;46(4):335–42.

7. Song K, Portwood C, Jindal J, Launer D, France H, Hey M, et al. Preventable deaths involving falls in England and Wales, 2013-22: a systematic case series of coroners' reports. Age Ageing [Internet]. 2023 Oct 2;52(10). Available from: http://dx.doi.org/10.1093/ageing/afad191

8. Jindal J, Launer D, France HS, Hey M, Song K, Portwood C, et al. Preventable deaths involving sepsis in England and Wales, 2013-2022: a systematic case series of coroners' reports. Infection [Internet]. 2023 Dec 11; Available from: http://dx.doi.org/10.1007/s15010-023-02140-6

9. Dernie F, France HS, Thomas ET, Bilip M, DeVito NJ, Ferner RE, et al. Preventable deaths involving opioids in England and Wales, 2013-2022: a systematic case series of coroners' reports. J Public Health [Internet]. 2023 Aug 21; Available from: http://dx.doi.org/10.1093/pubmed/fdad147

10. Swift B, Heneghan C, Aronson J, Howard D, Richards GC. Preventable deaths from SARS- CoV-2 in England and Wales: a systematic case series of coroners' reports during the COVID- 19 pandemic. BMJ Evid Based Med [Internet]. 2021 Dec 21; Available from: http://dx.doi.org/10.1136/bmjebm-2021-111834

11. Ministry of Justice. GOV.UK. 2022 [cited 2024 Jan 16]. Coroners statistics 2021: England and Wales. Available from: https://www.gov.uk/government/statistics/coroners-statistics-2021/coroners-statistics-2021-england-and-wales

12. Public Health England. GOV.UK. 2018 [cited 2024 Jan 17]. Statistical commentary: End of Life Care Profiles, February 2018 update. Available from: https://www.gov.uk/government/statistics/end-of-life-care-profiles-february-2018- update/statistical-commentary-end-of-life-care-profiles-february-2018-update

13. Leary A, Bushe D, Oldman C, Lawler J, Punshon G. A thematic analysis of the prevention of future deaths reports in healthcare from HM coroners in England and Wales 2016–2019.

Journal of Patient Safety and Risk Management. 2021 Feb 1;26(1):14–21.

14. Wallace E, Revie L, Sharland E, Mais D. Office for National Statistics. Office for National Statistics; 2023 [cited 2024 Jan 17]. Prevention of Future Death Reports for Suicide submitted to coroners in England and Wales. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/mentalhealth/articles/preventionoffuturedeathreportsforsuicidesubmittedtocoronersinenglandandwales/january2021tooctober2022

15. The Coroners (Investigations) Regulations 2013 [Internet]. [cited 2019 May 16]. Available from: http://www.legislation.gov.uk/uksi/2013/1629/pdfs/uksi_20131629_en.pdf

16. Thomas C, McGuiness T. UCL. 2021 [cited 2023 Oct 20]. 2020 CORONER ATTITUDE SURVEY. Available from: https://www.judiciary.uk/wp-content/uploads/2023/03/Coroner-Attitude-Survey-2020.pdf

17. Southall S, Tariq A, Patrick H, Harris K, Bird C. A thematic analysis of National Institute for Health and Care Excellence responses to coroners' concerns'. Journal of Patient Safety and Risk Management. 2023 Oct 1;28(5):222–6.

18. Anis A, Heneghan C, Aronson JK, DeVito NJ, Richards GC. Deaths from cardiovascular disease involving anticoagulants: a systematic synthesis of coroners' case reports. BJGP Open [Internet]. 2022 Mar;6(1). Available from: http://dx.doi.org/10.3399/BJGPO.2021.0150

19. Odgers L, Aronson JK, Richards GC. Global Centre on Healthcare & Urbanisation. 2021 [cited 2024 Jan 16]. Preventable deaths involving cyclists in England and Wales. Available from: https://www.gchu.org.uk/2021/09/gchu-report-preventable-deaths-involving-cyclists-in-england-and-wales/

20. Aronson JK, Ferner RE, Richards GC. Deaths attributed to the use of medications purchased online. BMJ Evid Based Med. 2022 Feb;27(1):60–4.

21. Bilip MK, Richards GC. Emollients and smoking: a fire hazard that could be prevented to reduce future deaths. BMJ Evid Based Med [Internet]. 2021 Apr 9; Available from: http://dx.doi.org/10.1136/bmjebm-2020-111648

22. Richards GC. Preventable Deaths Tracker. 2023 [cited 2024 Jan 15]. Tracking deadly dogs. Available from: https://preventabledeaths.substack.com/p/tracking-deadly-dogs

23. Richards GC. Preventable Deaths Tracker. 2023 [cited 2024 Jan 15]. Preventing deaths involving nitrous oxide and other gases. Available from: https://preventabledeaths.substack.com/p/preventing-deaths-involving-nitrous

24. O'Neill S. Britain's most dangerous prescription drug — linked to 400 deaths a year. The Times [Internet]. 2024 Jan 7 [cited 2024 Jan 19]; Available from: https://www.thetimes.co.uk/article/clozapine-most-dangerous-prescription-drug-britain-c9llnfg83

25. Hayes J. IOSH Magazine. 2024 [cited 2024 Jan 19]. Workplace suicides: preventing future deaths. Available from: https://www.ioshmagazine.com/2024/01/10/workplace-suicides-preventing-future-deaths