PREVENTABLE DEATHS IN OXFORD AND OXFORDSHIRE J P LOO AND GEORGIA C RICHARDS -

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Preventable deaths in Oxford and Oxfordshire

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ABSTRACT

We analysed 22 Prevention of Future Death reports (PFDs) concerning deaths in Oxfordshire. We find no clear pattern in the number of reports over time. The median time between a death and the issuing of a report is 267 days. The median age of the deceased was 55 (IQR 26.5–72.0, n = 19; 17 were male and 5 female.) We coded deaths using the reports according to the wHO's ICD-10. The commonest cause was 'external causes'. In seven cases the deceased took their own life, but only one report specifically mentions a mental or behavioural disorder in accounting for the cause of death. Three themes emerge: suicides by first time prisoners, a lack of resources in healthcare, and poor communication in the emergency services. These appear consistent with broader national trends. The number of reports is too low to come to any definitive conclusions on a statistical basis, but they show clear themes which ought to be investigated by local bodies.

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1 Introduction

The population of Oxford is 151,584 people,¹ and of Oxfordshire 696,000.² Health indicators for the city and the county are similar comparable to those across England (see Table 2). Oxford has an unusually high student population, (see Table 1) much of which has a highly privileged background.³ It is quite wealthy (though not so wealthy as London).

	Oxford	Oxon	England
Proportion of population students (%) ⁴	23.6 ⁵	7.5 ⁶	5·4 ⁷
Gross value added (£, 2017) ⁸	41,042	_	27,949
Under 16s in low income families (%)	16.2%	12.9	17%

Table 1: Oxford, Oxfordshire and England compared: miscellaneous

Coroners in England and Wales must report and communicate details of deaths when they believe that actions should be taken

- 1. Estimates of the Population for the UK, England and Wales, Scotland and Northern Ireland, Mid-2020 edition (2021 local authority boundaries), URL: https://www .ons.gov.uk/peoplepopulati onandcommunity/populationa ndmigration/populationesti mates/datasets/populatione stimatesforukenglandandwal esscotlandandnorthernirela nd.
- 2. Population, URL: https://insig
 ht.oxfordshire.gov.uk/cms
 /population.
- 3. See e.g. "Oxbridge 'over-Recruits from Eight Schools'", in: BBC News (7th Dec. 2018), URL: https: //www.bbc.com/news/educati on-46470838.
- 6. Qualifications and Students, 2011 census, URL: https://www.nomi sweb.co.uk/census/2011/ks5 01ew
- 7. i.e. (5, 841+1, 115+22, 968)/126, 725. The discrepancy with the most recent ONS estimate is to be expected

given the time elapsed since the last census.

- 8. i.e. (10, 447 + 1, 634 + 27, 904)/531, 558.
- 9. i.e. (836, 788 + 219, 756 + 1, 420, 951)/45, 496, 780.
- 11. Gross Value Added (GVA) per Head Generated in the Area in England, Local Government Association, URL: https://lginform .local.gov.uk/reports/lgas tandard?mod-metric=10255&m od-area=E92000001&mod-grou p=20110ACgroups&mod-type=c omparisonGroupType
- 6. Rates are per 100,000 people per year unless stated otherwise.
- 7. Slope index of inequality.
- 8. Local Authority Health Profiles, Public Health England, URL: http s://fingertips.phe.org.uk /profile/health-profiles/d ata#page/1/gid/1938132701 /pat/6/par/E12000008/ati/2 01/are/E07000178/cid/4/tbm /1

	Oxford	Oxon	England
Under 75 mortality rate from all causes ⁹	319	259	326
Life expectancy at birth (male)	80.2	81.7	79.8
Life expectancy at birth (female)	84.7	84.3	83.4
Suicide rate ¹⁰	8.5	9.6	10.1
Proportion of adults physically active (%)	75.3	73.0	66.4
Excess winter deaths index	9.2	9.2	15.1
Inequality in life expectancy at birth (m) ¹¹	10.3	7.8	9.4
Inequality in life expectancy at birth (f)	7.6	6.1	6.0

Table 2: Oxford, Oxfordshire and England compared: health.¹²

to prevent future deaths. These reports, named Prevention of Future Deaths reports (PFDs),¹³ involve three processes—

- 1. coroners write PFDs highlighting concerns and address reports to specific individuals or organisations;
- 2. addressees respond to the concerns raised in PFDs within 56 days; and
- 3. the actions taken (or proposed) are explained and implemented.

However, this process and the statutory requirement of responding to PFDs and taking action is not audited, and concerns have been raised regarding the lack of wider communication of the lessons reported in PFDs.

PFDs have been analysed to examine preventable deaths involving cardiovascular disease and anticoagulants,¹⁴ the COVID-

13. Available at https://www.judi ciary.uk/subject/preventio n-of-future-deaths/.

14. Ali ANIS et al., "Deaths from Cardiovascular Disease Involving Anticoagulants: A Systematic Synthesis of Coroners' Case Reports", in: (19th Aug. 2021), p. 2021.04.28.21256272, DOI: 10.11 01/2021.04.28.21256272. 19 pandemic,¹⁵ cyclists,¹⁶ suicides,¹⁷ medicines¹⁸ and drugs of misuse,¹⁹ including an analysis of opioid-related deaths.²⁰ However, PFDs in Oxford have not been assessed and compared with other cities.

2 Analysis

We conducted a retrospective observational study using the Preventable Deaths Database,²¹ created using web scraping.²² We screened 3699 PFDs dated between 1 July 2013 and 7 September 2021 and included PFDs that occurred in Oxford. We removed duplicates and extracted relevant information reported by coroners. To categorise the types of deaths in each city, we assigned numeric codes to each PFD using the World Health Organizations (WHO) International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10). We calculated summary statistics where possible and used content analysis to categorise concerns raised by coroners thematically.

- 15. Bethan SWIFT et al., "Preventable Deaths from SARS-CoV-2 in England and Wales: A Systematic Analysis of Coroners' Case Reports from the COVID-19 Pandemic", in: (23rd July 2021), p. 2021.07.15.21260589, DOI: 10.11 01/2021.07.15.21260589.
- 16. Available at https://securese rvercdn.net/160.153.138.71 /ipa.75a.myftpupload.com/w p-content/uploads/2021/09/ GCHU-Report-Preventable-De aths-involving-Cycling-in-England-and-Wales.pdf.
- 17. Georgia RICHARDS, "Preventable Suicides: A Systematic Analysis of Coroners' Prevent Future Death Reports in England and Wales", in: (2021), in collab. with Georgia RICHARDS et al., DOI: 10.17605 /OSF.IO/AD4UP.
- 18. Robin E. FERNER, Craig EASTON and Anthony R. Cox, "Deaths from Medicines: A Systematic Analysis of Coroners' Reports

to Prevent Future Deaths", in: Drug Safety 41.1 (1st Jan. 2018), pp. 103–110, ISSN: 1179-1942, DOI: 10.1007/s40264-017-0588-0.

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- 20. Georgia C. RICHARDS et al., "Preventable Opioid-Related Deaths in England and Wales", in: (15th June 2019), DOI: 10.17605/0SF.IO/E CZ4R.
- 21. URL: https://preventabledea thstracker.net/.
- 22. Nicholas J. DEVITO, Georgia C. RICHARDS and Peter INGLESBY, "How We Learnt to Stop Worrying and Love Web Scraping", in: *Nature* 585.7826 (7826 8th Sept. 2020), pp. 621–622, DOI: 10.1038 /d41586-020-02558-0.



Figure 2: Deaths mentioned by date

3 Findings

3.1 Reports: chronology

One report concerned the deaths of servicemen in Afghanistan; we have omitted it since it does not directly relate to Oxford or Oxfordshire. We also removed two duplicates. This left 22 reports. The reports were written by six coroners; 16 of them were written by D.M. Salter, Senior Coroner.

There is no obvious pattern in the dates of reports or the deaths they concern (see Fig. 1 and 2). The median time from a death to the issuing of a report was 267 days (see also Fig. 3) (n = 22).

3.2 Demographics of deceased persons

The median age was 55, and the IQR was 26.5-72.0 (n = 19; see also Fig. 4.) 17 were male and 5 female.



Figure 3: Delay from till issuing of report in days



Figure 4: Ages of persons mentioned in reports.

Not a single deceased person was stated to be a student of either the University of Oxford or Oxford Brookes University. This is surprising in view of the large number of students at Oxford (see Table 1).

3.3 Types of death and concerns

The commonest death category was 'external causes of morbidity and mortality' (see Fig. 5). In 12 cases a narrative conclusion was given. Non-narrative conclusions are shown in Fig. 6.

A simple verdict of 'suicide' was recorded in two cases. In five other cases the narrative conclusion indicated that the deceased



Figure 5: Reports by death code



Figure 6: Non-narrative verdicts.



Figure 7: Reports by sector

person sadly took their own life. It may seem incongruous that 'mental and behavioural disorders' do not appear particularly common. Many PFDs, however, did not specifically attribute deaths by suicide to a particular mental health condition.

The judiciary's website contains a 'category' column. It appears to use something of a topical schema, but is not easily machinereadable, so we have given a different schema in Fig. 7.

Eight reports contained substantial medical history relevant to the cause of death. Eight reports (not necessarily the same) related the history of the mental health of the deceased in accounting for their death. Apart from observing of the three prisoners in this sample that they were there for the first time, there was no substantial record of social history.

3.4 Concerns: classification

We give a classification of concerns in Fig. 8. The commonest matter of concern was possible inadequacies in procedures or



Figure 8: Reports by concern type

planning. In one case a patient (MG)²³ was moved due to a lack of beds to a neuro-science ward from a trauma ward, and 'a number of system checks...failed'.²⁴ In another case, a patient (LT) on a psychiatric ward committed suicide, and the coroner requested 'further details about' measures to ensure plastic bags were not brought back into the ward.²⁵ In a third example, the coroner recommended that a nursing home should review its procedures for assessing patients after a fall.²⁶

23. We have anonymised the names of the patients, but all reports are on the judiciary's website and those interested may trivially obtain the original report from the combination of the initials, date, and coroner. 24. D.M. SALTER, *MG*, Oxford Coroners Court, 15th Sept. 2018.

- 25. D.M. SALTER, *LT*, Oxford Coroners Court, 4th Sept. 2017.
- 26. Nicholas Graham, *PNN*, Oxford Coroners Court, 28th Feb. 2014.

The second commonest concern was communication. For example, in the case of MG, 27 alerts were issued by a system but 'none of the staff interviewed recalled seeing the alert'. In the case of LT, the coroner requested more details about procedures vis à vis communication with family.

The third commonest was the safety of facilities. Examples included a falling mirrorsalter2015a and a collision with a slowmoving lorry on the M40. The fourth commonest was noncompliance with procedures or planning; for example, in the case of LT, the coroner noted that there was a policy on searching the ward and enquired as to the extent to which it was implemented.

3.5 Major themes

3.5.1 First time prisoners

Three reports concerned suicides by first time prisoners (MS, JW, and DD).²⁷ In each case, information processing was a concern.

- MS There was a record of an overdose in 2012. This information was 'not available to the Prison Officers.'
- JW Software did not allow 'staff to make entries prior to the prisoner being received at reception'.
- DD Healthcare staff did not routinely attend 'Assessment, Care in Custody and Teamwork' (ACCT) reviews, which therefore took place 'without key information'.

An obvious solution would be to centralise and standardise databases throughout the prison system. *The Register* reported in 2009 that a previous attempt 'failed amid scathing attacks, accusations of mismanagement, and vast budget overruns'.²⁸ Nevertheless, the government should consider using some of the £4.4b it claims to have recently allocated to the justice system to improve the sharing of information.²⁹

- 27. D.M. SALTERS, *MS*, Oxford Coroners Court, 21st July 2014; D.M. SALTERS, *JW*, Oxford Coroners Court, 21st Mar. 2019; D.M. SALT-ERS, *DD*, Oxford Coroners Court, 16th May 2019.
- 28. Michael KRIGSMAN, UK Prison IT: Massive and 'spectacular' Failure, ZDNet, 13th Mar. 2009, URL: http s://www.zdnet.com/article

/uk-prison-it-massive-andspectacular-failure/.

29. Prisons, Courts and Victim Services Will Benefit from Spending Review Funding, GOV.UK, 26th Nov. 2020, URL: https://www.gov.uk/gov ernment/news/prisons-court s-and-victim-services-willbenefit-from-spending-revi ew-funding. Second, the level of attention paid to prisoners was a concern.

- MS 'Prisoners (particularly those with mental health difficulties...) are not routinely assessed on return from court hearings.'
- JW '[A] decision was taken during the reception process to step down to twice hourly observations.'
- DD '[T]here is a danger in leaving the issue of in possession medication [i.e. medication possessed by a prisoner] solely to healthcare [i.e. not the guards]. There could be a time delay of several hours between a prisoner having a mental health crisis and healthcare involvement/reassessment...'

It cannot rigorously be inferred on the basis of three reports that first time prisoners generally are much more likely to commit suicide. However, not a single report concerns reoffenders. The possibility that first time prisoners are much more likely to commit suicide or otherwise suffer from mental health problems should be thoroughly investigated. Statistics for the whole of England and Wales suggest that this hypothesis is plausible. The risks of the first night, and first time in prison generally, were recognised in a 2014 report for the Prisons and Probations Ombudsman for England and Wales.³⁰ The report stated that 36% of prisoners who took their own lives were in prison for the first time. Approximately 8% of sentences are handed down to first time offenders.³¹ HMP Bullingdon should therefore investigate its procedures for receiving first-time prisoners, even if its own situation turns out to differ from that nationally.

3.5.2 Under-resourced health service

Several reports mentioned under-staffing in the health service.³²

- AH 'I heard evidence that a Major Trauma Centre is expected to have a major trauma lead consultant, and a trauma co-ordinator (in accordance with NICE guidelines).' The Trust had not filled those posts since 2018; the report was sent in February 2021.
 - 30. Helen STACEY, Learning from PPO Investigations: Risk Factors in Self-Inflicted Deaths in Prisons, Prisons and Probation Ombudsman, Apr. 2014, URL: http://www.ppo.gov .uk/app/uploads/2014/07/Ri sk_thematic_final_web.pdf.
 - 31. Peter CUTHBERTSON, Who Goes to Prison? An Overview of the Prison Population of England and Wales,

Dec. 2017, URL: https://civita s.org.uk/content/files/who goestoprison.pdf.

32. Gemma Brannigan, *AH*, Oxford Coroners Court, 12th Feb. 2021; Nicholas Graham, *CG*, Oxford Coroners Court, 16th Dec. 2013.

- CG There was 'little resilience in the system to tolerate absence or sudden sickness of personnel' in the South Central Ambulance Service.
- MG 'There were no beds on a trauma ward'; the move to the neuroscience ward may have contributed to the death of the deceased, because training differed.
- CS Staff must listen to ensure that patients with epilepsy do not drown whilst bathing. In a busy ward they may be distracted.

Austerity measures have been found to have contributed to hundreds of thousands of excess deaths.³³ It is unclear, however, whether it is inevitable that there will be a few cases where resources are overstretched given any reasonable level of funding. Accordingly, these PFDs alone do not contribute very much to the debate about the correct level of funding for healthcare. They should, however, be thoroughly investigated by the relevant NHS trusts, since they may be indicative of local problems.

3.5.3 Information processing and communications in the emergency services

Several reports mentioned communications breakdowns or a failure to act on what should have been known.³⁴

- LT 'Her explanations of her overdoses were not consistent with her actions and contained inaccuracies, she was not challenged about this by the mental health team.'
- MG An important warning 'often... would not be seen because sometimes a doctor does not actually exit the record but keeps it open (albeit secure).'
- PNN A doctor in hospital was incorrectly given the impression from paramedics at a nursing home that a patient was unconscious.
 - CG The family of the deceased were incorrectly given the impression that an ambulance would soon arrive, and so did not e.g. call up locally trained first aiders.
 - 33. Johnathan WATKINS et al., "Effects of Health and Social Care Spending Constraints on Mortality in England: A Time Trend Analysis", in: *BMJ Open* 7.11 (1st Nov. 2017), e017722, ISSN: 2044-6055, 2044-6055, DOI: 10.1136/bmjopen-2 017-017722, pmid: 29141897; Frances DARLINGTON-POLLOCK, Mark A GREEN and Ludi SIMPSON,

"Why Were There 231 707 More Deaths than Expected in England between 2010 and 2018? An Ecological Analysis of Mortality Records", in: *Journal of Public Health* (fdab023 26th Mar. 2021), ISSN: 1741-3842, DOI: 10.1093/pu bmed/fdab023.

34. Nicholas GRAHAM, DS, Oxford Coroners Court, 25th Sept. 2013. DS An ambulance crew were incorrectly given to believe that they should stand down, whereupon they returned to hospital. This delayed treatment.

Again, this is consistent with broader trends, and so local investigations should be undertaken.³⁵

35. Carl MACRAE, "When No News Is Bad News: Communication Failures and the Hidden Assumptions That Threaten Safety", in: *Journal* of the Royal Society of Medicine 111.1 (1st Jan. 2018), pp. 5–7, ISSN: 0141-0768, DOI: 10.1177/014107 6817738503.

3.6 Maps



Locations of deaths mentioned in PFDs, Oxfordshire coroner area

ap: J.P. Loo • Source: Scraped from the Judiciary's website • Created with Datawrapper

Locations of deaths mentioned in PFDs, Oxfordshire coroner area



Map: J.P. Loo • Source: Scraped from the Judiciary's website • Created with Datawrapper

Figure 9: Location of deaths mentioned in reports.

4 Conclusion

Patterns in PFDs are consistent with broader findings about preventable deaths in healthcare and prisons. Given their limited numbers, they do not contribute substantially to any conclusions nationally. Conversely, however, clear national trends make it more plausible that these PFDs identify important local failings. Three suggestions present themselves. First, generally, each of these trends (and indeed any others) should be closely scrutinised by relevant bodies—district and county councils, local administrators of government bodies such as prisons and hospitals, and local civil society.

Second and more specifically, both prisons and hospitals clearly need to improve the way they process and exchange information. Third and finally, prisons should be cautious in lowering the level of observation of first time prisoners with mental health issues.

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