

Inside Healthcare

A review of healthcare provided to people who died from a 'natural' or other 'non-natural' cause of death while detained in prison or were transferred to an acute NHS hospital or hospice, while detained.



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A review of healthcare provided to people who died from a 'natural' or other 'non-natural' cause of death while detained in prison or were transferred to an acute NHS hospital or hospice, while detained.

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Mark C Juniper FRCP FFICM

NCEPOD Clinical Co-ordinator

Great Western Hospitals NHS Foundation Trust

Vivek Srivastava FRCP (Glasg) MD

NCEPOD Clinical Co-ordinator

Guy's and St Thomas' NHS Foundation Trust

Neil Smith PhD

Senior Clinical Researcher and Deputy Chief Executive

D'Marieanne Koomson BSc (Hons)

Clinical Researcher

Michelle Galea

Senior Administrative Officer

Marisa Mason PhD

Chief Executive

The idea for this study was proposed by **Dr Mary Piper OBE FRCP MFPHM**, Retired Consultant Physician and Public Health Physician for People in Prison.



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FOREWORD

The government has a stated expectation that “*prisoners get the same healthcare and treatment as anyone outside of prison.*” Whilst an understandable and laudable aspiration, it would perhaps seem more realistic to expect an “equivalent” quality of care, given the inevitable constraints imposed by security considerations within the prison service. This report acknowledges the context in which health and care is provided by clinicians and prison staff.

Having worked as a hospital consultant in a city with two Category A high security prisons, I can personally attest to some of the inherent difficulties in providing healthcare for prisoners touched upon in this report, for example, prisoners refusing to attend hospital and the unavailability of suitable escorts.

In an ideal world it would of course be preferable to fully involve both patient and family in communication and decision-making, but in this group of patients, particularly those detained for the most serious offences who are believed to pose an ongoing risk to staff, other patients and the public, a balance must be struck between healthcare needs and security.

This report highlights some of these issues and makes recommendations to improve care by involving patients and family by earlier planning for possible emergency treatment or for palliative and end of life care.

When considering these data and attempting to draw comparisons with the quality of care provided in the general population, it is important to remember that many aspects of care in the population at large currently do not meet the relevant standards. The reviewers, however, have made judgements about whether prisoners received equivalent standards of care, using their experience which in many cases is based upon working both in primary care and in prisons.

It should be noted that although the standard of physical healthcare in prisons was often considered to have fallen short, when comparing mental healthcare, the prison service was often thought to be superior, and there may be lessons to be learned from the way mental healthcare services are organised, for example by providing in-reach services and easier access to secondary care.

It would be disingenuous to pretend that undertaking this study was anything other than challenging. This perhaps also reflects the reality of providing high quality healthcare where there is often a very real and necessary security barrier between prisons and the healthcare services provided for the general population. Nonetheless, there are numerous examples within the report which identify opportunities to improve care by employing relatively simple measures. These include cardiopulmonary resuscitation training for prison staff, using the national early warning score (NEWS2) to identify deterioration, ensuring hospital discharge summaries are provided in a timely manner, and good communication about clinical pathways for chronic conditions, palliative and end of life care.

There are also opportunities to improve and better share learning from deaths; perhaps a system in which a prison reviewer worked alongside a medical examiner might be more effective?

As ever the Trustees are grateful to all those study advisors and reviewers who have given so generously of their time, in addition to our staff and clinical co-ordinators. In addition, we are grateful to the Health Foundation for funding the work, and to NHS England for helping us reduce the burden we would have had to place on prisons, by granting us access to central clinical data.



Ian C Martin Chair of NCEPOD

INTRODUCTION

From 1st January 2018 to 31st December 2020, in prisons in England and Wales, an average of 314 prisoners died per year while in prison custody. Of this yearly average figure, 183 prisoners died from natural causes*, representing 58.3% of all deaths in prison, and 81 prisoners died from other 'non-natural' causes†, representing 25.8% of all deaths in prison.^[1] The fact that prisoners have a higher mortality rate than the general population has been widely reported.^[2] Despite the fact that more people in prison die from 'natural' and other 'non-natural' causes than from suicide, such deaths are often considered inevitable and therefore learning from them seldom reaches the public domain.

It can be seen from this report that these deaths in prison are occurring in a much younger group of people (median age 67.5 years vs 86.7 years in the general population for the same time period).^[3,4] This significant reduction in life expectancy is far from 'natural', and the years of life lost are considerable.

Death has been used as a starting point for this work, but the reality is that poor health underlies most deaths, and poor healthcare can make that situation worse, therefore, this should be a focus for improvement. As for the general population, the prison population is ageing, and their general healthcare needs are increasing as a result. Despite prison healthcare having been a commissioned NHS service since 2006, it has not been designed to meet the increasing healthcare needs of its population. The prison setting is unique. There will be prisoners who become patients as emergencies with an acute condition such as sepsis, or they may have one or more, long-standing or new long-term conditions such as coronary heart disease, which can be made worse if there are interactions with other substances such as illicit substances. To cover this important area, this report also looks at other 'non-natural' deaths, where the death is neither natural, nor intentionally self-inflicted.

Data presented here look in detail at the clinical pathways for five common clinical conditions, covering screening and assessment, the healthcare provided, recognition of deterioration, and medications management, through to emergency hospital transfers and end of life care. The report highlights the need for healthcare in prisons to be underpinned by robust, well communicated processes and protocols to help staff identify and respond promptly to emergency situations, as well as ensuring appropriate involvement of specialists from local hospitals for those with long-term conditions, particularly palliative and end of life care services. The findings should be used locally with Care Quality Commission (CQC)/HM Inspector of Prisons (HMIP) reports, as they will provide detail at a prison level and help highlight any systemic issues within.

This is not the first report to highlight the issues of healthcare in prisons, and the findings reflect those highlighted in the HMIP annual report that was published prior to the data collection for this study.^[5] There have been many describing a system within which prisoners who become patients cannot access healthcare reliably either in the prison or in local hospitals.^[5-11] However, the aim is that this report will add to the body of evidence, and support both healthcare professionals and operational staff working in prisons to drive local changes that are needed to improve the quality of healthcare and outcomes, knowing that they are not the only ones in this position.

* A **natural death** is any death of a person as a result of a naturally occurring disease process. This includes those contributed to by alcohol or drug dependence (where the death was related to the effects of long-term substance use) but not poisoning in a specific incident.

† An **other 'non-natural' death** is any death of a person that cannot easily be classified as natural causes, self-inflicted or homicide. This includes accidents arising from external causes, including apparently accidental alcohol and drug poisoning and deaths of which, even after all investigations have been concluded, the cause remains unascertained or unknown.

SUMMARY OF THE KEY MESSAGES

The PPO fatal incident report, NHSE independent clinical review and clinical notes from SystmOne were obtained for 247 people who died in prison, or in hospital while detained. These data were reviewed by a group of clinicians including prison general practitioners, specialist nurses, consultants in palliative medicine, and consultants in psychiatry. In addition, an anonymous survey collected the views of healthcare professionals working in prisons.

Death was used as point of entry into the study, but the report focuses on the quality of healthcare in the preceding months.

The aim was to improve healthcare in prisons for current and future prisoners.

In conclusion: the report has **15 recommendations** and listed below are the **six primary areas for improvement**.

Examples of excellent care we found, particularly in mental health and end of life care, highlighting what can be achieved.

1 IMPROVE HEALTHCARE ASSESSMENTS AND THE MONITORING OF LONG-TERM CONDITIONS

1



26.9% of patients with **advanced chronic diseases** (e.g. heart failure) had the most overall **room for improved healthcare**. **15.4%** in the **frequency of clinical review**.

44.2% of patients had **scope for improvement in health assessments**. Frequent areas for improvement were **history taking for physical health problems, mental health conditions or smoking, alcohol or drug misuse**.

2 RECOGNISE CLINICAL DETERIORATION AND USE NEWS2

2



68.0% of patients had evidence of **clinical deterioration prior to death**.

87.1% of patients had an **emergency transfer to hospital** due to **acute deterioration** in physical health.

NEWS2 was used to **assess 55.6%** of patients and to **monitor 40.5%**. The **use of NEWS2** could have been **improved for 30.7%** of patients.

Clinical **deterioration** was **not managed appropriately in 27.3%** of patients prior to emergency hospital transfer.

3 PLAN FOR EMERGENCY TRANSFER TO HOSPITAL AND IMPROVE COMMUNICATION AND HANDOVER

3



64.6% of patients required **emergency transfer to hospital** in the 12-months prior to their death.

13.5% of **transfers to hospital** were **preventable or avoidable**.

No clinical handover in **29.9%** of patients. **86.4%** of patients had a **discharge letter** and **8.8%** of them were **poor or unacceptable**.

Discharge from hospital back to prison was **not appropriate for 19.8%** of patients.

4 PROVIDE CARDIOPULMONARY RESUSCITATION TRAINING

4



CPR was initiated in prison for **50 patients** (**31** who died of **natural causes** and **19** who died of **other 'non-natural' causes**). There was **room for improvement** for **22 patients**.

CPR training for prison staff was identified as an **important area for improvement**. In **6/22** patients, **immediate CPR could not be started due to lack of training** even though **prison staff were first on the scene**.

5 IMPROVE PALLIATIVE AND END OF LIFE CARE SERVICES

5



A **palliative or end of life care (EoLC) plan** was documented in **44.7%** of patients who died of a **natural cause**. Reviewers considered that **an additional 23.5%** of patients were **suitable for EoLC planning**.

The **EoLC process** could have been **improved in 45.2%** of patients where death was from **natural causes**.

The **most common areas for improvement** were **involving the patient and family** (**27 patients**), and **advance care planning for end of life** (**27**).

6 LEARN FROM, AND SHARE THEMES FROM PPO / NHSE INDEPENDENT CLINICAL REVIEWS

6



There was the **potential to learn from the NHS clinical review** in more than half of the cases. This applied to both the **natural deaths** where opportunities to learn were identified in **55.6%**, and the **'non-natural' deaths** where they were identified in **57.1%**.

RECOMMENDATIONS

These recommendations have been formed by a consensus exercise involving all those listed in the acknowledgements. The recommendations have been independently edited by medical editors experienced in developing recommendations for healthcare audiences to act on.

The recommendations highlight areas that are suitable for regular local clinical audit and quality improvement initiatives by those providing care to this group of patients. Quality Improvement tools are provided with this report to support this. The findings should also be considered alongside reports from the Care Quality Commission (CQC) and HM Inspector of Prisons (HMIP).

Suggested target audiences to action recommendations are listed in italics		Key points (see each chapter)
HEALTHCARE STAFFING		
1	<p>Provide enough appropriately skilled prison healthcare staff to:</p> <ol style="list-style-type: none"> a. Undertaken healthcare assessments at the times they are needed, to include late receptions. b. Ensure that initial healthcare assessments identify all healthcare needs. c. Support the continuity of clinical care for the management of long-term conditions and ensure long-term conditions are given equal priority to acute care. d. Provide prompt acute care as needed. e. Ensure robust handovers are undertaken between staff on a day-to-day basis and if a transfer to hospital is needed. <p><i>Primary target audiences: Ministry of Justice, Department of Health and Social Care, NHS England, NHS Wales, HMPPS</i> <i>Supported by: Prison governors, CQC, HMIP</i></p>	<p>3.6 - 3.7 5.1 - 5.6 6.1 - 6.5 7.5</p>
ACUTE DETERIORATION, CLINICAL OBSERVATIONS, AND TRANSFER TO HOSPITAL		
2	<p>After any clinical interaction for an acute episode, outline a plan for regular monitoring of clinical observations, the duration for this monitoring tailored to the patient's needs, including the use of NEWS2 (National Early Warning Score 2) scoring and a protocol for escalation of care, should the patient deteriorate.</p> <p><i>Primary target audience: Prison healthcare staff</i> <i>Supported by: Prison governors</i></p>	<p>3.6 - 3.7 6.8 - 6.11 9.1 9.5</p>
3	<p>Ensure appropriate clinical cover is in place both day and night, including protocols for the escalation to senior clinicians, if not on site, in the event of significant deterioration or a medical emergency.</p> <p><i>Primary target audience: Prison healthcare staff</i> <i>Supported by: NHS England, NHS Wales, HMPPS, CQC, HMIP</i></p>	<p>6.8 - 6.11 9.1 - 9.2 11.5</p>
4	<p>Minimise last minute delays in the emergency transfer of a patient to hospital by:</p> <ol style="list-style-type: none"> a. Agreeing in advance a standard process applicable to most transfer needs. b. Adapting standard process for prisoners with special restrictions/conditions in place. c. Ensuring collaboration between healthcare and operational staff in prisons. <p><i>Primary target audiences: Prison healthcare leads, prison governors</i> <i>Supported by: Medical directors, NHSE England, NHS Wales, HMPPS, CQC, HMIP</i></p>	<p>7.1 - 7.6</p>

BASIC LIFE SUPPORT TRAINING		
5	<p>Establish a basic life support (BLS) training programme for prison operational staff with the aim of training all prison staff in cardiopulmonary resuscitation (CPR) and the use of automated external defibrillator (AED) devices. Provision of compression-only CPR could be a first step towards this goal. The location of AEDs should also be easily identifiable and accessible to staff in all parts of the prison.</p> <p><i>Primary target audience: Prison governors</i> <i>Supported by: Prison healthcare staff, HMPPS, CQC, HMIP</i></p>	6.12 - 6.13
DISCHARGE FROM HOSPITAL TO PRISON		
6	<p>Recognise the limitations of healthcare that can be provided in prison. When discharging someone from hospital include a discharge letter which states the clinical diagnosis, ongoing health, and social care needs, and follow-up plans.</p> <p><i>Primary target audience: Hospital clinicians who discharge patients</i> <i>Supported by: Hospital medical directors, NHSE England, NHS Wales</i></p>	7.5 - 7.6 10.4 - 10.5
END OF LIFE CARE PLANNING		
7	<p>Prison healthcare staff should receive training in end of life care planning to:</p> <ol style="list-style-type: none"> Identify patients approaching their end of life, including advanced non-malignant conditions. Co-create advance care plans with the patient and their family/carers, to include out of hours care, such as anticipatory medications. <p><i>Primary target audience: Prison healthcare staff</i> <i>Supported by: Prison governors, HMPPS</i></p>	8.1 - 8.8 8.10 - 8.11 9.5 11.9
8	<p>Prison healthcare staff and local palliative care services should work together to ensure that when needed, patients have access to clinical reviews, medications and transfer to a hospice if required.</p> <p><i>Primary target audience: Prison healthcare leads</i> <i>Supported by: Prison governors, HMPPS, local palliative care leads in hospital or the community, CQC, HMIP</i></p>	8.1 8.7 - 8.11
9	<p>Provide guidance, including the clinical information required, to support prison governors and healthcare staff in applications for compassionate release.</p> <p><i>Primary target audience: HMPPS, prison governors</i> <i>Supported by: NHS England and NHS Wales, CQC, HMIP</i></p>	8.8 - 8.11
IMPACT OF SUBSTANCE MISUSE ON LONG-TERM CONDITIONS AND MEDICATIONS		
10	<p>Identify the potential impact of substance misuse on long-term health conditions and adverse interactions with any medications the patient is taking or may be prescribed. Using point-of-care testing for substance misuse during health assessments may help facilitate this.</p> <p><i>Primary target audience: Prison healthcare leads</i> <i>Supported by: Prison governors, HMPPS</i></p>	3.1 3.3 - 3.4 5.2 - 5.5
NHS CLINICAL REVIEWS AND FATAL INCIDENT REPORTING		
11	<p>Ensure that all recommendations from the Prisons and Probation Ombudsman (PPO) fatal incident reports have clear, measurable outcomes with a timeframe for delivery.</p> <p><i>Primary target audience: Prisons and Probation Ombudsman (PPO)</i> <i>Supported by: NHS clinical reviewers</i></p>	10.7 - 10.9

12	<p>Ensure clinical reviewers with experience of the complex medical care provided in natural and other ‘non-natural’ deaths in prisons are included in processes of both clinical review and formulating recommendations.</p> <p><i>Primary target audience: NHS England and Health Inspectorate Wales</i> <i>Supported by: NHS clinical reviewers</i></p>	10.1 - 10.3 10.6 - 10.7
13	<p>Produce themed reviews on deaths within prisons. Identify local issues in individual prisons and general issues across the wider prison estate. Include all learning opportunities related to healthcare not just those directly related to the death. Use the clinical reviews, carried out as part of the Prisons and Probation Ombudsman (PPO) fatal incident report, to identify the themes.</p> <p><i>Primary target audiences: Prisons and Probation Ombudsman (PPO), NHS England, Health Inspectorate Wales</i> <i>Supported by: NHS clinical reviewers, prison healthcare staff, prison governors, HMPPS</i></p>	10.7
INFORMATION SYSTEMS AND DATA SHARING		
14	<p>Develop the information technology systems required for healthcare record-keeping in prisons, using feedback from those who use it for day-to-day delivery of healthcare to inform the developments.</p> <p><i>Primary target audiences: Commissioners, IT service providers, NHS England, NHS Wales</i> <i>Supported by: Prison governors, prison healthcare staff</i></p>	11.2 11.3
15	<p>Ensure prison healthcare and operational staff share information, to assist in the care of patients in the event of significant deterioration or a medical emergency.</p> <p><i>Primary target audience: Prison healthcare staff, prison governors</i> <i>Supported by: NHSE, HMPPS, CQC, HMIP</i></p>	11.4
FUTURE RESEARCH		
16	<p>Establish an ongoing programme of research to evaluate the healthcare needs of prisoners, to ensure prison healthcare services can provide safe and effective care.</p> <p><i>Primary target audiences: National Institute for Health Research, NHS England, Welsh Government</i> <i>Supported by: Prison healthcare staff, prison governors, HMPPS, CQC, HMIP</i></p>	All

The recommendations in this report support those previously made by other organisations, so for added value should be read alongside:

NICE: [NICE Guideline 57 - Physical health of people in prison](#)

NICE: [Quality standard 156 - Physical health of people in prison](#)

CQC/HMIP: [Prison Inspections](#)

CHAPTER 1

METHOD AND DATA RETURNS

METHOD

Study Advisory Group

A group of stakeholders was convened to determine the objectives of the study, advise on the key questions, comment on the report, and agree the recommendations. The study advisory group (SAG) comprised healthcare professionals, prison governors, prison research academics, a former prisoner and third sector organisations.

Aim

To identify remediable factors in the clinical approach to, and organisation of healthcare for people who died from natural or other 'non-natural' causes while detained in prison or who were transferred to an acute NHS hospital or hospice, while detained.

Objectives

The SAG identified the following areas to address:

- Whether the death was thought to be avoidable or premature
- The quality, nature and timeliness of healthcare provided
- Recognition and treatment of acute medical emergencies and deterioration
- Prescribing and medicines reconciliation
- Adherence to national clinical guidelines/quality standards relevant to the medical conditions being treated (e.g. NICE guidelines and quality standards)
- Quality of the NHS commissioned independent clinical review
- Quality of the Prison and Probation Ombudsman (PPO) fatal incident reports and action plans

Prison participation

All prisons in England and Wales were invited to provide data for the study.

Study population and case ascertainment

Inclusion criteria

All adults aged 18 years or over, who died in prison, from a death categorised as a natural or other 'non-natural'.

*A **natural death** is any death of a person as a result of a naturally occurring disease process. This includes those contributed to by alcohol or drug dependence (where the death was related to the effects of long-term substance use) but not poisoning in a specific incident.*

*An **other 'non-natural' death** is any death of a person that cannot easily be classified as natural causes, self-inflicted or homicide. This includes accidents arising from external causes, including apparently accidental alcohol and drug poisoning and deaths of which, even after all investigations have been concluded, the cause remains unascertained or unknown.*

Sampling period

Natural deaths occurring between 1st January 2019 and 31st December 2020 inclusive.

Other 'non-natural' deaths occurring between 1st January 2018 and 31st December 2020 inclusive (deaths from 2018 were included so that there were enough peer reviewed cases to draw conclusions).

Sampling of deaths to review

Using the PPO website, all deaths categorised as natural or other 'non-natural' deaths for the study inclusion period were identified. Only deaths with a published PPO fatal incident report at the time of sampling were included. A maximum of six deaths were selected from each prison for peer review. Where possible, two other 'non-natural' deaths and four natural deaths were sampled.

Data collection

For each death included in the sample, a copy of the PPO fatal incident report and action plan (where available) were obtained, along with the associated NHS clinical review, and copied extracts of the relevant parts of the patient's notes from SystmOne™ and/or hospital case notes.

All SystmOne™ notes for the 12-months leading up to the death:

- Clinical annotations
- Clinic letters
- Electronic prescribing
- Test results
- Physical health observations/NEWS2 scores
- Healthcare provider Initial review/72-hour review report
- Task messages requested
- Handover and daily checks record
- Treatment escalation plans

Peer review of the case notes

A multidisciplinary group of case reviewers were recruited to peer review the case notes, comprising prison general practitioners, specialist nurses, consultants in palliative medicine, and consultants in psychiatry.

All patient identifiers were removed before the case notes were presented to the group. Using a semi-structured electronic questionnaire, each set of case notes was reviewed by at least one reviewer within a multidisciplinary meeting. At regular intervals discussion took place, allowing each reviewer to summarise their cases and ask for opinions from other specialties or raise aspects of the case for further discussion.

Data collection: healthcare professional staff survey

This open-access anonymous survey was used to collect data on the views of healthcare professionals working in prisons. It was developed with input from relevant groups to reflect the target audience and the survey link was sent to a wide group of stakeholders to disseminate via local and national professional networks. The data were not linked to any other aspect of clinical data collection.

Information governance

All data received and handled by NCEPOD comply with all relevant national requirements, including the General Data Protection Regulation 2016 (Z5442652), Section 251 of the NHS Act 2006 (22/CAG/0007), and the Code of Practice on Confidential Information. Each patient included was given a unique NCEPOD number. All electronic questionnaires were submitted through a dedicated online application. HM Prison and Probation Service National Research Committee (NRC) approval was received.

Data analysis

Following cleaning of the quantitative data, descriptive data summaries were produced.

Review of the data showed that deaths from COVID-19 did not influence or skew the overall findings.

Qualitative data collected from the reviewers' opinions and free text answers were themed, where possible to allow additional quantitative analysis.

Denominators in the report will change depending on the data source. This deep dive uses a qualitative method of peer review from which anonymised case studies have been created and used throughout the report to illustrate themes. The sampling method of this enquiry, unlike an audit, means that data cannot be displayed at a prison or regional level.

The findings of the report were reviewed prior to publication by the SAG, case reviewers and the NCEPOD Steering Group which included clinical co-ordinators, trustees, and lay representatives.

DATA RETURNS

Prison participation

There are 123 prisons in England and Wales. His Majesty's Government run 109 of those prisons. Of these, 84 prisons had one or more death meeting the study criteria during the sampling time periods (range 1 – 20 deaths). To minimise data burden, records for up to a maximum of six deaths were requested from all 84 prisons.

Clinical data

There were a total of 618 all cause deaths in the prison population between 1st January 2019 and 31st December 2020, of which 382 were natural deaths, and 943 all cause deaths between 1st January 2018 and 31st December 2020, of which 140 were classed as other 'non-natural' deaths.^[1]

Identification of the deaths through the available PPO reports resulted in 410 deaths which met the inclusion criteria of for the study across the 84 prisons. After sampling (not exceeding six deaths per prison) a total of 303 deaths were identified for inclusion (242 natural deaths and 61 other 'non-natural' deaths).

The final sample of prisoner deaths for which there was complete data to review was 247 patients (198 natural deaths and 49 other 'non-natural' deaths) from 70 prisons.

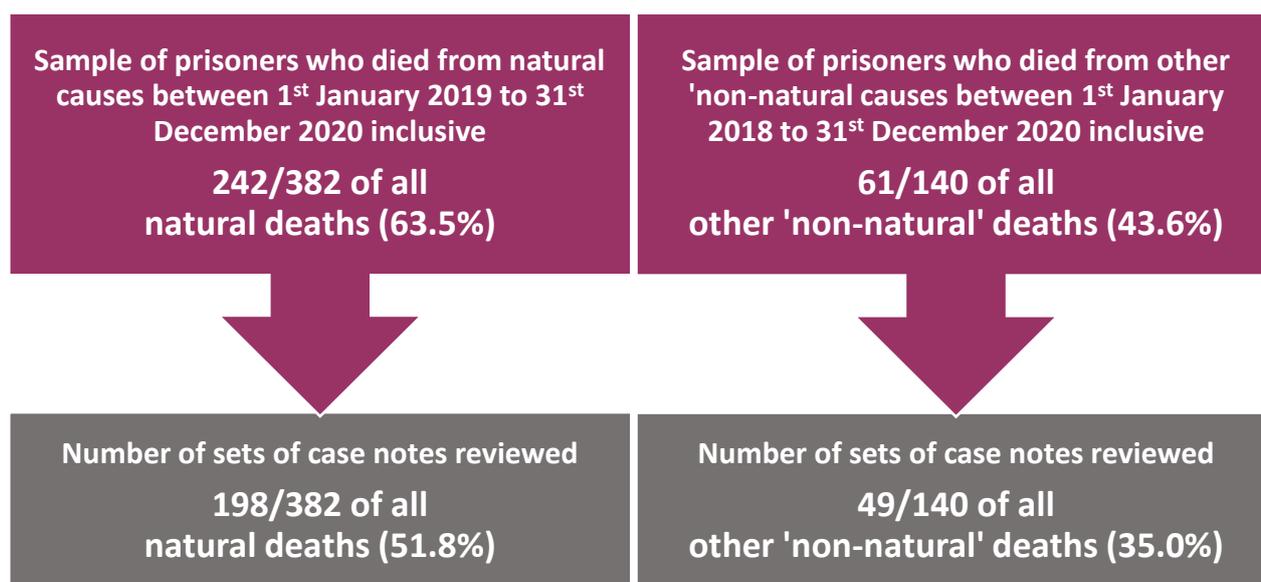


Figure 1.1 Data returns.

Healthcare survey data

An on-line survey was answered by 117 prison healthcare staff, the majority of whom were:



Other staff who responded included advanced clinical practitioners, physiotherapists, healthcare assistants and healthcare administrative staff.

CHAPTER 2

STUDY POPULATION

KEY POINTS	
2.1	The average age of the 198 patients who died a natural death was 63.8 years and of the 49 who died a 'non-natural' death it was 40.4 years.
2.2	There were 135/247 (54.7%) deaths in category C prisons and 112/247 (45.3%) deaths in category A or B prisons in this study.
2.3	There were 199/247 (80.6%) patients in this study who were found to have at least one long-term medical condition. These included hypertension, diabetes, cancer, coronary disease, and chronic obstructive pulmonary disease, a history of substance misuse, and serious mental illness were also present.
2.4	In 62/240 (25.8%) cases the patient was under the care of the mental health in-reach service prior to death. This was more common in those who died from other 'non-natural' causes (21/48; 43.8%).
2.5	Learning difficulty was documented in the healthcare records of 27/227 (11.9%) prisoners.
2.6	Of those whose death was from a natural cause, 131/193 (67.9%) patients were at least mildly frail (Rockwood score 5-9). Only two of the other 'non-natural' deaths fell into this category.

Demographics

The average age of the patients who died a natural death was 63.8 years (median 66), and of those who died a 'non-natural' death it was 40.4 years (median 41) (figure 2.1 and table 2.1). Seven of the deaths reviewed were women, an under-representation when compared to the percentage of women in prison.^[12]

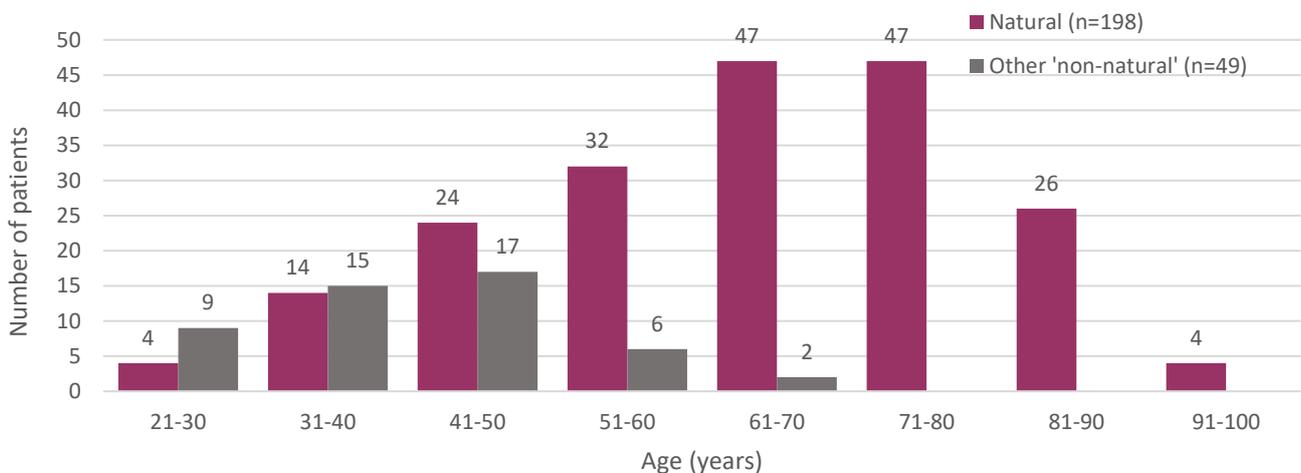


Figure 2.1 Age of the peer reviewed population
PPO data

Table 2.1 Age of patients by type of death

	Natural (n=198)	Other 'non-natural' (n=49)
Mean age	63.8	40.4
Median age	66	41
Age range	21-98	21-67

PPO data

In terms of ethnicity, 124/247 (50.2%) people were recorded as White British, 74/227 (32.6%) were British or 'mixed British', and only 22/247 (8.9%) recorded as being from Black, Asian or mixed ethnic background groups, these percentages are lower than the general population.^[13] Ethnicity was not known for 22/247 (8.9%) people.

Those who died from other ‘non-natural’ deaths were more likely to die in prison, than those who died a natural death (figure 2.2).

Table 2.2 Location of death by type of death

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Prison	84	42.4	37	75.5	121	49.0
Hospital	95	48.0	12	24.5	107	43.3
Hospice	18	9.1	0	0.0	18	7.3
Home/community	1	<1	0	0.0	1	<1
Total	198		49		247	

PPO data

Duration of time spent in prison

There were 135/247 (54.7%) deaths in category C prisons (training and resettlement: provide skills development for lower risk prisoners) and 112/247 (45.3%) deaths in category A (high security: prisoners considered an on-going threat to public, police, or national security) or B (local or training: long-term or high security prisoners) prisons. However, as prisoners held in higher security prisons are more likely to be considered an ongoing threat to public safety, those held in category A or B prisons are more likely to die while still serving their sentence even when compassionate release might appear appropriate on medical grounds.

Transfer of prisoners between prisons is common. Around one in five prisoners is moved between prisons within a three-month period.^[14] This is of particular relevance to prisoners with long-term medical conditions where continuity of healthcare is an important part of disease management. Medical records are transferred automatically between prisons in England and Wales as they are available on the same electronic system. It is, however, vital to ensure that long-term conditions that require ongoing active management are flagged for ease of identification in medical records. It is also important to consider the need for ongoing hospital or specialist care when deciding to transfer patients between prisons.

Where the location prior to the final episode of healthcare was known, transfer from another prison occurred in 159/229 (69.4%) cases reviewed (table 2.3). There were 112/228 (49.1%) patients who had been in the final prison for more than 12-months (figure 2.2).

Table 2.3 Location prior to arrival in last prison

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Another prison	127	69.0	32	71.1	159	69.4
Court	28	15.2	5	11.1	33	14.4
Home/recalled	20	10.9	7	15.6	27	11.8
Hospital/mental health unit	9	4.9	1	2.2	10	4.4
Subtotal	184		45		229	
Unknown	14		4		18	
Total	198		49		247	

Reviewer assessment form data

Of the people who died a natural death, 126/198 (63.6%) had been in prison for more than two years. There were however, 86/198 (43.4%) who had been in their final prison for a year or less (Figure 2.3). This highlights prison ‘churn’, the frequency with which prisoners are moved between prisons.^[14]

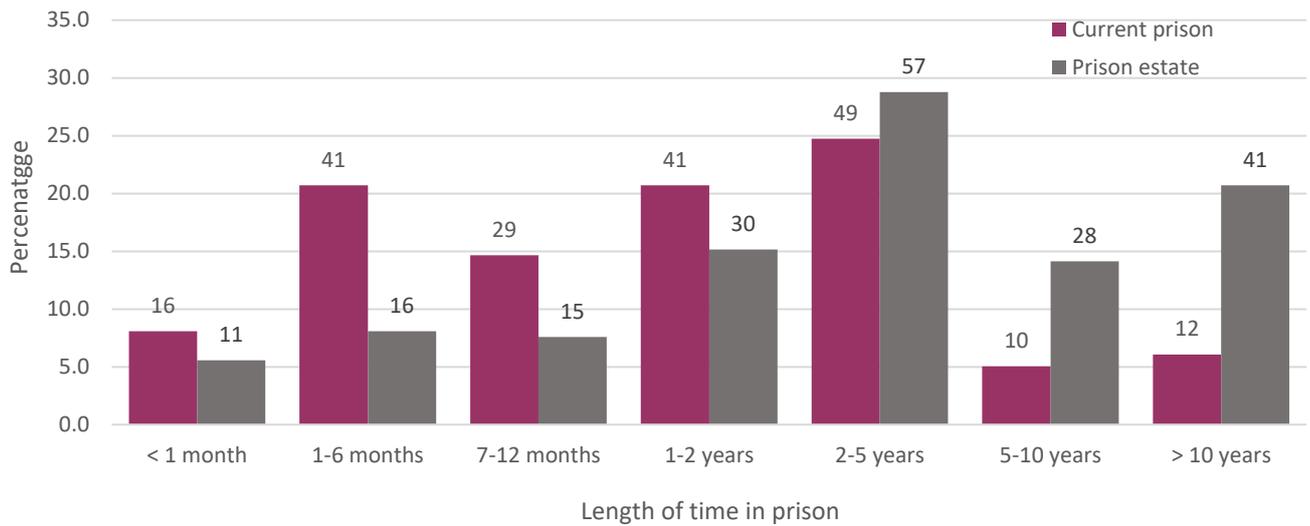


Figure 2.2 Length of time in prison estate and current prison (natural deaths n=198)
 PPO data and reviewer assessment form data

By comparison, in the people who died a 'non-natural' death, only 17/49 (34.6%) had been in prison for more than two years and 36/49 (73.5%) had been in their final prison for a year or less (figure 2.3). Data shown in subsequent chapters shows that deaths in this category related more to access to illicit substances than specifically due to the delivery of healthcare.

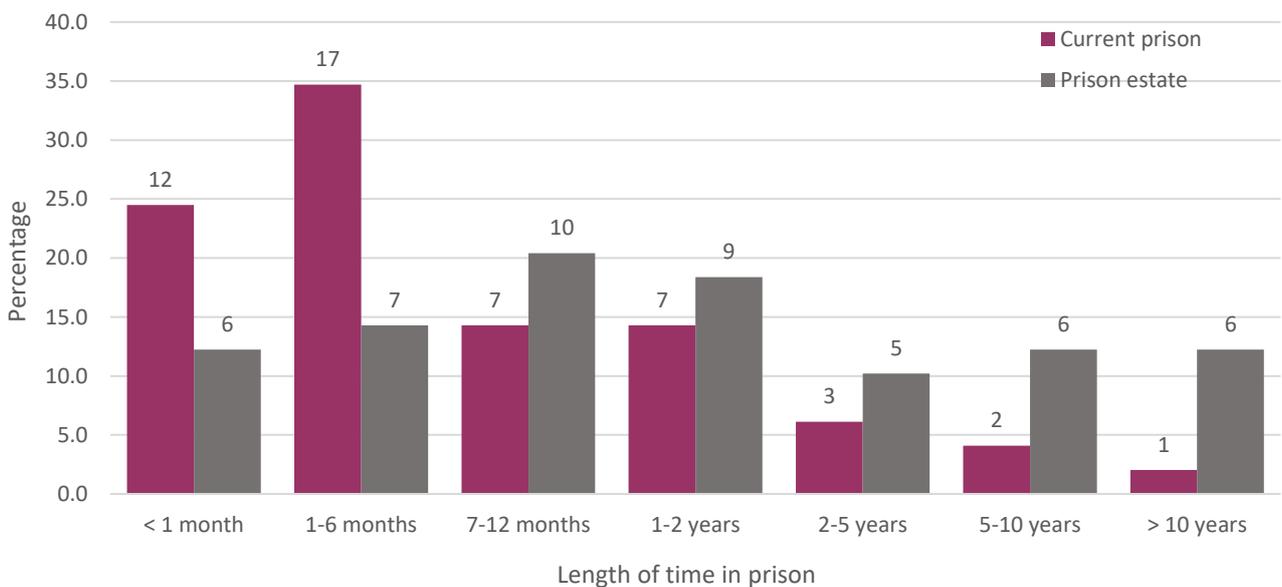


Figure 2.3 Length of time in prison estate and current prison (other 'non-natural' deaths n=49)
 PPO data and Reviewer assessment form data

Long-term conditions

The prison population is known to have a high level of morbidity. Cardiovascular risk is higher than in the general population, occurring at a younger age.^[15] Small studies have also shown that type 2 diabetes is also more prevalent, and the disease burden is likely to increase.^[16] It is therefore important that effective systems are in place to support the management of these long-term conditions.

There were 199/247 (80.6%) patients in this study who were found to have at least one long-term medical condition. The eight most common health conditions identified in the cases reviewed are shown in Figure 2.5. Heart failure and chronic kidney disease were also present in just over 10% of the overall study

population. The most common co-morbid condition was hypertension which was present in 71/247 (28.7%) patients, the same prevalence as in the UK adult population.^[17] Noting that these data apply to those who died, comorbidity was likely to be higher than the general prison population. Diabetes was present in more than a quarter of patients and cancer, coronary disease, and chronic obstructive pulmonary disease (COPD) were each present in a fifth. For heart and circulatory diseases, the prevalence in the UK adult population is around 14%, and for diabetes in UK adult men it is <10%.^[17]

A history of substance misuse was also present in almost a quarter of patients (59/247; 23.9%) and serious mental illness in almost one in six (40/247; 16.2%). There were 76/247 (30.8%) patients with either a history of substance misuse or a serious mental illness (figure 2.4). Of those who died a 'non-natural' death, there were 29/49 (59.2%) with such a history. There were an additional eight patients listed as having other mental health problems, including anxiety and depression.

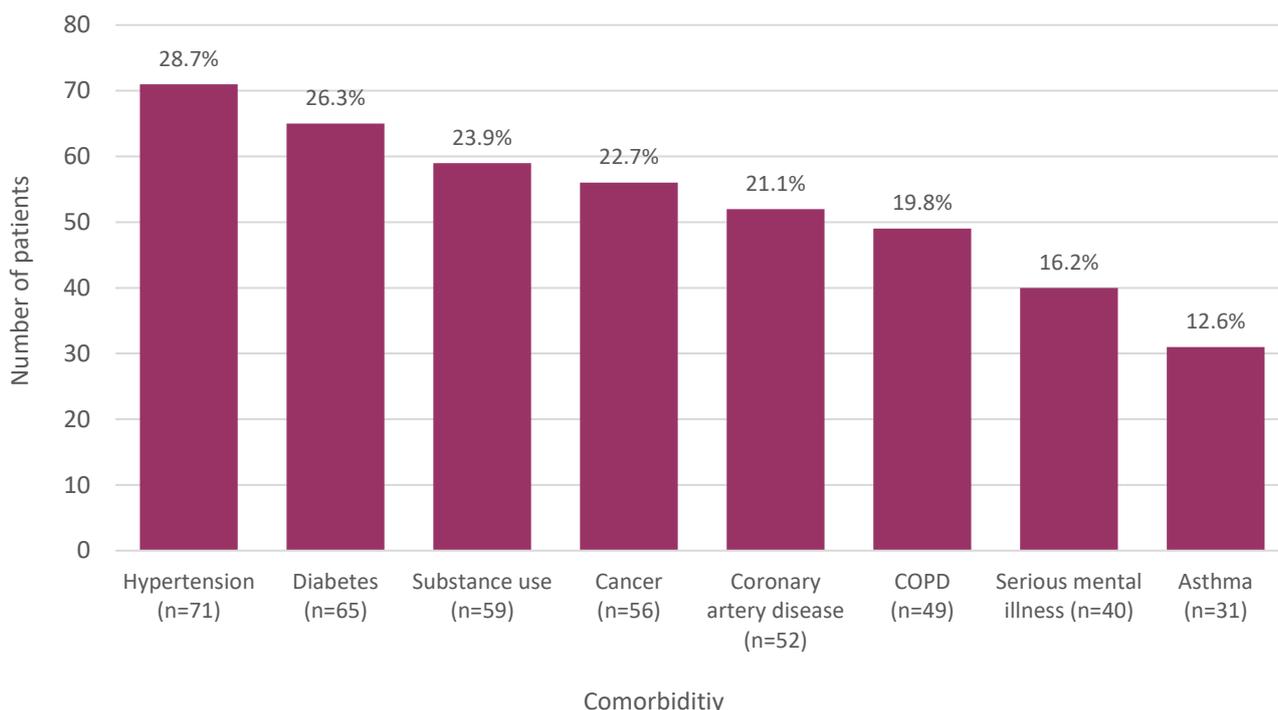


Figure 2.4 Most common long-term conditions

Reviewer assessment form data (answers may be multiple; n=247)

*Serious mental illness: schizophrenia, bipolar disorder, or other psychosis

The prevalence of mental ill health is high in the prison population.^[18] In-reach services are frequently provided to ensure that assessment and provision of mental healthcare are available for those who need them. In 62/240 (25.8%) cases the patient was under the care of the mental health in-reach service prior to death. This was more common in those who died from other 'non-natural' causes (21/48; 43.8%) (table 2.4).

Table 2.4 Mental health in-reach services involved

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	41	21.4	21	43.8	62	25.8
No	151	78.6	27	56.3	178	74.2
Subtotal	192		48		240	
Unknown	6		1		7	
Total	198		49		247	

Reviewer assessment form data

Learning disability

Approximately 7% of those in contact with the criminal justice system are reported to have a learning disability, compared with approximately 1.5-2% of the general population.^[19] A learning disability was documented in the healthcare records of 27/227 (11.9%) prisoners in this study and was unknown for 20.

Frailty

The clinical frailty scale was developed to describe overall functional status of patients.^[20] It was originally developed to describe this in people of 65 years of age or older. From the clinical notes, the reviewers were able to estimate the frailty score in the month prior to death for all but five of the patients reviewed. Of those whose death was from a natural cause, 131/193 (67.9%) patients were at least mildly frail (Rockwood score 5-9) (figure 2.5). Only two of the other 'non-natural' deaths fell into this category.

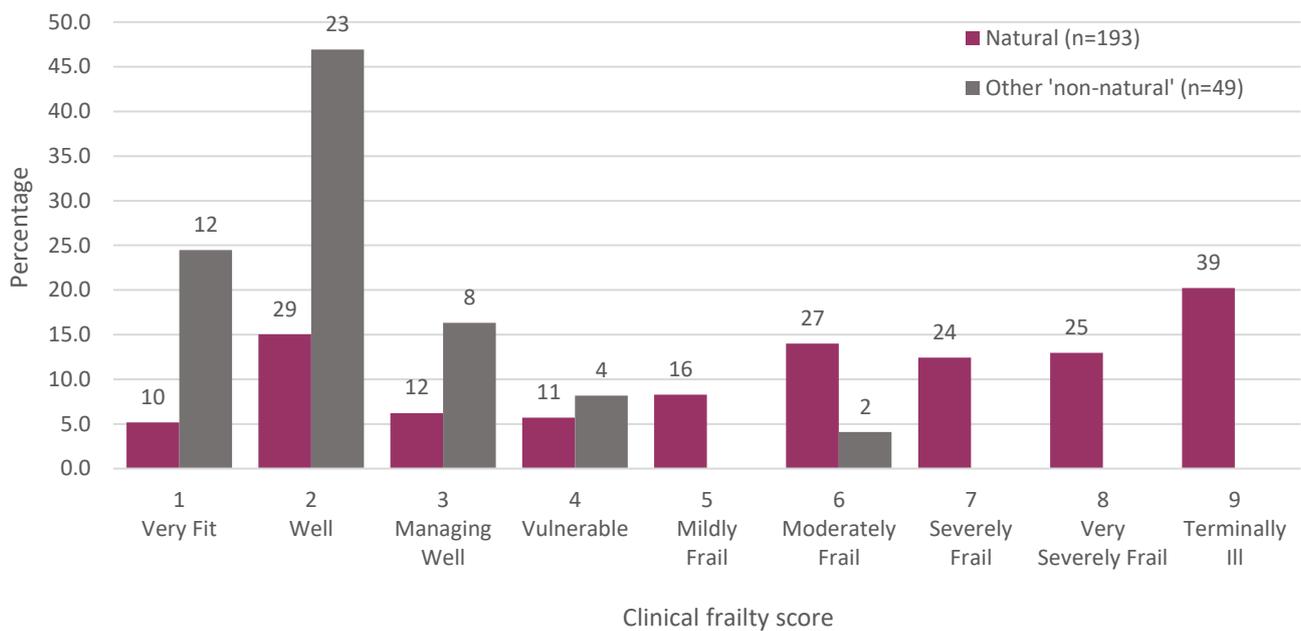


Figure 2.5 Clinical frailty scores by type of death
Reviewer assessment form data

CHAPTER 3

CAUSE OF DEATH AND AVOIDABLE DEATHS

KEY POINTS	
3.1	There were often multiple contributors to a death, for example death from an acute infection in an individual with an underlying cancer. The included deaths were not weighted towards those from COVID-19.
3.2	The group with the highest proportion listing a single cause of death was those with malignancy where 53/69 (76.8%) had no other contributing cause.
3.3	Of the drug-related deaths (40), there were 16/40 (40.0%) where there was another contributor to the death ; most commonly underlying coronary disease or infection (aspiration pneumonia).
3.4	The median age of death for the patients with advanced chronic diseases was the highest (70.5 years). Those who died from drug-related causes had a lower median age at death of 41.5 years.
3.5	There was a greater proportion of avoidable deaths in the ‘non-natural’ (drug-related) deaths (23/34; 67.6%) compared with the natural deaths (23/173; 13.3%).
3.6	The 23 potentially avoidable natural deaths most commonly had an acute condition (infection or acute cardiovascular system causes) listed as the cause of death (16 patients).
3.7	The most common factor that could have prevented the death in this group was earlier identification of an acute deterioration in health which was found in 11 deaths.

CAUSE OF DEATH

To register a death, a medical certificate outlining the cause of death is required. The cause of death listed on the death certificate was recorded for all the peer reviewed cases and grouped into themes relevant to different pathways of care. There were often multiple contributors to a death, for example death from an acute infection in an individual with an underlying cancer, or death due to acute coronary insufficiency where there was a background of severe lung disease. The group with the highest proportion listing a single cause of death was those with malignancy where 53/69 (76.8%) had no other contributing cause (figure 3.1). Despite the sampling period for this study, the overall sample was not weighted towards deaths from COVID-19.

The drug-related deaths listed were essentially the same group as the other ‘non-natural’ deaths. Of the 49 people who died a ‘non-natural’ death, illicit substances were listed on the death certificate in 39. Of the 40 who had illicit substances listed under the cause of death, there were 39 whose death was recorded as ‘non-natural’. It is worth noting that of the drug-related deaths, there were 16/40 (40.0%) where there was another contributor to the death. This was commonly underlying coronary disease or infection (aspiration pneumonia).

The median age of death for the patients with advanced chronic diseases was the highest (70.5 years) and those with a malignancy also died at an older age. Those who died from drug-related causes had a lower median age at death of 41.5 years. Those who died from infection or acute cardiovascular system (CVS) causes were also on average younger than those with malignancy or advanced chronic diseases (table 3.1). The median ages at the time of death were lower than the life expectancy of the general population.^[2]

Table 3.1 Age at time of death by diagnosis

	Malignancy	Advanced chronic conditions	Infection	Acute cardiovascular system	Illicit substances
Average age	64.4	66.5	61.0	61.6	40.5
Median age	66	70.5	64	61.5	41.5
Number of patients	69	52	74	38	40

Reviewer assessment form data

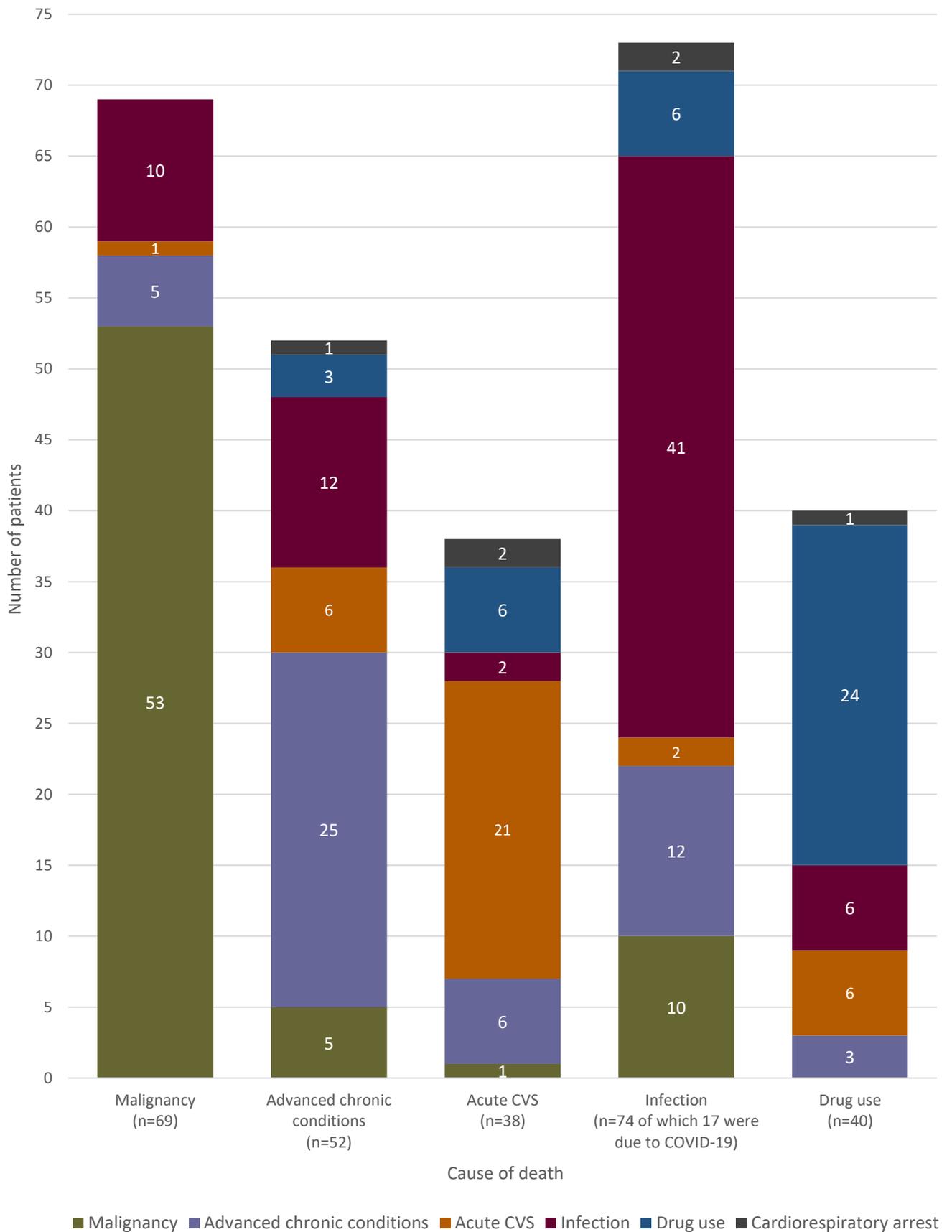


Figure 3.1 Cause of death

Reviewer assessment form data (answers may be multiple; n=242)

*Acute infections include sepsis, peritonitis, urinary sepsis, pneumonia (including aspiration and COVID-19)

**Advanced chronic conditions: advanced long-term conditions requiring ongoing treatment and healthcare follow-up, including heart failure, chronic lung diseases, chronic liver disease and chronic kidney disease

Figure 3.2 shows the Rockwood frailty score for each of the groups outlined above. As might be expected, the majority of those who died from malignancy or advanced chronic disease were at least mildly frail in the weeks leading up to their death. The groups who died from infection, or an acute CVS cause, as well as being younger, were more likely to be fit. Of those who died from drug-related causes, 36/40 (90%) had a frailty score of 1-3 (31 of them were rated as 'very fit' or 'well').

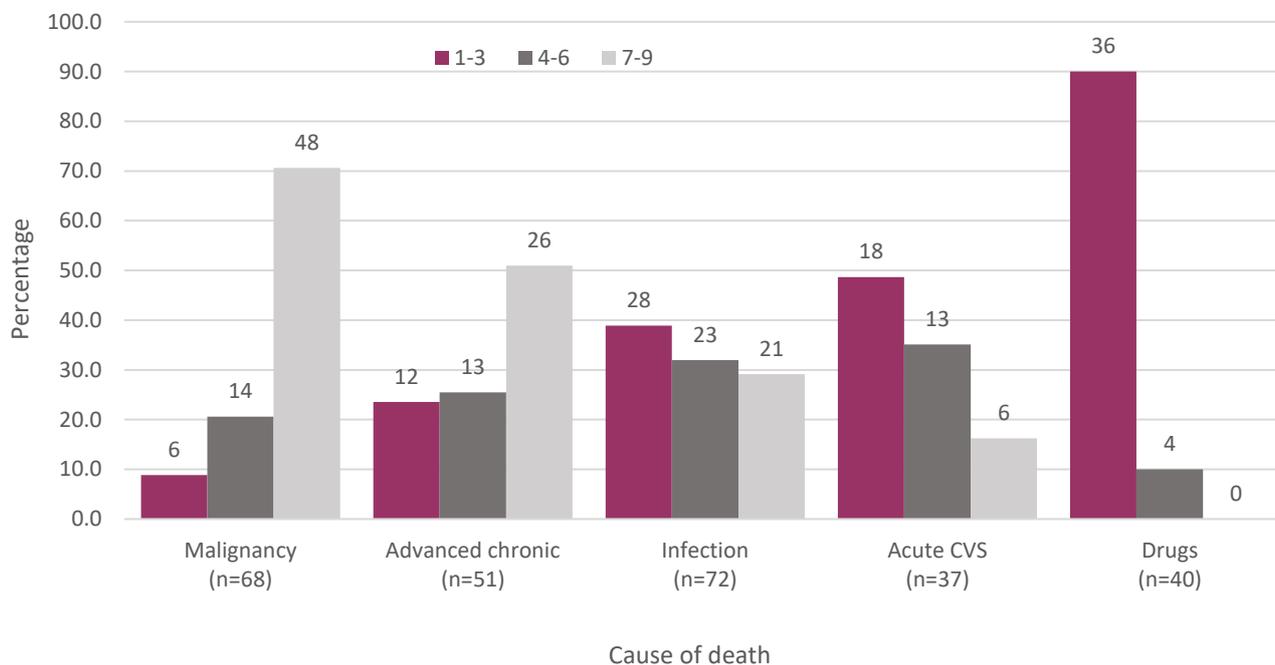


Figure 3.2 Clinical frailty scores by cause of death

Reviewer assessment form data

AVOIDABLE DEATHS

The age and frailty scores of the groups described above emphasises the potential years of useful life lost and the importance of designing a system to help prevent future avoidable deaths.

In 2017, the NHS England National Quality Board set out guidance for acute hospitals on learning from deaths.^[21] This included a recommendation to identify deaths which were potentially avoidable. While reviewing deaths in prison to identify areas for improvement in healthcare, it was important to consider whether avoidable harm occurred. Reviewers were asked to assess whether death was avoidable.

There were an equal number of avoidable deaths (23) in those listed as natural and other 'non-natural' (noting that in a number of cases the reviewer was not able to comment). This was a greater proportion for the 'non-natural' (drug-related) deaths (23/34; 67.6%) compared with the natural deaths (23/173; 13.3%) (table 3.2).

Table 3.2 Was the death avoidable

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	23	13.3	23	67.6	46	22.2
No	150	86.7	11	32.4	161	77.8
Subtotal	173		34		207	
Unknown	25		15		40	
Total	198		49		247	

Reviewer assessment form data

The reasons the other ‘non-natural’ deaths were rated as avoidable were not related to healthcare. All of them related to access to illicit substances within the prison, suggesting that addressing this would be the best way of reducing avoidable deaths.

Reviewer: “The Ombudsman report states the prison had a high number of drug incidents at the time. A reduction in the amount of illicit drugs available in the prison would have avoided the death. The patient was also known to be subject to bullying for drugs and money. They were not receiving meaningful support from their prison keyworker who appeared unaware of his very recent drug and bullying incidents.”

The 23 potentially avoidable natural deaths identified in this study were generally in younger people than those who died a natural death, with an average age of 52.2 years (median 49). They mostly had an acute condition (infection or acute CVS causes) listed as the cause of death (16/23 patients). Infection in the presence of another advanced chronic condition was listed for three of these patients. Five of the avoidable deaths did not fit into the five cause of death categories used in this report: two had an unknown cause of death despite an autopsy and an inquest.

Reviewer: “This patient had diabetic ketoacidosis. If transfer to hospital had been more rapid, then death may have been prevented.”

Reviewer: “The patient was complaining of vomiting and abdominal pain for 15 hours prior to death without assessment. Living in a cell with poor ventilation. At time of death there was warmer than normal temperatures during the summer. They died of dehydration...”

Reviewers identified a number of factors that could have prevented the death in this group. The most common of these was earlier identification of an acute deterioration in health (with the potential to start treatment sooner) which was found in 11/23 deaths (table 3.3).

Table 3.3 Reasons the natural death was avoidable

	Number of patients
Identifying and treating acute health deterioration	11
Preventing complications from long-term conditions	7
Untimely discharge from hospital	3
Delay in calling for ambulance, or transfer	2
Earlier diagnosis of red flag symptoms of cancer	1

Reviewer assessment form data (answers may be multiple; n=23)

The chapters that follow in this report explore in more detail how clinical pathways of care could be improved in all of the areas identified above.

CASE STUDY

A middle-aged patient with diabetes and angina was found on the floor of their cell three days prior to admission to hospital. No observations were undertaken and no NEWS2 score was calculated. They were admitted to hospital with a heart attack and deteriorated and died.

The reviewers thought the initial collapse was most likely due to an acute cardiovascular cause. There was a six-day delay in assessment and no diagnosis was made before hospital transfer. Better assessment and recognition of unstable angina with admission to hospital several days earlier could have prevented deterioration and the death might have been avoided.

CHAPTER 4

CLINICAL PATHWAYS

KEY POINT

4.1

The group of patients with **advanced chronic conditions** (such as heart failure, chronic obstructive pulmonary disease, and chronic kidney or liver disease) listed among the causes of death had the highest overall **room for improved healthcare** (14/52; **26.9%**). There was room for **improved medicines management** in 11/52 (**21.2%**) patients and **frequency of clinical review** in 8/52 (**15.4%**) patients.

The figures that follow outline specific areas of healthcare where the reviewers were asked if there was room for improvement. The areas include: the need for improved clinical review, medicines management, further investigations, and use of the National Early Warning Score (NEWS2).^[22] These are all discussed in more detail in chapter 5. The charts also include the reviewers' rating of whether the overall quality of healthcare could have been improved.

Malignancy

When the reviewers examined the healthcare of prisoners who had malignancy listed among the causes of death, they found that there were more examples of good practice in end of life care for this group than for those who died from other causes. It also had the least room for improvement in overall healthcare (8/69; 11.6%) of any of the groups. There was, however, still room to improve medicines management in 16/62 (25.8%) patients in this group (figure 4.1).

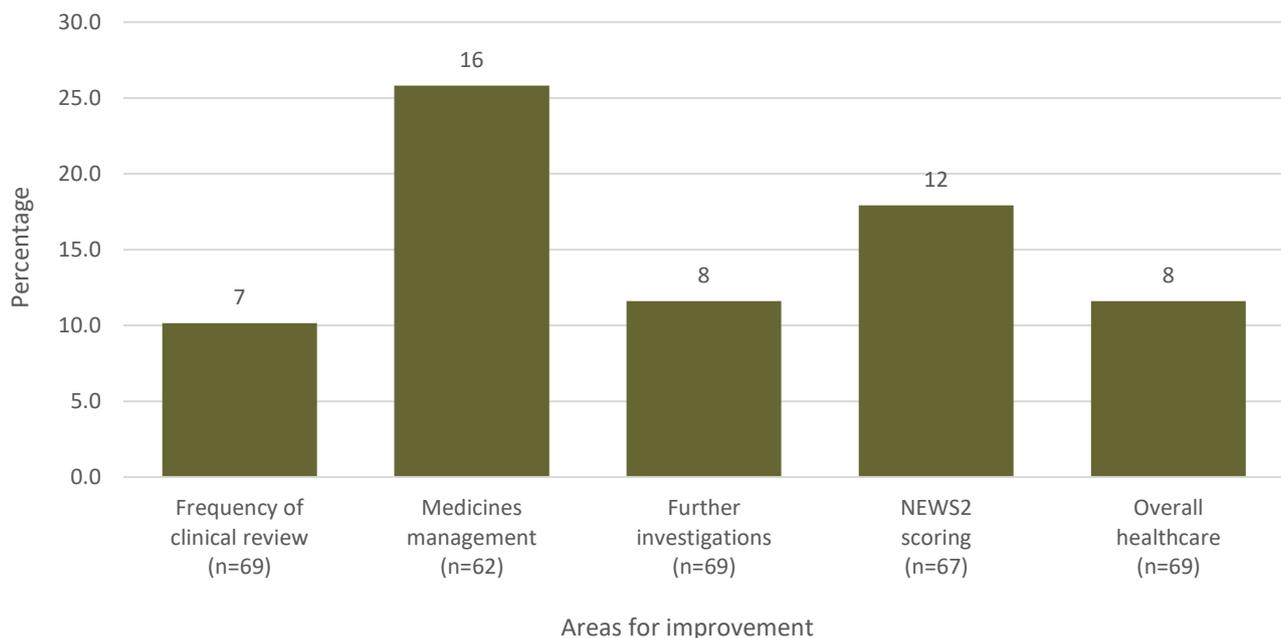


Figure 4.1 Areas for improvement in malignancy healthcare
Reviewer assessment form data

Advanced chronic conditions

The group of patients with advanced chronic conditions (such as heart failure, chronic obstructive pulmonary disease, and chronic kidney or liver disease) listed among the causes of death had the highest overall room for improved healthcare (14/52; 26.9%). These conditions require regular review to assess progression and often for the adjustment of medication. There was room for improved medicines management in 11/52 (21.2%) and frequency of clinical review in 8/52 (15.4 %) patients (figure 4.2). There was also room for

improvement in NEWS2 scoring at the time of deterioration in nearly a third (16/49; 32.7%) of patients with advanced chronic conditions.

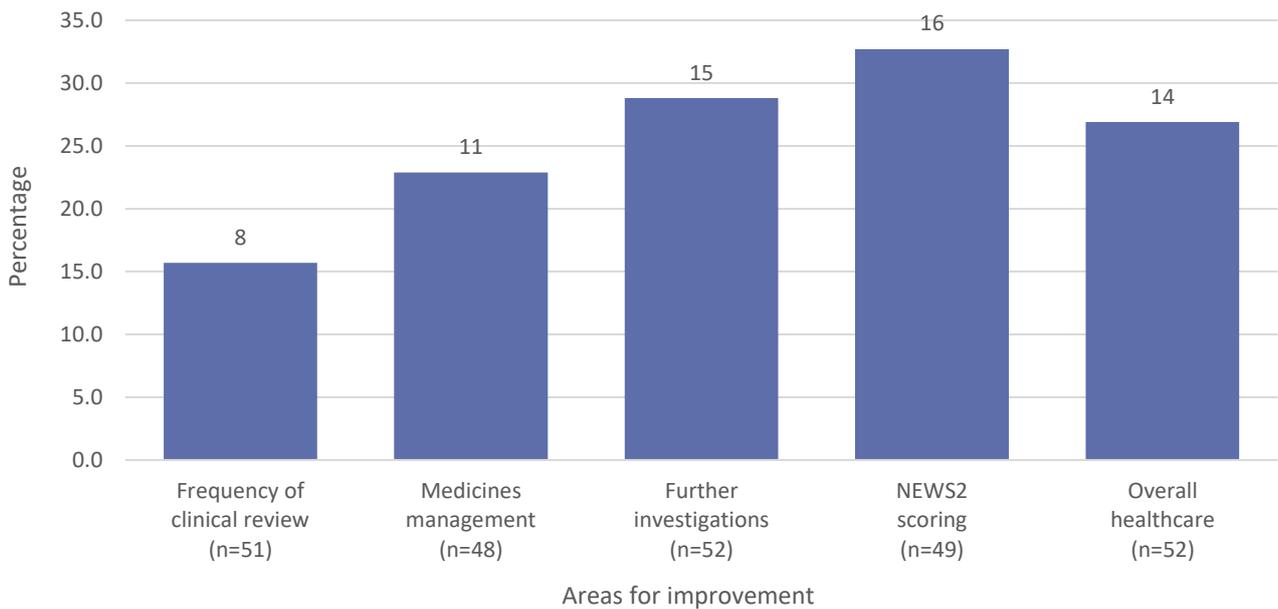


Figure 4.2 Areas for improvement in advanced chronic condition healthcare
Reviewer assessment form data

Acute cardiovascular system causes, and infection

Patients who die from acute cardiovascular system (CVS) causes (mainly acute coronary syndromes) and those who died with infection listed as a cause, are treated on similar acute pathways which often require regular and timely clinical assessment. There was more room for improved NEWS2 scoring in both of these groups than in any of the others (acute CVS: 13/36; 36.1%, infection: 31/71; 43.7%) (figures 4.3 and 4.4). There was also room for improvement in the overall healthcare provided in a similar percentage in both of these groups (acute CVS: 9/38; 23.7%, infection: 17/74; 23.0%).

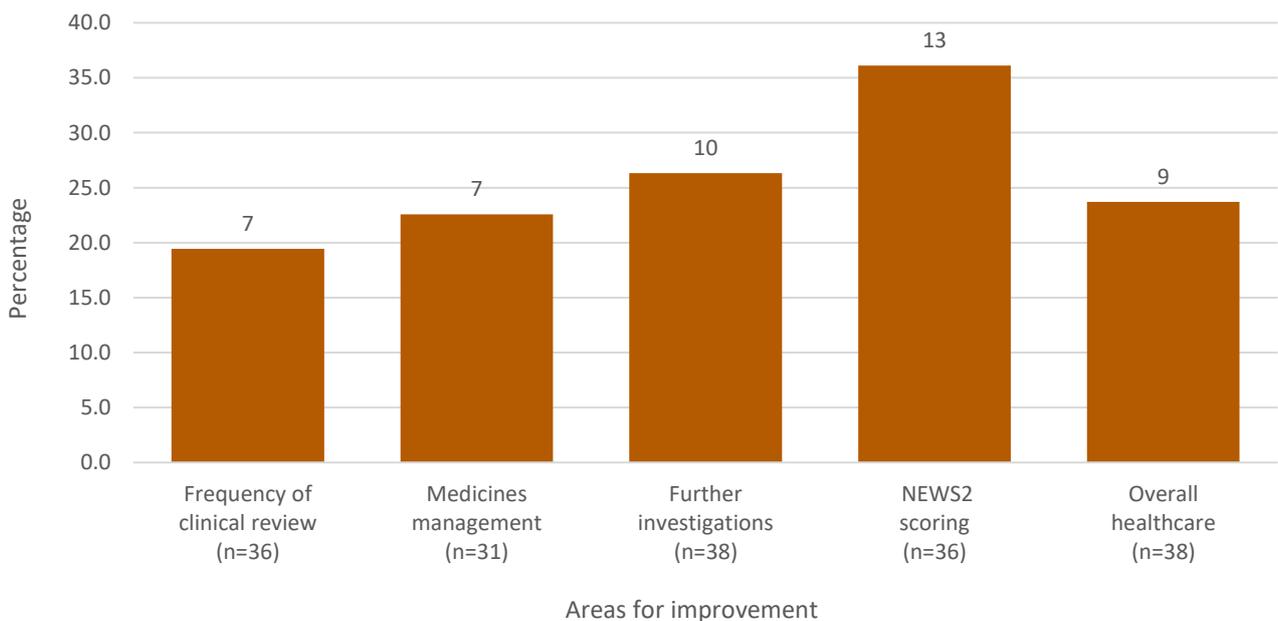


Figure 4.3 Areas for improvement in acute cardiovascular conditions
Reviewer assessment form data

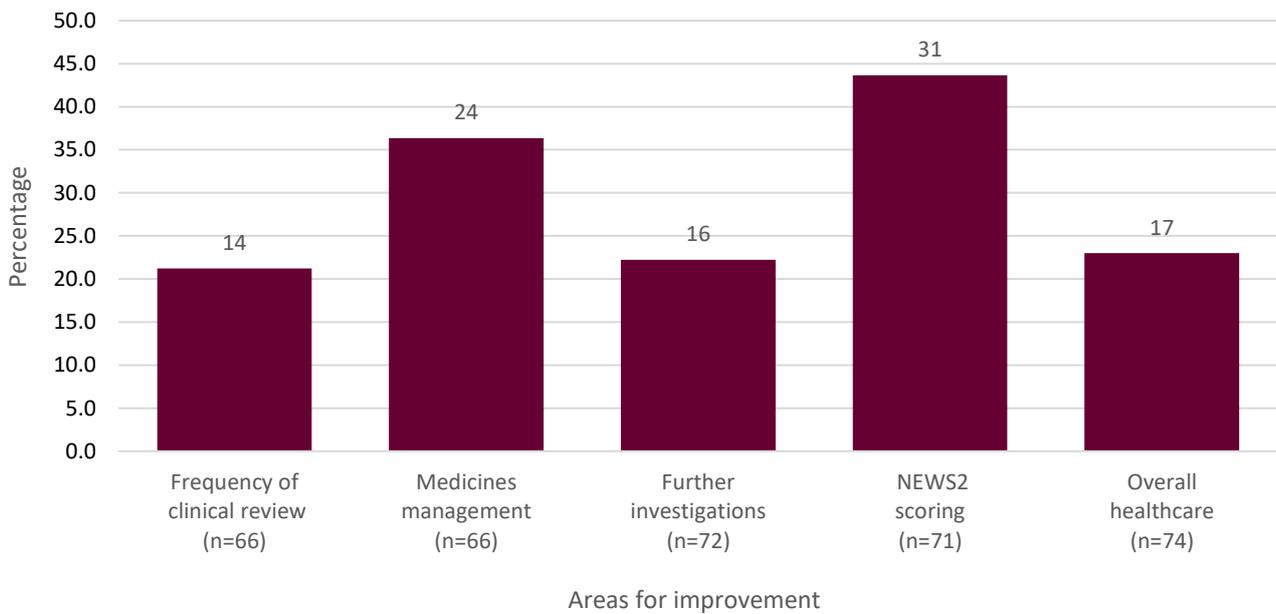


Figure 4.4 Areas for improvement in Infection healthcare
 Reviewer assessment form data

Drug-related

The areas for improvement in drug-related deaths were often not directly related to healthcare. The percentage where there was room for improved overall healthcare for this group was similar to that in the group with malignancy (5/39; 12.9%). There was, however, still room for improvement in all of the parts of the clinical pathway (figure 4.5).

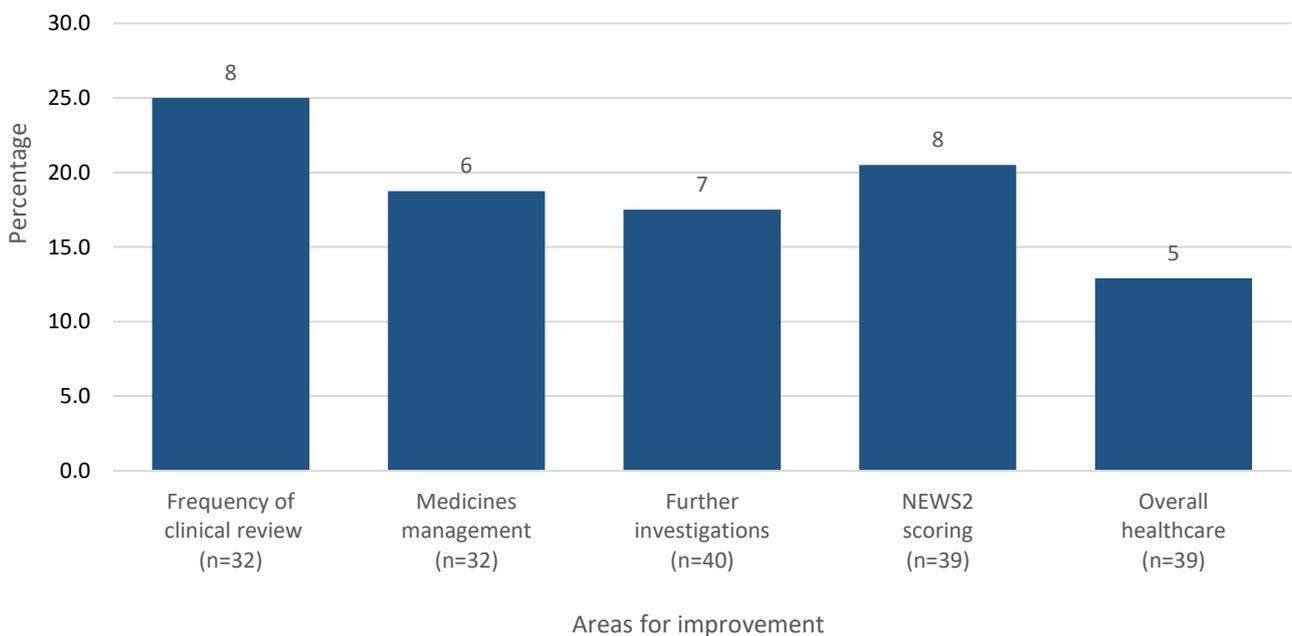


Figure 4.5 Areas for improvement in drug-related deaths healthcare
 Reviewer assessment form data

For ease of comparison between groups, the areas for improvement for each clinical pathway are shown together in figure 4.6.

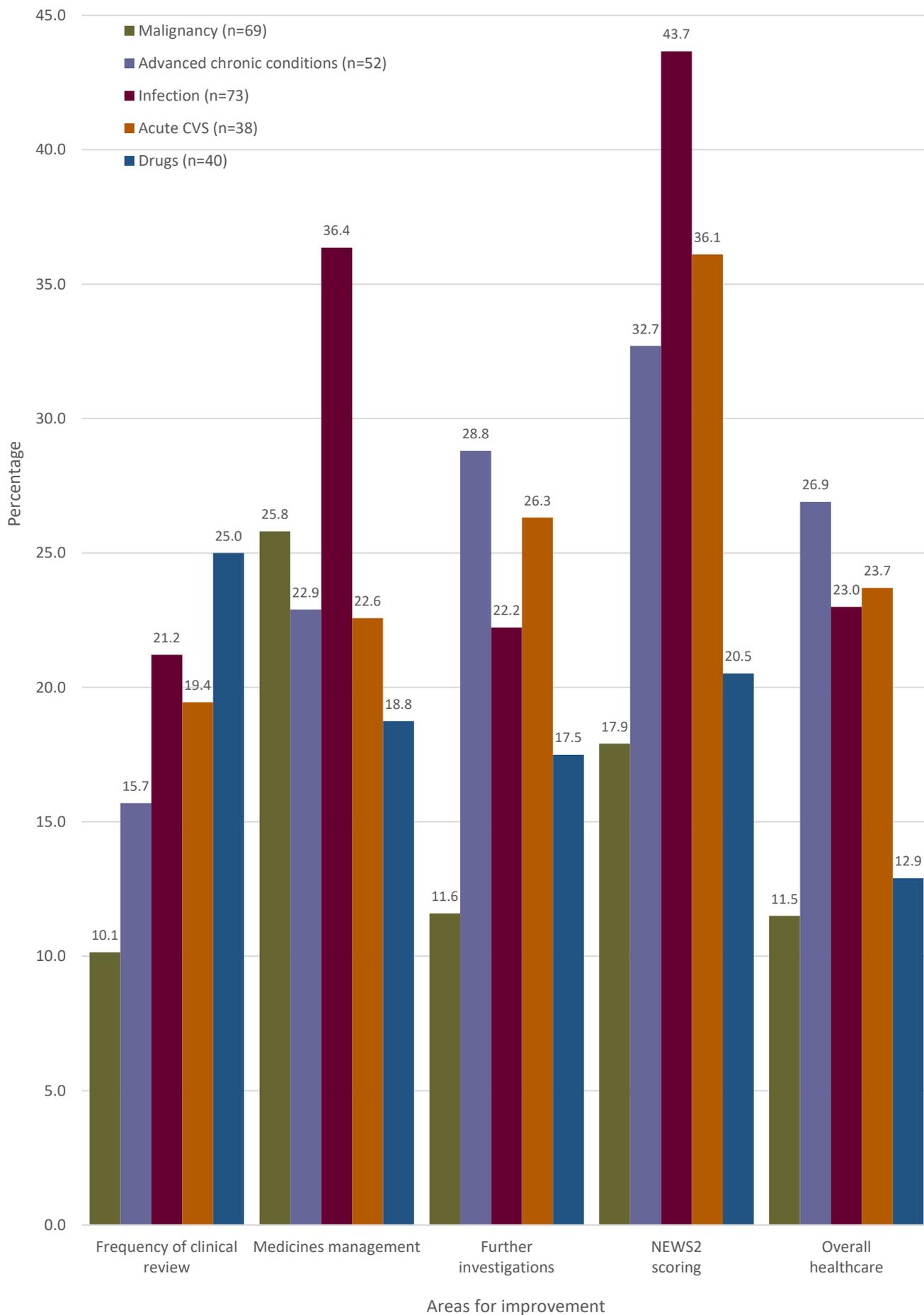


Figure 4.6 Areas for improvement in healthcare by types of death
 Reviewer assessment form data

CHAPTER 5

HEALTHCARE SCREENING

KEY POINTS	
5.1	The purpose of health assessments is to identify immediate risks and then to ensure arrangements are in place for chronic condition management. Where a plan for the health risks identified was required, it was not documented in 38/108 (35.2%) cases. There were 46/108 (42.6%) patients where there was either no documented plan or an inappropriate one .
5.2	Reviewers identified a history of alcohol misuse in 33/114 (28.9%) patients. Of these, 24 people were given appropriate treatments to prevent alcohol withdrawal and/or to mitigate adverse effects of chronic misuse.
5.3	There was a history of illicit substance misuse in 46/122 (37.7%) patients for whom reviewers had clinical notes for the first- and second-stage health assessments. Substance misuse was more common in the group whose death was due to other 'non-natural' causes (25/30; 83.3%) compared with those who died from natural causes (21/92; 22.8%).
5.4	There was scope for improvement in 57/129 (44.2%) of first- and/or second-stage health assessments . The most frequent areas identified for improvement were history taking for physical health problems, mental health conditions or smoking, alcohol, or drug misuse .
5.5	Point of care testing to screen for substance misuse was carried out in 24/107 (22.4%) people.
5.6	The overall quality of the health assessments was rated as good in 55/122 (45.1%) cases. Health assessments were considered poor or unacceptable in 25/122 (20.5%).

On arrival at a prison, the health of prisoners is assessed by a two-stage process. A first-stage health assessment at reception into prison should be provided within 24 hours of arrival.^[23,24] This is designed to identify any issues that may affect the individual's health and safety, including the risk of self-harm (or harm to others), the need for the management of alcohol or drug withdrawal and the continuation of medications for both physical and mental health conditions. This assessment can also identify other priority health needs which will need addressing.

A second-stage health assessment should be carried out within seven days of arrival.^[23,24] This is intended to review the actions taken at the first-stage assessment as well as exploring other aspects of health such as family history of serious or long-term illness, previous screening tests and consideration of mental health screening, which is often needed. It is also an opportunity to do simple clinical assessments such as blood pressure measurement or urine testing, to arrange any onward referrals where needed and to put in place follow-up for long-term conditions identified.^[25]

In this study, records of the first- and second-stage assessments were not requested if they took place more than two years before the death occurred. This was to ensure that the peer review only considered standards and health related information relevant to the care provided prior to death. There were therefore 129 sets of records for the assessments available for review (table 5.1). As the prisoners who died due to other 'non-natural' causes had been in prison for a shorter time, the health assessments were more frequently available for review in this group (32/49; 65.3%) than for those who died from a natural cause (97/198; 49.0%).

Table 5.1 Availability of full health assessment case notes

	Natural death		Other 'non-natural' death		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	97	49.0	32	65.3	129	52.2
No	101	51.0	17	34.7	118	47.8
Total	198		49		247	

Reviewer assessment form data

The reviewers found that the assessments were not conducted at an appropriate interval in 33/129 (25.6%) patients. Of these, both reviews were done on the same day in four cases and the interval was longer than recommended in nine (in one case, it was several months). The second review was not done at all in ten patients, and the documentation was considered incomplete in four. There were seven patients for whom this had an adverse impact. This was related to the delay in monitoring long-term conditions, and, in one case, a delay in arranging surveillance of a known cancer.

As previously noted, the purpose of health assessments is to identify immediate risks and then to ensure arrangements are in place for chronic condition management. The reviewers found that, where a plan for the health risks identified was required, it was not documented in 38/108 (35.2%) cases (table 5.2). Where a plan was documented, this was not considered to be appropriate in eight cases. There were 16 cases where the reviewer did not think that a plan was needed (as no health issues were identified). Therefore, there were 46/108 (42.6%) patients where there was either no documented plan or an inappropriate one.

Table 5.2 Documented plan for health risks

	Number of patients	%
Yes	70	64.8
No	38	35.2
Subtotal	108	
Unknown	5	
N/A - no issues identified	16	
Total	129	

Reviewer assessment form data

CASE STUDY

A young patient with a history of head injury leading to uncontrolled epilepsy and communication difficulties was found dead in their cell. The presumed cause of death was an uncontrolled seizure.

The reviewers noted that the second stage assessment had not been done. No medication review had taken place on arrival at the prison. No plan for seizure management was documented and there was no plan for specialist advice or assessment. They thought that this death might have been avoidable.

Smoking, alcohol, and substance misuse

The NICE quality standard (QS156) for the physical health of people in prisons states that first-stage health assessment should include an enquiry about smoking, alcohol and drug use, to reduce health risks, help with detoxification and manage withdrawal from these substances.^[24] Since prisons became smoke-free, they should support smokers to stop with multiple options, which include nicotine replacement and electronic cigarettes. The prevalence of tobacco smoking in the UK is falling every year and in 2021 was estimated at 13.3%. Of the patients in this study, 45/127 (35.4%) were documented as smokers.

NICE guidance (NG209) on treatment for tobacco dependence has recently been updated.^[26] It recommends that health and care providers guide should support smokers to help them stop smoking. In this study, 37/39 of current smokers were referred to smoking cessation services, however, 17/37 did not take up this offer. All of those accepting advice were offered nicotine replacement therapy.

Reviewers identified a history of alcohol misuse in 33/114 (28.9%) patients (figure 5.1). Of these, 24/33 were given appropriate treatments to prevent alcohol withdrawal and/or to mitigate adverse effects of chronic alcohol misuse (figure 5.1). Point of care testing for substance misuse is not routinely undertaken in prisons

except in some low-risk, category C and D, prisons. Point of care testing to screen for substance misuse was carried out in 24/107 (22.4%) people.

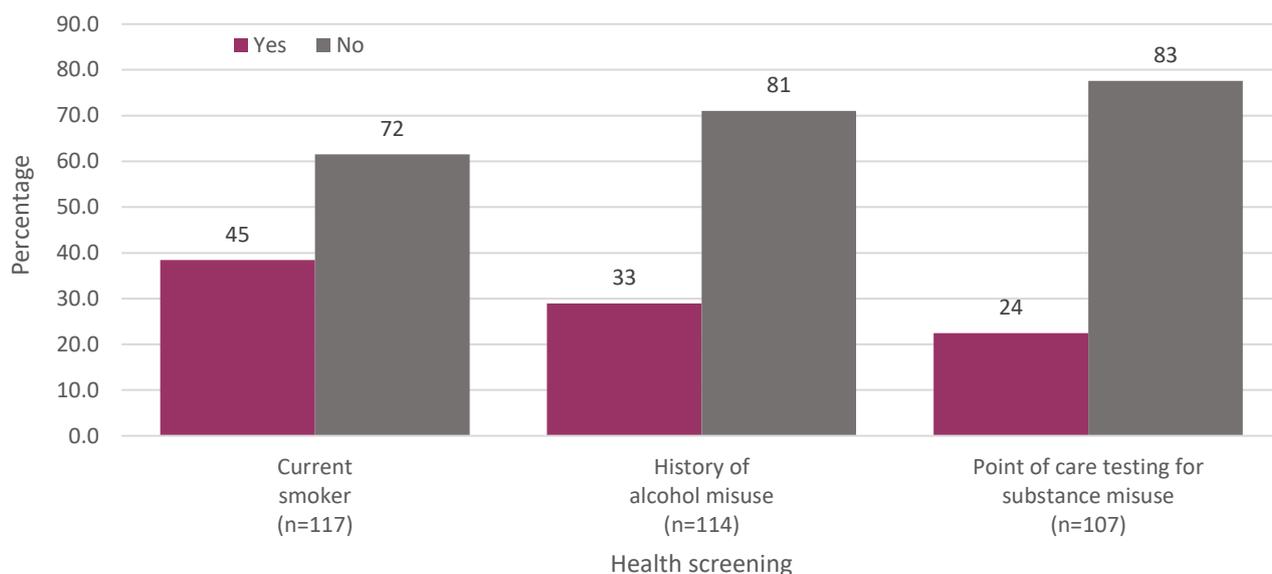


Figure 5.1 Health screening: smoking /alcohol history and testing for substance misuse
Reviewer assessment form data

There was a history of substance misuse in 46/122 (37.7%) patients for whom reviewers had clinical notes for the first- and second-stage health assessments (table 5.3). Substance misuse was more common in the group whose death was due to other ‘non-natural’ causes (25/30; 83.3%) compared with those who died from natural causes (21/92; 22.8%). Where evidence of substance misuse was found, appropriate treatment was offered to 33/42 (78.6%) people.

Table 5.3 History of substance misuse by type of death

	Natural death		Other ‘non-natural’ death		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	21	22.8	25	83.3	46	37.7
No	71	77.2	5	16.7	76	62.3
Subtotal	92		30		122	
Unknown	5		2		7	
Total	97		32		129	

Reviewer assessment form data

Reviewers identified scope for improvement in 57/129 (44.2%) of first- and/or second-stage health assessments. The most frequent areas identified for improvement were history taking for physical health problems, mental health conditions or smoking, alcohol, or drug misuse (table 5.4).

Table 5.4 Areas of reception and/or full health assessment that could have been improved

	Number of patients	%
Physical health history	21	36.8
Mental health history	12	21.1
Smoking/ alcohol/ substance use history	12	21.1
Clinical examination	10	17.5
Onward referrals/ outpatient appointments	8	14.0
Vital signs/ physical health observations	6	10.5
Current medications list	6	10.5

Reviewer assessment form data (answers may be multiple; n=57)

The reviewers rated the overall quality of the health assessments as good in 56/128 (43.8%) cases. Health assessments were considered poor or unacceptable in 26/128 (20.3%) (figure 5.2), with the reasons given relating to the areas identified for improvement already listed above.

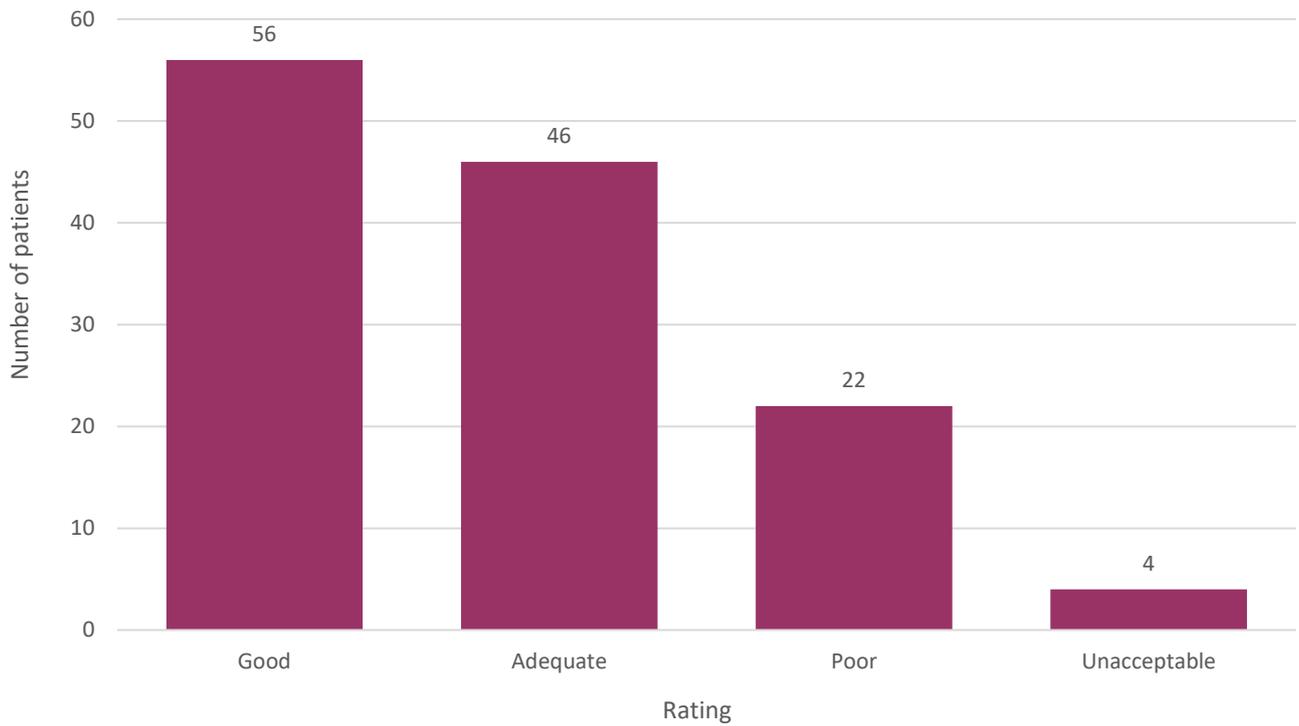


Figure 5.2 Overall quality of health assessments (n=128)
Reviewer assessment form data

CHAPTER 6

HEALTHCARE PROVIDED IN PRISONS

KEY POINTS	
6.1	Long-term conditions were common in those who died of natural causes , (173/197; 87.8%) and were also present in more than half of the younger group who died of other 'non-natural' causes (26/48; 54.2%). There were 97/189 (51.3%) patients in whom a new long-term medical condition was identified while in prison.
6.2	There was room for improvement in the process and/or timeliness of the new diagnosis of a long-term medical condition in 22/88 (25.0%) cases reviewed.
6.3	There was room for improvement in the frequency of clinical reviews in 35/208 (16.8%) patients, particularly in those who died from an acute medical condition (infection/acute cardiovascular system cause) as well as in those who had drug-related deaths . For the patients who died from an advanced chronic condition there was room to improve the frequency of review in 8/51 (15.7%) and for malignancy in 7/69 (10.1%).
6.4	A specialist outpatient review was indicated in the 12-months prior to death in 153/235 (65.1%) patients. 57 patients missed one or more appointments . Multiple factors were identified, the most common of which were patient refusal (26/57), lack of an appropriate escort (12/57) and cancellation by the hospital (11/57).
6.5	Access to appropriate investigation is key to both diagnosis and management of acute and long-term medical conditions. 36/212 (17.0%) patients did not receive the investigations they needed. The reviewers thought that 49/244 (20.1%) patients should have been investigated further based on their symptoms.
6.6	108/197 (54.8%) patients who died from natural causes , and 16/49 (32.7%) patients who died from other 'non-natural' causes required time-critical medications . Reason for the missed dose was refusal/non-adherence by the patient (20/30), medication not prescribed in time , or it was not available .
6.7	There was room for improvement in medicines management in 60/247 (24.3%) cases reviewed. The most frequent reason was an error in medication prescribing, dose, or monitoring .
6.8	There was evidence of clinical deterioration prior to death in 168/247 (68.0%) patients.
6.9	58/168 (34.5%) instances of deterioration were not managed appropriately . Referral to the local palliative care service should have been made for 20 patients. Timely and regular clinical observations and NEWS2 scoring should have been undertaken in an additional 18 patients, with a decision to escalate to an appropriate clinician for five, and transfer to hospital for ten patients.
6.10	NEWS2 was used to assess 135/224 (55.6%) patients and to monitor 96/237 (40.5%) patients. The reviewers found that use of NEWS2 could have been improved for 73/238 (30.7%) patients.
6.11	In those who died a natural death , where NEWS2 scores were documented, they were often used inconsistently (25/62) or were incompletely recorded/calculated (11/62). In 11/62 of these cases, although a NEWS2 score was recorded , appropriate action(s) were not taken to manage the clinical deterioration.
6.12	CPR was initiated in prison for 50 patients comprising 31 who died of natural causes and 19 who died of other 'non-natural' causes . Reviewers found that there was room for improvement in CPR for 22 patients , of whom 15 died of natural causes and seven of other 'non-natural' causes.
6.13	CPR training for prison staff was identified as an important area for improvement . In 6/22 patients, immediate CPR could not be started due to lack of training even though prison staff were first on the scene .
6.14	The reviewers' overall rating of delivery of prison healthcare was considered good in 117/245 (47.8%) cases reviewed and adequate in 78/245 (31.8%) cases. Reviewers thought that it was poor in 38/245 (15.5%) and unacceptable in 12/245 (4.9%) cases. They identified aspects of care that could be improved in 146/246 (59.3%) cases reviewed.

Long-term conditions

NICE guidance (NG57) on the physical health of people in prison includes early assessment of health to identify priority health needs, continuity of care, medications (including medicines reconciliation) and outstanding medical appointments.^[23] This health assessment is also an opportunity to list long-term medical conditions, identify new health conditions and promote a healthier lifestyle.

As noted in chapter 2, there were 199/245 (81.2%) patients in this study who had at least one long-term medical condition. Long-term conditions were common in those who died of natural causes, (173/197; 87.8%) (table 6.1) and were also present in more than half of the younger group who died of other 'non-natural' causes (26/48; 54.2%).

Table 6.1 Long-term medical conditions

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	173	87.8	26	54.2	199	81.2
No	24	12.2	22	45.8	46	18.8
Subtotal	197		48		245	
Unknown	1		1		2	
Total	198		49		247	

Reviewer assessment form data

Furthermore, there were 97/189 (51.3%) patients in whom a new long-term medical condition was identified while they were in prison. Again, this was more frequent for those who died of natural causes (93/165; 56.4%) than for those who died of other 'non-natural' causes (4/24; 16.7%) (table 6.2). This reflects both the younger age and shorter time in prison for those who died a 'non-natural' death. It is still worth noting that one in six of this group had a new long-term condition identified.

Table 6.2 New long-term medical conditions identified in prison

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	93	56.4	4	16.7	97	51.3
No	72	43.6	20	83.3	92	48.7
Subtotal	165		24		189	
Unknown	8		2		10	
Total	173		26		199	

Reviewer assessment form data

Reviewers were of the opinion that there was room for improvement in the process and/or timeliness of the new diagnosis of a long-term medical condition in 22/88 (25.0%) cases reviewed.

Analysis of free-text comments by reviewers revealed that the process for diagnosis could have been improved in 19 patients and timeliness of diagnosis in nine. The conditions for which there was room for improvement were malignancy (8/22), advanced chronic conditions (9/22), cardiovascular disease (4/22) and mental health conditions (1/22). Patient refusal occurred in 2/22 cases.

The overall healthcare for those who died from an advanced long-term condition had the greatest room for improvement (14/52; 26.9%) (figure 6.1). There was room for improvement in healthcare for more than one in five of those who died from acute infection (17/73; 23.2%) or an acute cardiovascular system (CVS) cause (9/38; 23.7%) (see also chapter 3).

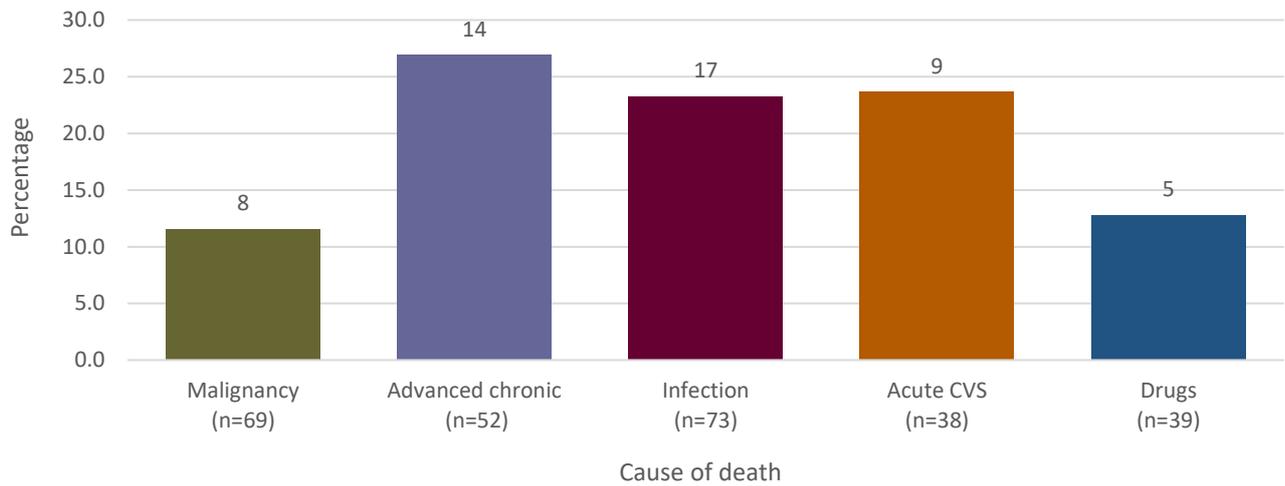


Figure 6.1 Room for improvement in overall healthcare by cause of death
 Reviewer assessment form data

Clinical review in prison

Timely review is needed for long-term conditions to adjust medication and to arrange appropriate investigations. Good management of long-term conditions can reduce the need for hospital admission for both acute deterioration and the management of long-term complications. Continuity of GP/primary care in the community is a way to ensure regular monitoring. Within the prison healthcare system continuity of care, follow-up and care planning could prevent adverse events.

Frequent clinical review is also necessary for acute medical conditions to identify how effective acute treatment has been and to ensure deterioration is managed appropriately (see also National Early Warning Score (NEWS2) scoring below).

The reviewers identified room for improvement in the frequency of clinical reviews in 35/208 (16.8%) patients, particularly in the patients who died from an acute medical condition (infection or acute CVS cause) as well as in those who had drug-related deaths (figure 6.2). For the patients who died from an advanced chronic condition there was room to improve the frequency of review in 8/51 (15.7%) and for those who died from a malignancy in 7/69 (10.1%).

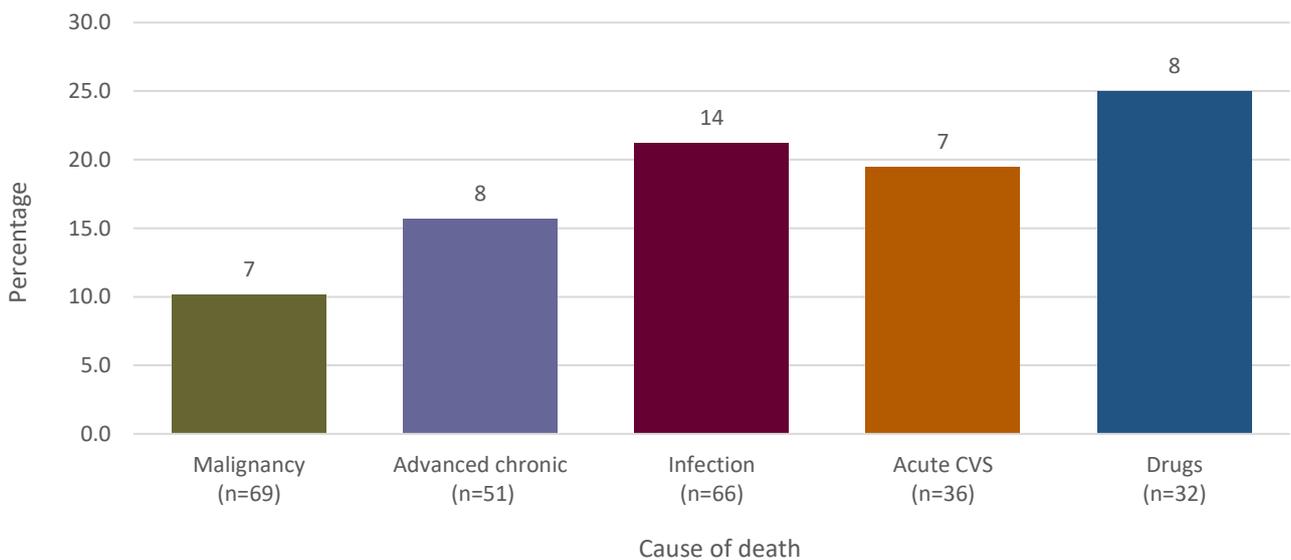


Figure 6.2 Room for improvement in frequency of clinical review by cause of death
 Reviewer assessment form data

CASE STUDY

An elderly patient with multiple comorbidities including advanced heart failure became acutely breathless and was admitted to hospital. Treatment for heart failure was increased in hospital and continued once discharged back to the prison.

The reviewers commented that the acute care for this patient worked well, including rapid assessment, NEWS2 scoring and efficient transfer to hospital. They also noted that there had been no review of the long-term conditions or medications over the preceding months. There were additional medications for heart failure that could have been introduced and might have prevented the acute deterioration.

Specialist outpatient review

Patients with long-term conditions may need specialist outpatient review in a hospital to monitor progress, and to prevent deterioration or complications. As an example, in 2017/18, there were 27,806 prisoners who required a total of 83,176 outpatient appointments.^[10] These prisoners missed outpatient appointments twice as frequently as patients from the general population.^[10] A review of safety incidents in prisons over one year found 171 that related to a delay or inability to access hospital appointments.^[10] In addition to improving the processes for arranging outpatient appointments and transfers from prison, improved access could be achieved by, where appropriate, increasing the use of telemedicine consultations.

A specialist outpatient review was indicated in the 12-months prior to death in 153/235 (65.1%) patients. Appointments were made for 144 patients: 137/144 (95.1%) for a physical health condition and 12/144 (8.3%) for a mental health condition. Five patients required appointments for both physical and mental health conditions (table 6.3).

Table 6.3 Outpatient reviews

	Outpatient review indicated in the last 12-months		Specialist outpatient appointment(s) made	
	Number of patients	%	Number of patients	%
Yes	153	65.1	144	61.0
No	82	34.9	92	39.0
Subtotal	235		236	
Unknown	12		11	
Total	247		247	

Reviewer assessment form data

From review of the case notes, 57 patients missed one or more outpatient appointment in the 12-months prior to death. Multiple factors were identified for missed appointments, the most common of which were patient refusal (26/57), lack of an appropriate escort (12/57) and cancellation by the hospital (11/57).

Reviewers considered that missed appointments contributed to adverse health outcomes in 14 patients, due to delayed diagnosis (including missed cancer in three patients) and delayed or missed treatment in seven patients. Missed appointments with hospital specialists compromised the quality of end of life care for two patients.

CASE STUDY

A young adult with persistent ear pain missed several specialist outpatient appointments due to lack of escorts. The patient deteriorated in prison and finally died due to complications of an ear infection.

Reviewers were of the opinion that timely attendance at the specialist appointment would have been likely to identify problems requiring additional treatment with the potential to prevent the complications that resulted in a fatal outcome. A telemedicine consultation with the specialist could have identified the seriousness of the condition and prompted an urgent review in hospital.

Investigations for acute and long-term conditions

Access to appropriate investigation is key to both diagnosis and management of acute and long-term medical conditions. Access to investigations varies between prisons. It is possible to ensure that basic investigations such as ECG or blood tests can be done on-site. X-rays are available in some prisons, but more complex investigation generally requires a visit to hospital. Previous data have shown that fewer than one percent of patient safety incidents reported in prisons relate to investigations.^[27]

In this study, there were 36/212 (17.0%) patients who did not receive the investigations they needed. The reviewers thought that 49/244 (20.1%) patients should have been investigated further based on their symptoms (figure 6.3).

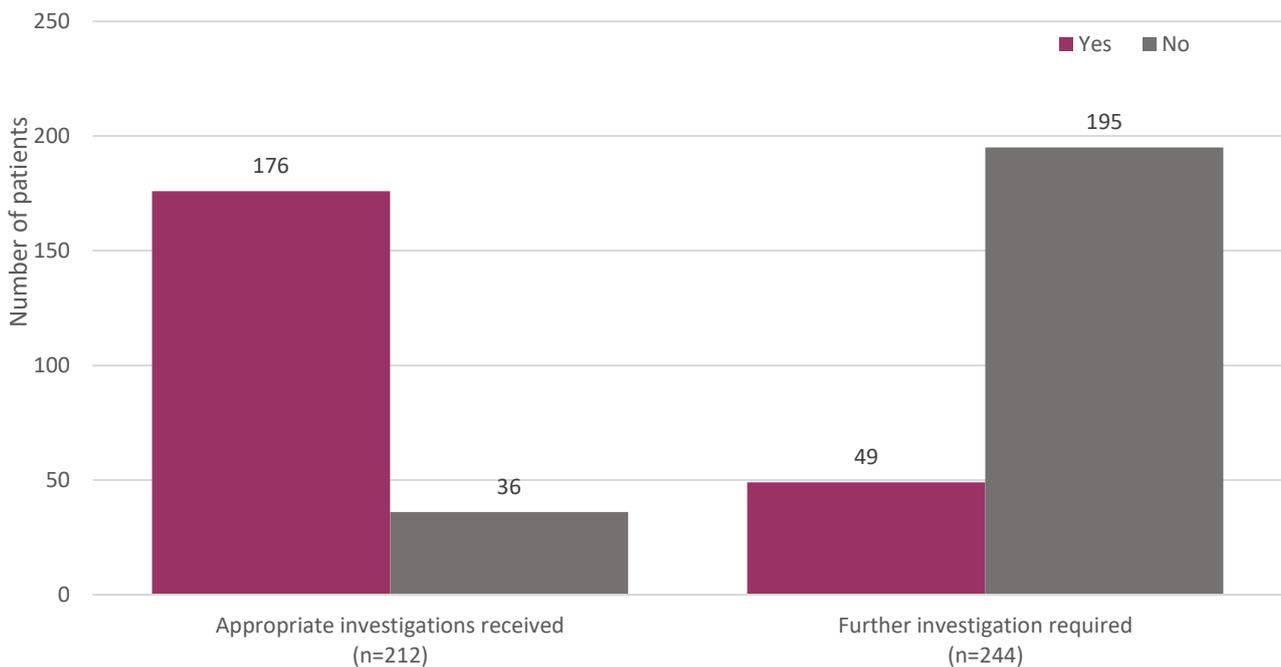


Figure 6.3 Appropriateness of investigations and need for further investigation
Reviewer assessment form data

The reviewers found that those who died from advanced chronic conditions were more likely to have required additional investigations (15/52; 28.8%) than for those who died from other causes. More than one in five of those who died from an acute CVS cause (10/38; 26.3%) or from infections (16/72; 22.2%) would have benefited from further investigations (figure 6.4).

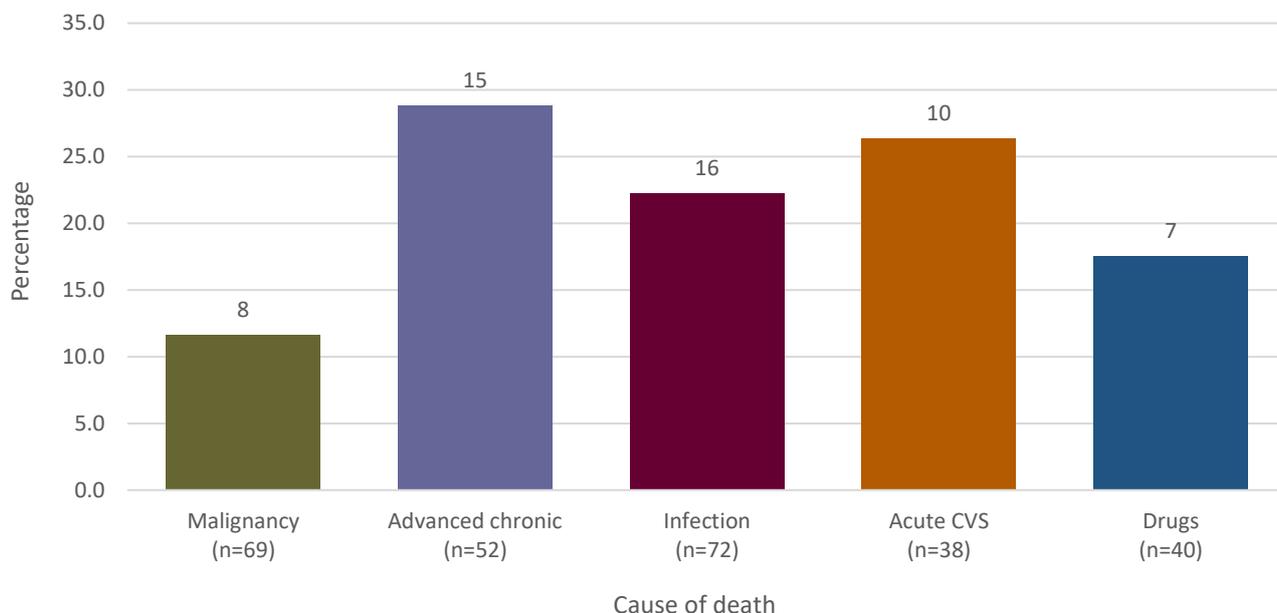


Figure 6.4 Need for further investigation by cause of death

Reviewer assessment form data

CASE STUDY

An older prisoner was documented to have an irregular pulse at reception screening. No investigation was arranged. A few months later the prisoner was admitted to hospital as an emergency with an acute stroke due to atrial fibrillation.

The reviewers thought that investigation with an ECG and, in the context of atrial fibrillation, referral for further cardiac assessment was indicated at reception screening. Earlier investigation and diagnosis followed by anticoagulation could have prevented the stroke.

Prescription medications

NICE guidance (NG57) on the physical health of people in prison recommends that a list of previous medications is obtained at the first-stage health assessment.^[23] The linked quality standard document (QS156) includes the quality statement, 'People entering or transferring between prisons have a medicines reconciliation carried out before their second-stage health assessment'.^[24] Reports relating to medications are the most frequent patient safety incidents in prisons, making up about a third of incident reports.^[27] Access to medication in prison has been highlighted as a particular problem.^[27]

Time-critical medication(s) are those where delayed or missed doses could adversely impact a patient's health. In those who died from natural causes, 108/197 (54.8%) patients required time-critical medications. The corresponding figure for those who died from other 'non-natural' causes was 16/49 (32.7%) (table 6.4).

Table 6.4 Time critical medications

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	108	54.8	16	32.7	124	50.4
No	89	45.2	33	67.3	122	49.6
Subtotal	197		49		246	
Unknown	1		0		1	
Total	198		49		247	

Reviewer assessment form data

Time-critical medications included opiates for pain control and antimicrobials for infection as well as treatments for diabetes (oral medications and insulin), cardiovascular disease, asthma, or COPD (bronchodilators and steroids), and epilepsy (anti-seizure medication) (table 6.5).

Table 6.5 Types of time critical medications

	Number of patients	%
Opiates	58	46.8
Bronchodilators	31	25.0
Oral hypoglycaemic	24	19.4
Antibiotics	24	19.4
Anti-thrombotics	23	18.5
Antiplatelets	21	16.9
Steroids	15	12.1
Insulin	13	10.5
Anti-seizure medication	9	7.3
Cardiovascular medications	7	5.6
Anti-cancer / palliative therapy	5	4.0
Mental health medications	5	4.0
Anti-Parkinsonian	4	3.2

Reviewer assessment form data (answers may be multiple; n=124)

Missed doses of time-critical medications were seen in 30/124 (24.2%) cases reviewed. The most common reason for the missed dose was refusal/non-adherence by the patient (20/30). Other reasons included the medication not prescribed in time, or not being available.

Medicines reconciliation

Reviewers found that the medicines reconciliation was not appropriate for 31/212 (14.6%) patients in the 12-month period leading up to their death (unknown for 35). In addition, they reported that there was room for improvement in medicines management in 60/247 (24.3%) cases reviewed. The most frequent reason was an error in medication prescribing, dose, or monitoring (table 6.6).

Table 6.6 Areas for improvement in medicines management

	Number of patients
Error in medication prescribing, dose, or monitoring	22
No medicines reconciliation	8
Inappropriate anticipatory medications	4
Not coded appropriately	3
Medication not sent with patient/ not available	2

Reviewer assessment form data

They found areas of medication management that could be improved within all of the clinical pathways. The most frequent area where they found room for improvement was in those who died from an infection (24/66; 36.4%) (figure 6.5).

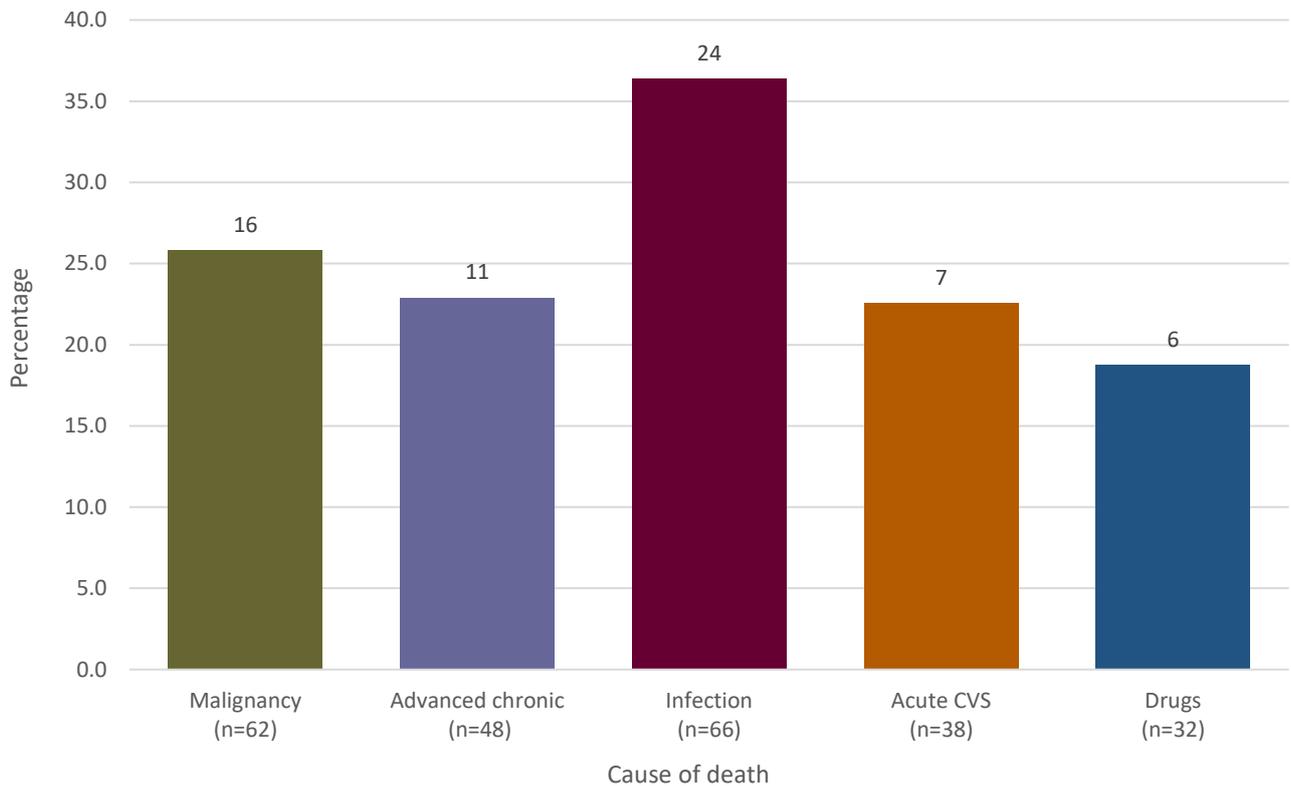


Figure 6.5 Room for improvement in medicines management by cause of death

Reviewer assessment form data

CASE STUDY

A patient with epilepsy was transferred between prisons without medication. While waiting to receive anti-epileptic medications the patient had multiple breakthrough seizures and required emergency hospital transfer.

The reviewers noted that it was the responsibility of the discharging prison to provide medications and the seizures and hospital transfer were entirely avoidable.

Clinical deterioration before death

Deterioration in a patient's clinical condition often occurs before they die. There was evidence of clinical deterioration prior to death in 168/247 (68.0%) patients.

For patients with advanced malignancy or advanced chronic conditions the fact that death is approaching is often clear over a period of weeks or months. This provides an opportunity to plan ongoing treatments with the patient and others who care about them. End of life care is covered in more detail in chapter seven. Of the group with advanced chronic conditions or malignancy, there were 108/118 (91.5%) with evidence of deterioration.

Deaths from acute cardiovascular disease, infections and overdose/poisoning are generally preceded by more rapid deterioration. In these cases, timely assessment, monitoring, and interventions are the broad principles of management. The aim of these is often recovery, (although palliative care may be appropriate when there are coexisting life-limiting conditions) and the opportunities to improve care are therefore different. Assessment using NEWS2 is more likely to be appropriate in these patients. Of those who died from infection or an acute cardiovascular cause, there were 75/109 (68.8%) who had evidence of deterioration prior to death.

There were signs of deterioration in 8/38 (21.1%) of the drug-related deaths (figure 6.6).

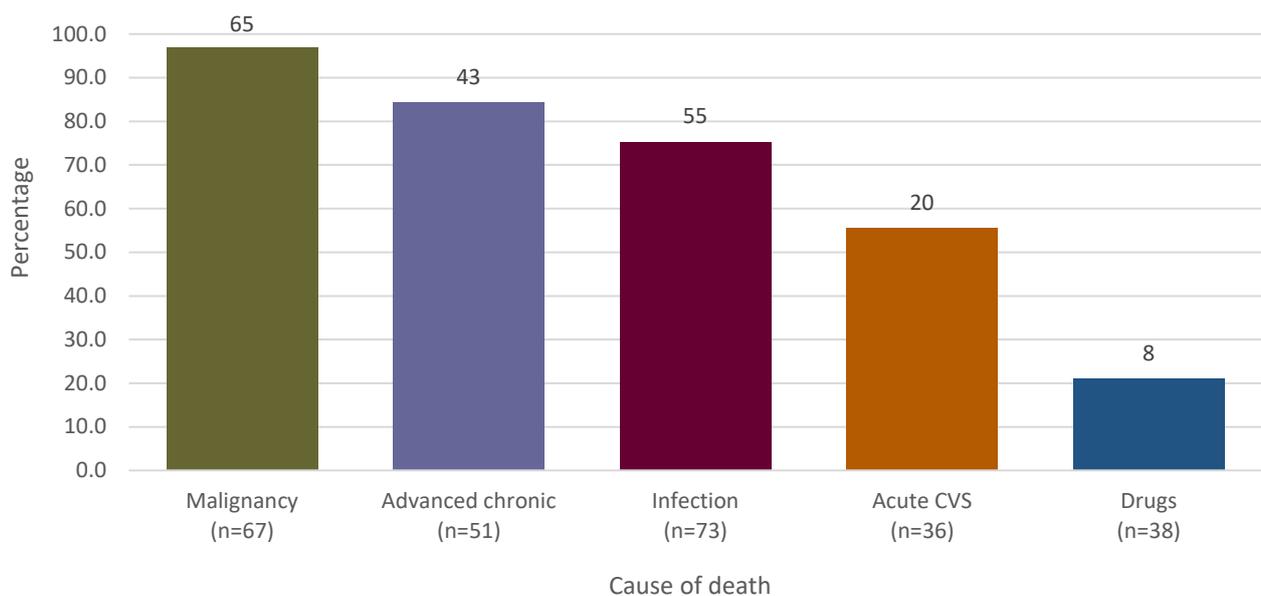


Figure 6.6 Evidence of deterioration before death by cause of death
Reviewer assessment form data

Reviewers found that 58/168 (34.5%) instances of deterioration were not managed appropriately. They were of the opinion that referral to the local palliative care service should have been made for 20 patients. Timely and regular clinical observations and NEWS2 scoring should have been undertaken in 18 patients, with a decision to escalate to an appropriate clinician for five, and transfer to hospital for ten patients.

CASE STUDY

A patient with hypertension, diabetes and high cholesterol was not taking their medications regularly. Their poor general health was not recognised at a healthcare appointment. There were no plans for regular follow-up. There were abnormal observations documented. NEWS2 was not used, and observations were not repeated. No medical professional assessment took place for 28 hours after the abnormal observations. The patient developed persistent severe headache and vomiting and was then assessed and transferred to hospital as an emergency.

The reviewers thought the acute situation could have been avoided by timely observations and monitoring with NEWS2 leading to more rapid changes in treatment.

NEWS2 and acute deterioration

The NEWS2 was developed as a tool to monitor patients at risk of clinical deterioration and identify the need for escalation of care if there was evidence of deterioration. It is most used in secondary care settings to track the clinical status of patients and trigger an escalation response to an appropriately trained clinician based on the score.

Work is underway to explore the use of NEWS2 in out-of-hospital settings like primary care and in prisons. The Royal College of General Practitioners recommends the use of physiological measurements when assessing patients at risk of deterioration in primary care but has not yet endorsed use of NEWS2 in these settings. It also cautions that NEWS2 should not be used as a replacement for clinical judgement but should be used in combination with this.

In this study, NEWS2 was used to assess 135/242 (55.6%) patients and to monitor 96/237 (40.5%) patients. The reviewers found that use of NEWS2 could have been improved for 73/238 (30.7%) patients (table 6.7).

Table 6.7 Use of NEWS2 scoring

	NEWS2 scores used to assess the patient		NEWS2 scores used to monitor the patient		Use of NEWS2 scoring could have been improved	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	135	55.8	96	40.5	73	30.7
No	107	44.2	141	59.5	165	69.3
Subtotal	242		237		238	
Unknown	5		10		9	
Total	247		247		247	

Reviewer assessment form data

There was the most room to improve the use of NEWS2 in those who died from acute illness (infection or an acute cardiovascular cause). There was however still room to improve the use of NEWS2 in those who died of cancer, advanced chronic conditions and from drug-related causes (figure 6.7).

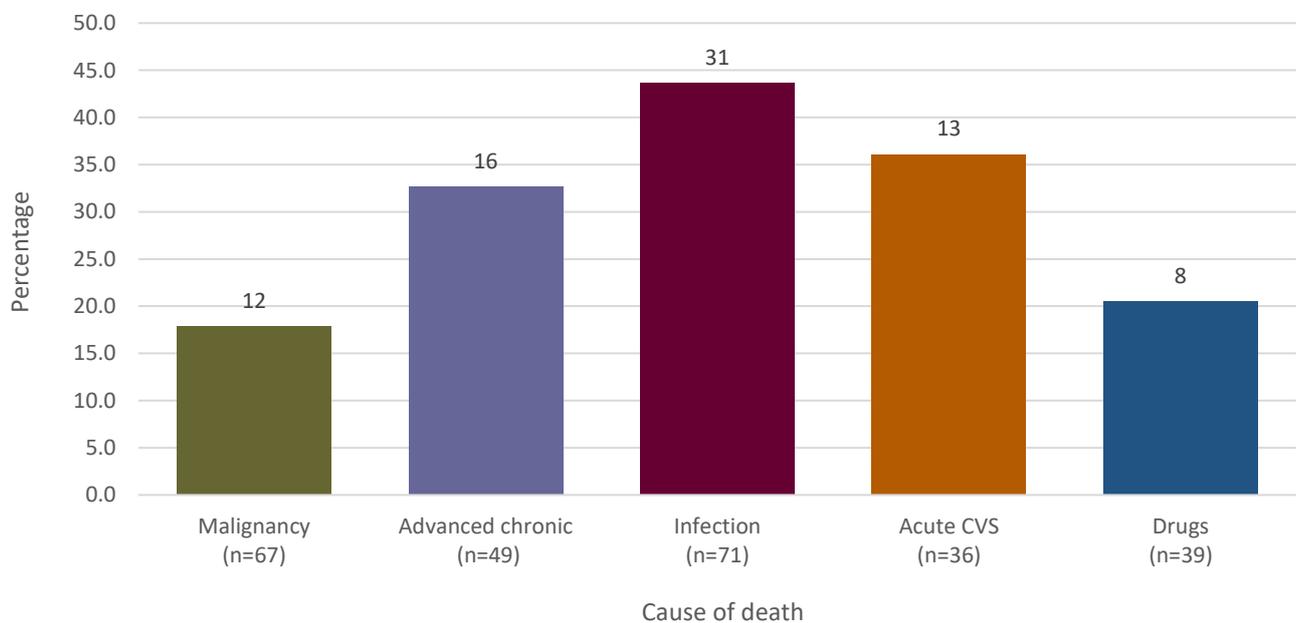


Figure 6.7 Room for improvement in NEWS2 scoring by cause of death

Reviewer assessment form data

In those who died a natural death, where NEWS2 scores were documented, they were often used inconsistently (25/62) or were incompletely recorded/calculated (11/62) (table 6.8). In 11/62 of these cases, although a NEWS2 score was recorded, appropriate action(s) were not taken to manage the clinical deterioration. This was a missed opportunity to improve care.

Table 6.8 Areas where NEWS2 scoring could be improved

	Natural deaths (n=62)	Other 'non-natural' (n=11)
Inconsistently used	25	4
Not used when there was scope for benefit	15	5
Incomplete set recorded/ calculated	11	0
Recorded but not acted appropriately	11	1
Not used but may not have prevented death	5	2
NEWS2 use not appropriate (e.g. end of life)	4	0

Reviewer assessment form data (answers may be multiple)

CASE STUDY

A patient with an infection was assessed by the healthcare team over several days. NEWS2 was not calculated. When calculated by the reviewer, it was 3, and rose to 5 two days later when the patient collapsed and was admitted to hospital as an emergency.

The reviewers believed that calculation of a NEWS2 score regularly and using an escalation protocol could have identified deterioration more rapidly and facilitated a more timely and organised transfer to hospital.

Cardiopulmonary resuscitation (CPR) in prison

The chance of survival following a cardiac arrest outside of hospital is about 7-8%.^[28] CPR can improve the chance of survival by up to four-fold if it is initiated immediately and performed appropriately.^[28] Bystander CPR is an important step in the 'chain of survival'. Automated external defibrillators have also been placed in many public places to improve immediate access to treatment that does not have to involve healthcare professionals. These are often placed in remote locations where access to a first responder is likely to be delayed. This has helped to improve survival rates further. Due to the understandable constraints for emergency services gaining access to prisons, they can be regarded as a remote location. The presence of 'bystanders' in the prison environment also provides an opportunity to focus on improving survival following cardiac arrest in prisons.

CPR was initiated in prison for 50 patients comprising 31 who died of natural causes and 19 who died of other 'non-natural' causes (table 6.9). Reviewers found that there was room for improvement in CPR for 22 patients, of whom 15 died of natural causes and seven of other 'non-natural' causes (table 6.10).

Table 6.9 Cardiopulmonary resuscitation attempted in prison

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	31	36.9	19	52.8	50	41.7
No	53	63.1	17	47.2	70	58.3
Subtotal	84		36		120	
Unknown	0		1		1	
Total	84		37		121	

Reviewer assessment form data

Table 6.10 Room for improvement in the cardiopulmonary resuscitation attempted

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	15	53.6	7	41.2	22	48.9
No	13	46.4	10	58.8	23	51.1
Subtotal	28		17		45	
Unknown	3		2		5	
Total	31		19		50	

Reviewer assessment form data

CPR training for prison staff was identified as an important area for improvement. In 6/22 patients, immediate CPR could not be started due to lack of training even though prison staff were first on the scene when the patient collapsed. CPR training would address other areas for improvement such as identifying cardiac arrest, promptly calling for assistance, initiating CPR immediately and using good CPR technique. In addition, training would include checking for DNACPR orders and knowing when not to initiate CPR.

CASE STUDY

A patient was found unresponsive by prison staff who called a code blue. CPR was not started until a member of the healthcare team arrived. The team managed to get a pulse through CPR, but the patient later died.

The reviewers thought that delay in starting resuscitation was inappropriate. Survival was unlikely but if prison staff had started CPR immediately, the patient's chance of survival would have been higher.

Overall rating of healthcare delivery in prison

The reviewers' overall rating of delivery of prison healthcare was considered good in 117/245 (47.8%) cases reviewed and adequate in 78/245 (31.8%) cases (figure 6.8). Reviewers thought that it was poor in 38/245 (15.5%) and unacceptable in 12/245 (4.9%) cases. They identified aspects of care that could be improved in 146/246 (59.3%) cases reviewed.

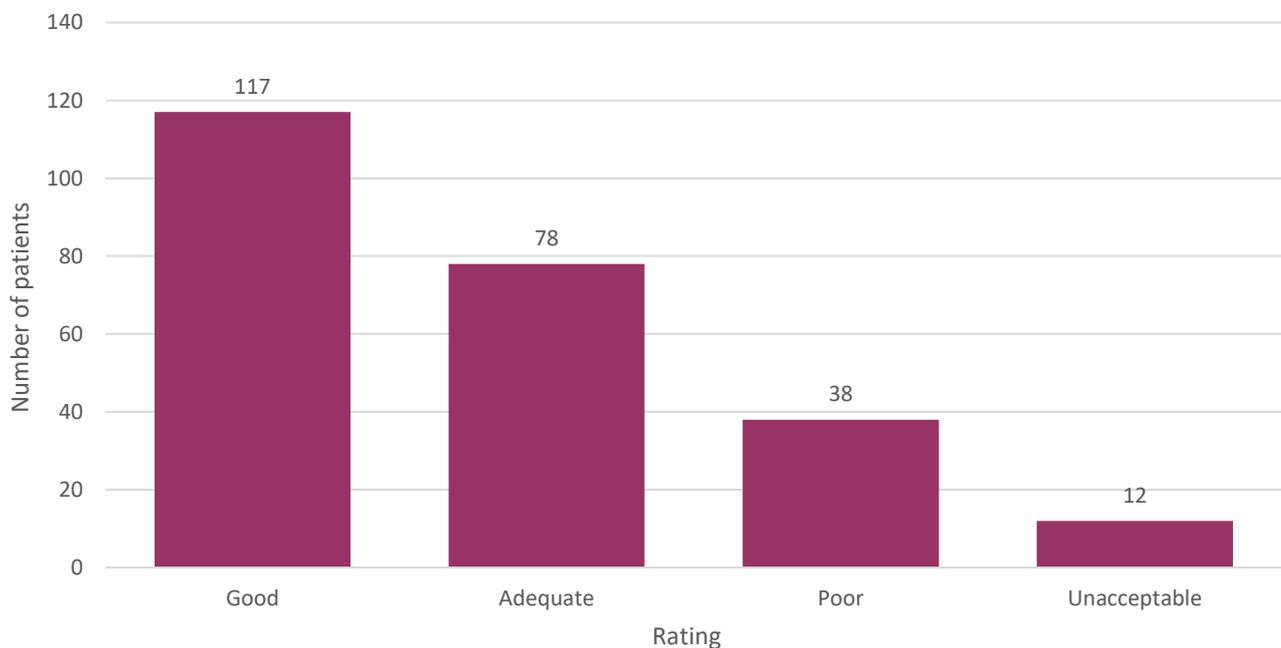


Figure 6.8 Overall rating of healthcare delivery (n=245)

Reviewer assessment form data

CHAPTER 7

EMERGENCY HOSPITAL TRANSFERS

KEY POINTS	
7.1	155/240 (64.6%) patients required emergency transfer to hospital in the 12-months prior to their death. A higher percentage of those who died from natural causes (142/194; 73.2%) were admitted to hospital as an emergency compared with those who died from other 'non-natural' causes (13/46; 28.3%).
7.2	The most common reasons for emergency transfer to hospital were an acute deterioration in physical health (135/155, 87.1%), illicit substance misuse (5), trauma (7) and other physical health conditions (8).
7.3	There were indicators of clinical deterioration in the days prior to transfer in 80/133 (60.2%) cases reviewed; and that earlier assessment and/or intervention could have prevented hospital transfer for 27/131 (20.6%) patients. Clinical deterioration was not managed appropriately in 35/128 (27.3%) patients prior to emergency hospital transfer.
7.4	21/155 (13.5%) transfers to hospital were preventable or avoidable . The most common issue identified was lack of appropriate communication and planning for end of life , in 11/21 cases.
7.5	Following an emergency transfer to hospital, 92/153 (60.1%) patients returned to prison . There was no evidence of clinical handover in 26/87 (29.9%) patients. A discharge letter accompanied the patient in 57/66 (86.4%) cases where reviewers could make an assessment from the documents available. They also observed that 5/57 (8.8%) discharge letters were poor or unacceptable .
7.6	The discharge from hospital back to prison was not appropriate in 18/91 (19.8%) cases. The most common reason for this (8/18) was either an unsafe discharge or that prison was not an appropriate setting for the patient's clinical condition , resulting in hospital readmission .

Transfer from the secure environment of a prison to an acute hospital is complicated. There is both the need for emergency services to access the prison and usually the need for prison staff to escort the patient to hospital.^[29] In this study, 155/240 (64.6%) patients required emergency transfer to hospital in the 12-months prior to their death. A higher percentage of those who died from natural causes (142/194; 73.2%) were admitted to hospital as an emergency compared with those who died from other 'non-natural' causes (13/46; 28.3%) (table 7.1).

Table 7.1 Emergency transfer to hospital in the 12-months prior to death

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	142	73.2	13	28.3	155	64.6
No	52	26.8	33	71.7	85	35.4
Subtotal	194		46		240	
Unknown	4		3		7	
Total	198		49		247	

Reviewer assessment form data

The most common reason for emergency transfer to hospital was an acute deterioration in physical health (135/155, 87.1%). Illicit substance use (5), trauma (7) and other physical health conditions (8) constituted other reasons for an emergency admission.

Reviewers found that there were indicators of clinical deterioration in the days prior to transfer in 80/133 (60.2%) cases reviewed; and that early assessment and/or intervention could have prevented hospital transfer for 27/131 (20.6%) patients (figure 7.1). Clinical deterioration was not managed appropriately in 35/128 (27.3%) patients prior to emergency hospital transfer.

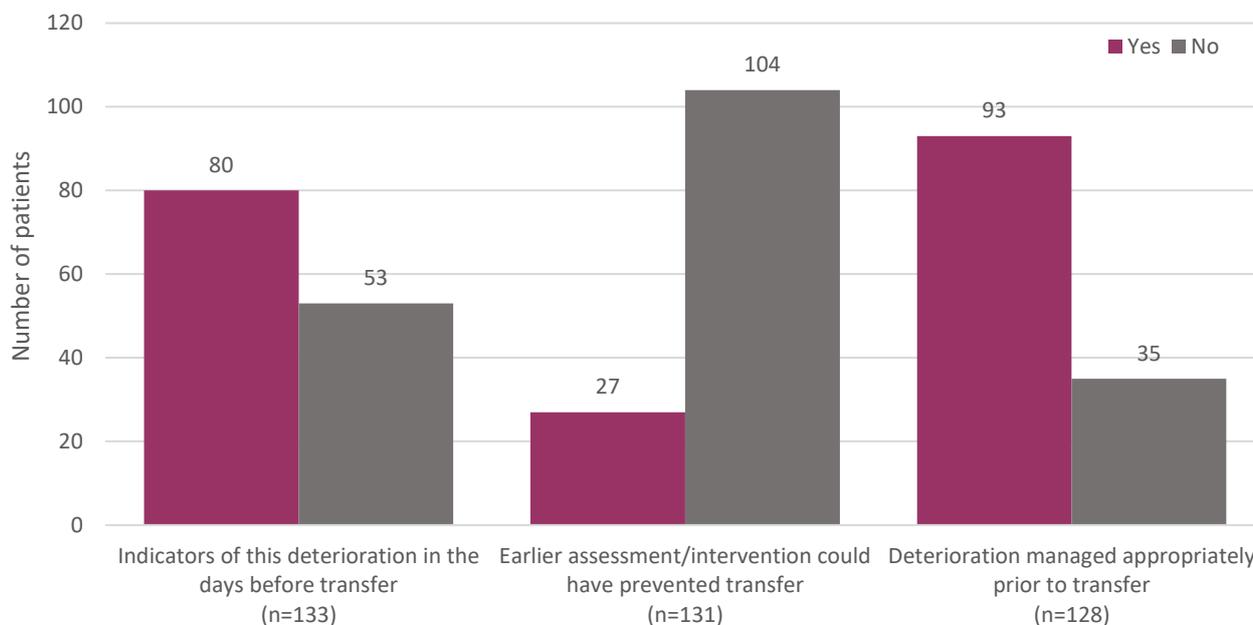


Figure 7.1 Management before hospital transfer
 Reviewer assessment form data

In addition to identifying/managing deterioration better, other areas for improvement, were earlier identification of the need for transfer to hospital (15 patients), avoiding delays in transfer (13 patients) and treatment being started before transfer (9 patients). In addition, reviewers believed that transfer to hospital could have been avoided by making advanced care plans for eight people at the end of life.

For the 112 patients where reviewers were able to determine who escorted the patient to hospital, the majority (85/112; 75.8%) were escorted by non-clinical staff.

Reviewers considered that 21/155 (13.5%) transfers to hospital were preventable or avoidable. The most common issue identified was lack of appropriate communication and planning for end of life, in 11/21 cases. This lack of advance care planning applied to people with cancer and those with non-malignant long-term medical conditions, such as chronic heart failure. Other reasons for their opinion included improvement in clinical assessment and monitoring by the local team (9/21), timely outpatient consultation (5/21) and organisational control of illicit substance misuse (3/21).

CASE STUDY

An older patient with multiple comorbidities was admitted to hospital with progressive difficulty in breathing despite a documented end of life/palliative care plan for advanced heart failure.

Reviewers thought that a DNACPR form should have been in place and the patient's wish not to go to hospital should have been respected.

Return to prison from hospital

Following an emergency transfer to hospital in the last 12-months of life, 92/153 (60.1%) patients returned to prison. There was no evidence of clinical handover in 26/87 (29.9%) patients. A discharge letter accompanied the patient in 57/66 (86.4%) cases where reviewers could make an assessment from the documents available. They also observed that 5/57 (8.8%) discharge letters were poor or unacceptable. The reviewers were also of the opinion that the discharge from hospital back to prison was not appropriate in 18/91 (19.8%) cases (figure 7.2). The most common reason for this (8/18) was either an unsafe discharge or that prison was not an appropriate setting for the patient's clinical condition, resulting in hospital readmission.

The other reasons were patient refusal/self-discharge (five cases) and inadequate discharge documentation or handover (five cases).

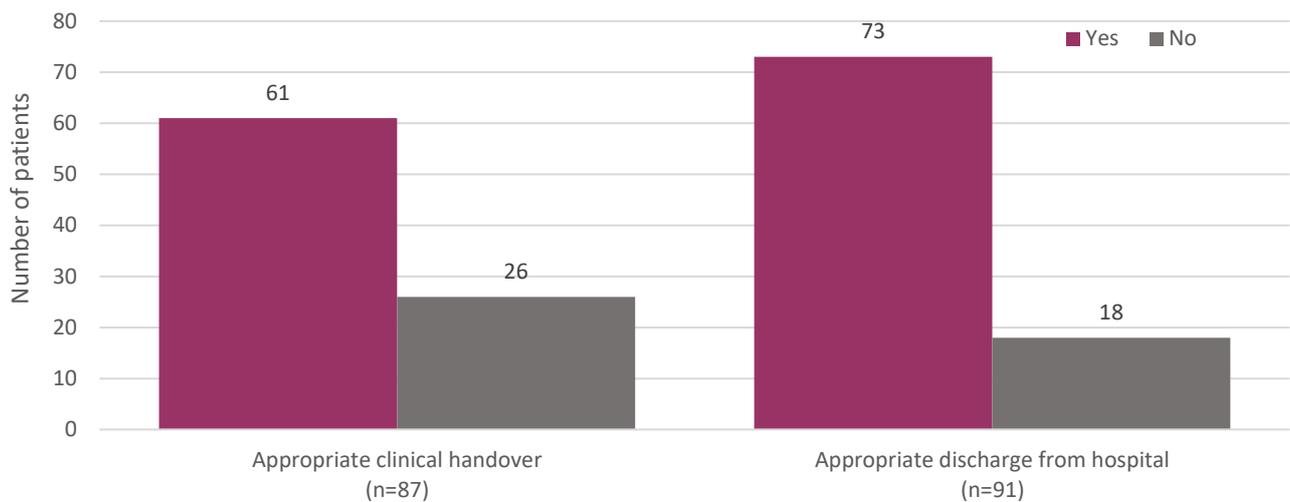


Figure 7.2 Appropriateness of clinical handover and discharge from hospital
Reviewer assessment form data

CASE STUDY

An older prisoner was admitted to hospital with suspected sepsis. They were discharged back to the prison 48 hours later. On arrival they were noted to be unwell, agitated and confused. An ambulance transfer was arranged for an immediate return to the hospital.

The reviewers thought that this was an inappropriate discharge, and that the hospital staff had a poor understanding of the level of monitoring and supervision available in the receiving prison.

Readmission to hospital

NHS Digital data show that the average 30-day readmission rate after hospital discharge to the community is 12.5-15.5%.^[30] While there can be multiple and complex reasons for readmission to hospital, it is considered an indicator of the quality of hospital care and discharge planning.

Over two-thirds (68/95; 71.6%) of patients who were discharged from hospital to prison had a subsequent emergency admission to hospital. Data were not collected to distinguish if these were readmissions, but reviewers did find that seven of these admissions were due to an inappropriate or untimely discharge from hospital.

CASE STUDY

A patient returned to prison from hospital with no discharge letter and a urinary catheter, which they did not have previously. When the prison nurse contacted the hospital for information, the ward nurse did not know which medications had been given prior to return to prison, nor why there was a catheter in situ.

The reviewers stated that this case highlighted the importance of the discharge letter and a proper clinical handover between hospital and prison healthcare staff.

CHAPTER 8

END OF LIFE CARE

KEY POINTS	
8.1	Death was anticipated in 94/246 (38.2%) patients. All but one of these (93/94) were from the subgroup of natural deaths and were more likely to be those with malignancy than with advanced chronic conditions. Death should have been anticipated in a further 22/101 (21.8%) natural deaths .
8.2	A palliative or EoLC plan was documented in 76/170 (44.7%) patients who died of a natural cause. Reviewers considered that an additional 40/170 (23.5%) patients were suitable for EoLC planning .
8.3	A palliative or EoLC plan should have been in place for 11/65 (16.9%) patients who died of malignancy (meaning that 63/65 (96.9%) of this group either had or should have had an EoLC plan).
8.4	Of the patients with advanced chronic conditions , 13/44 (29.5%) had an EoLC plan in place . The reviewers considered that an additional 17/44 (38.6%) patients should have had such a plan (meaning that 30/44 (68.2%) either had or should have had a plan in place).
8.5	DNACPR documentation was in place for 108/184 (58.7%) patients who died of natural causes .
8.6	Of the patients who died of malignancy , 60/68 (88.2%) had a DNACPR decision in place . DNACPR decisions were also in place for 28/48 (58.3%) patients who died from advanced chronic conditions and 31/63 (49.2%) who died from an acute infection . No patients who died from a drug-related cause had a DNACPR in place.
8.7	Where a DNACPR decision was in place, reviewers were of the opinion that this was the correct decision for all patients. However, they identified nine patients where they believed a DNACPR should have been in place . They also identified areas where communication regarding DNACPR decisions with both the patient and their family members could have been better.
8.8	Of the patients whose death was anticipated , there was documentation of a discussion about the preferred place of death in 58/73 (79.5%) cases reviewed. The majority (63/83; 75.9%) were also considered for compassionate release .
8.9	The actual place of death was a hospice for 18/198 (9.1%) patients. Most of these patients (15) had a malignancy listed as a cause of death. The patients who died from infection were most likely to die in hospital (54/74; 73.0%) . The patients most commonly dying in prison were those who died from a drug-related cause (34/40; 85.0%) .
8.10	The reviewers found that the end of life care process could have been improved in 48/106 (45.2%) cases where death was from natural causes . There was more room to improve end of life care for patients who died from advanced chronic conditions (22/42; 52.4%) than from malignancy (20/63; 31.7%).
8.11	The most common areas for improvement were involving the patient and family (27 patients) , and advance care planning for end of life (27) . The other important steps were early involvement of the palliative care service (12), timely clinical reviews (9) and staff training in end of life care (8) and CPR. Reviewers also identified three cases where patients were still hand-cuffed at the end of life .

The NICE guideline (NG142) for end of life care (EoLC) for adults and the associated quality standard (QS13) define adults approaching the end of life as those in the final weeks and months of life.^[31,32] As described in chapter five, for people with some conditions, this could be months or years. This includes people with advanced, progressive, incurable conditions such as malignancy. The combination of frailty and coexisting medical conditions often means that people are at increased risk of dying within the next 12-months.^[11,33-36]

The 'Dying Well in Custody Charter' provided by NHS England in 2018 provides a framework for end of life care planning.^[35] The document lists six ambitions, which includes: 1. each person is seen as an individual, 2. each person gets fair access to care, 3. maximising comfort and wellbeing, 4. care is coordinated, 5. all staff are prepared to care, and 6. each community is prepared to help.

An opportunity for advance care planning should be offered as part of EoLC, which should include the individual's concerns and wishes, their values or personal goals for care, their understanding about their illness and prognosis, their preferences and wishes for types of care or treatment that may be beneficial in the future and the availability of these. Where appropriate, plans for palliative care should be developed in conjunction with the local palliative care team. This should include care required outside of working hours.

There was documentation that death was anticipated in 94/246 (38.2%) patients. All but one of these (93/94) were from the subgroup of natural deaths and were more likely to be those with malignancy than with advanced chronic conditions (table 8.1). Reviewers were of the opinion that death should have been anticipated in a further 22/101 (21.8%) natural deaths.

Table 8.1 Death was anticipated

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	93	47.0	1	2.1	94	38.2
No	105	53.0	47	97.9	152	61.8
Subtotal	198		48		246	
Unknown	0		1		1	
Total	198		49		247	

Reviewer assessment form data

Comparing the areas with the potential for improvement across the care pathway for those who died of a malignancy and those with an advanced chronic healthcare condition, there was more room to improve care for those with non-malignant long-term conditions (figure 8.1). There were also more examples of good practice in the care of patients who died from a malignancy.

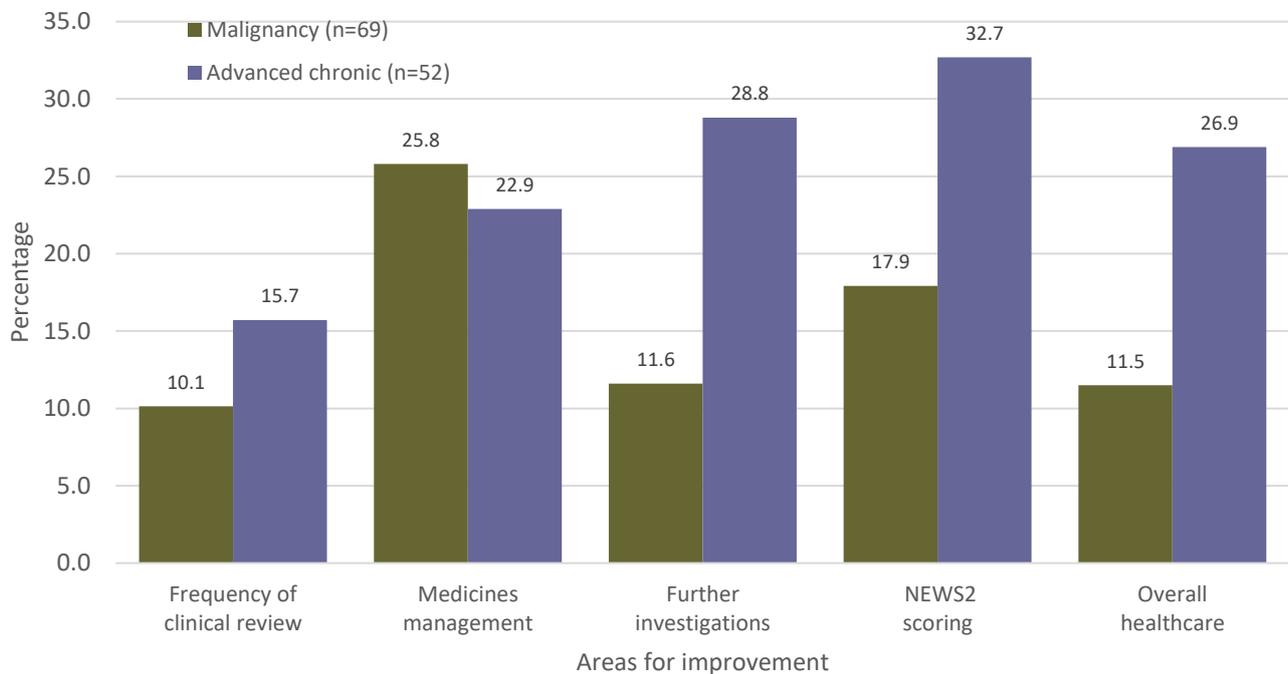


Figure 8.1 Areas for improvement in healthcare, malignancy versus other advanced chronic conditions

Reviewer assessment form data

A palliative or EoLC plan was documented in 76/170 (44.7%) patients who died of a natural cause. Reviewers considered that an additional 40/170 (23.5%) patients were suitable for EoLC planning.

For the two groups of people who died from conditions where death would be more likely to be predicted (malignancy and advanced chronic conditions), there was a clear difference in how frequently an EoLC plan was in place. This was in place for 52/65 (80.0%) patients with malignancy. The reviewers thought that a palliative or EoLC plan should have been in place for 11/65 (16.9%) patients who died of malignancy (meaning that 63/65 (96.9%) of this group either had or should have had an EoLC plan).

Of the patients with advanced chronic conditions, 13/44 (29.5%) had an EoLC plan in place. The reviewers considered that an additional 17/44 (38.6%) patients should have had such a plan (meaning that 30/44 (68.2%) either had or should have had a plan in place) (figure 8.2).

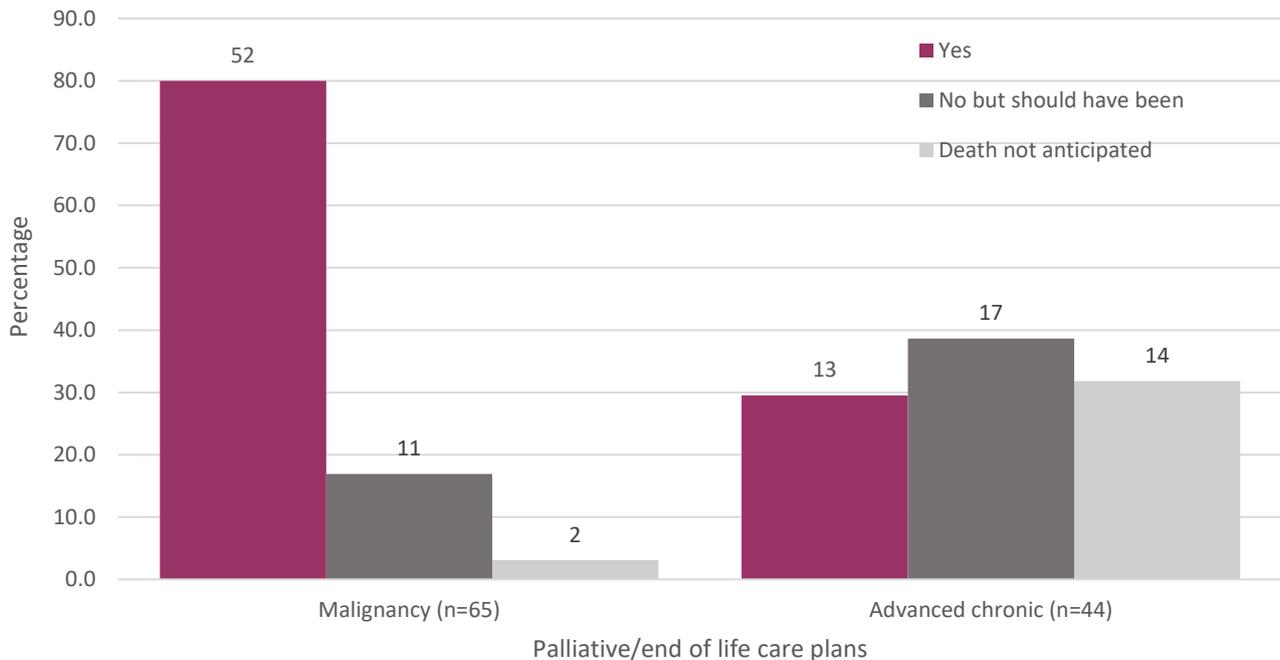


Figure 8.2 Palliative/end of life care plans in place for malignancy and other advanced chronic conditions
 Reviewer assessment form data

Advance care planning

Advance care plans should include discussion on the risks and benefits of cardiopulmonary resuscitation (CPR). Some patients may want to include family and/or carers in these discussions. Where a decision not to attempt CPR (DNACPR) is made, necessary documentation should be completed and shared with all those responsible for the health and care of that person. DNACPR documentation was in place for 108/184 (58.7%) patients and not completed for 76/184 (41.3%) patients who died of natural causes. Where it was not in place, this was considered appropriate in 58/71 (81.7%) patients.

Of the patients who died of malignancy, 60/68 (88.2%) had a DNACPR decision in place. DNACPR decisions were also in place for 28/48 (58.3%) patients who died from advanced chronic conditions and 31/63 (49.2%) who died from an acute infection (noting as previously that there is overlap between these groups) (figure 8.2). None of the patients who died from a drug-related cause had a DNACPR in place.

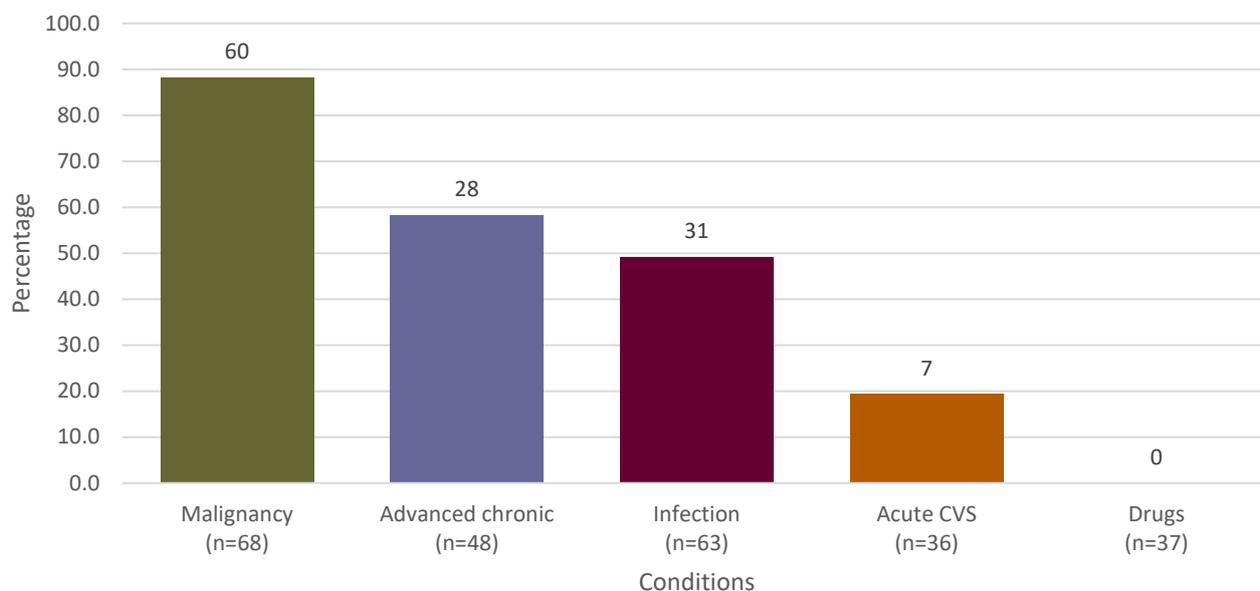


Figure 8.2 DNACPR decisions and cause of death
 Reviewer assessment form data

Where a DNACPR decision was in place, reviewers were of the opinion that this was the correct decision for all patients. However, they identified nine patients where they believed a DNACPR should have been in place. They also identified areas where communication regarding DNACPR decisions with both the patient and their family members could have been better.

Preferred place of death and compassionate release

A patient's preferred place of death is another important aspect of advance care planning. Prisons have policies to support release on compassionate grounds and other measures to support this.^[34]

Of the patients whose death was anticipated, there was documentation of a discussion about the preferred place of death in 58/73 (79.5%) cases reviewed. The majority (63/83; 75.9%) were also considered for compassionate release (table 8.2). Reviewers believed compassionate release should have been considered for a further ten patients.

Table 8.2 Preferred place of death and compassionate release

	Discussions about the preferred place of death		Patient considered for compassionate release	
	Number of patients	%	Number of patients	%
Yes	62	79.4	63	75.9
No	16	20.5	20	24.1
Subtotal	78		83	
Unknown	16		11	
Total	94		94	

Reviewer assessment form data

The actual place of death was a hospice for 18/198 (9.1%) patients. Most (15) had a malignancy listed as a cause of death. This was sometimes in combination with another cause such as infection. The patients who died from infection were most likely to die in hospital (54/74; 73.0%). The patients most commonly dying in prison were those who died from a drug-related cause (34/40; 85.0%) (figure 8.3).

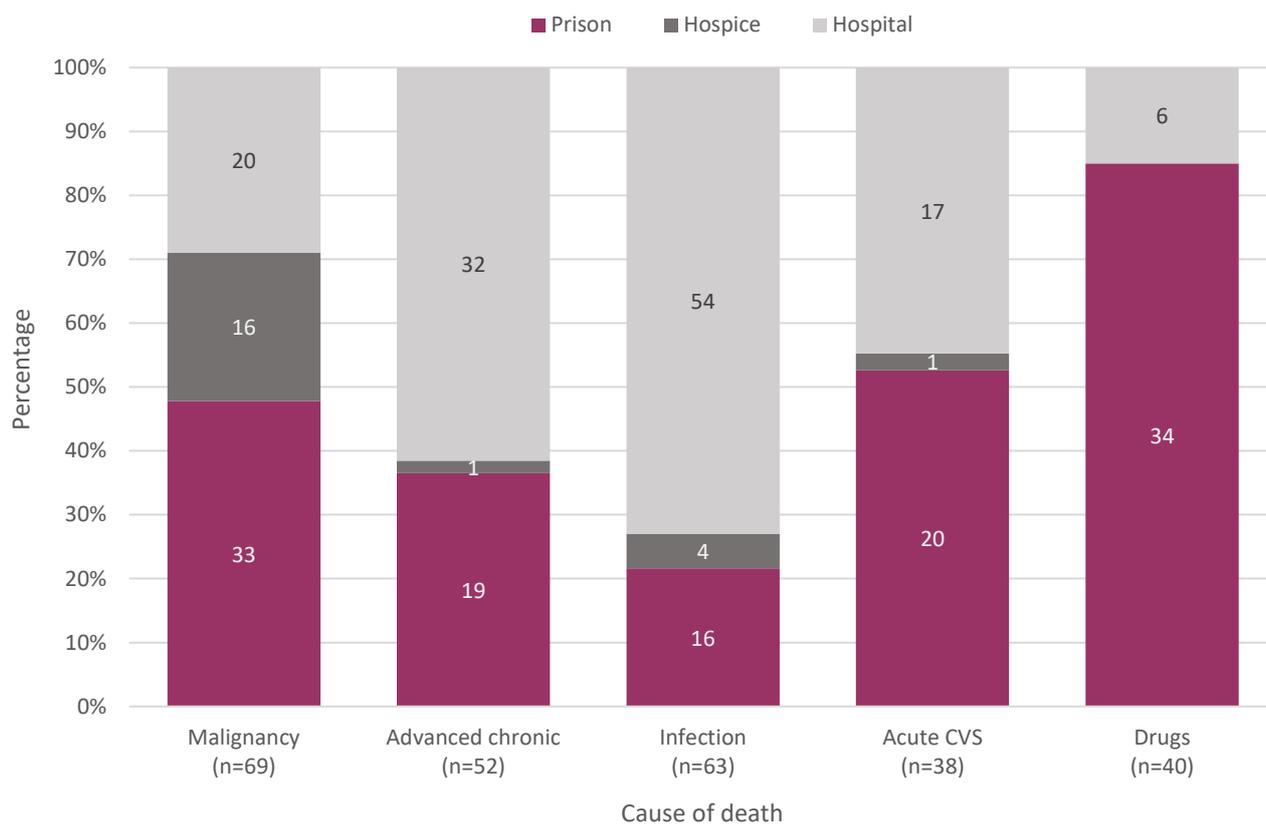


Figure 8.3 Location of death and cause of death
 Reviewer assessment form data

CASE STUDY

The death of an older patient with advanced malignancy was anticipated. End of life care planning was put in place. There was good documentation of shared decision-making including the patient's family. The patient wanted to stay in prison to die, describing it as the place they felt safe. The death occurred in the prison hospital wing with good control of the patient's symptoms.

The reviewers thought this was an example of excellent practice in end of life care and demonstrated what was possible in the prison environment.

CASE STUDY

An older prisoner had several admissions to hospital in the six months prior to death with advanced heart failure and deterioration of chronic kidney disease. In the last month of life, they were largely bedbound. An advance care plan was not discussed, and an escalation of treatment decision was not made. They were admitted to hospital as an emergency for the last 48 hours of their life.

The reviewers thought that there was a missed opportunity to discuss the individual's wishes and to agree an escalation plan. The final admission could have been avoided, and that the absence of a diagnosis of malignancy meant the prison healthcare team was not confident that the patient was approaching the end of their life, despite the clear deterioration in their condition over the preceding months.

Improvements in end of life care planning

The reviewers found that the end of life care process could have been improved in 48/106 (45.2%) cases where death was from natural causes. There was more room to improve end of life care for patients who died from advanced chronic conditions (22/42; 52.4%) than from malignancy (20/63; 31.7%) (table 8.3).

Table 8.3 Room for improvement in end of life care planning

	Malignancy		Advanced chronic		All natural deaths that were or should have been anticipated	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	20	31.7	22	52.4	48	45.3
No	43	68.3	20	47.6	58	54.7
Subtotal	63		42		106	
Unknown	6		10		9	
Total	69		52		115	

Reviewer assessment form data

The most common areas for improvement were involving the patient and family (27 patients), and advance care planning for end of life (27). The other important steps were early involvement of the palliative care service (12), timely clinical reviews (9) and staff training in end of life care (8) and CPR. Reviewers also identified three cases where patients were still hand-cuffed at the end of life.

CASE STUDY

A patient with advanced malignancy was referred to the local palliative care team. No contact was made for six weeks during which they were admitted to hospital for acute control of symptoms. Documentation suggested that the prison healthcare team were unclear how to refer to the palliative care team and were not confident in the prescribing and administration of palliative medications themselves.

The reviewers thought this illustrated the need for better relationships between prison healthcare providers and palliative care teams and local hospices including the need for clear referral pathways.

CHAPTER 9

OVERALL QUALITY OF CARE

KEY POINTS	
9.1	The most common area where care could be improved identified by the reviewers was long-term condition management (21 comments), management of malignancy or palliative care (18) and monitoring with NEWS2 or recognition of deterioration (11).
9.2	The clinical care provided to patients differed from that provided in the wider community in 66/198 (33.3%) of those who died a natural death and in 13/49 (26.5%) of those who died a ' non-natural ' death.
9.3	Good practice in the provision of mental health care, use of NEWS2 scoring and provision of palliative care input were each highlighted in three cases. This confirms that good practice is also possible in each of the areas which were also highlighted for improvement.
9.4	The overall quality of healthcare was rated as good in 100/247 (40.5%) patients. There was room for improvement in clinical care in 99/247 (40.1%) patients. There was room for improvement in the organisation of care for 54/247 (21.9%) patients. Care was rated as less than satisfactory in 25/247 (10.1%) cases reviewed (23/25 were in deaths from natural causes).
9.5	Learning opportunities were identified in 164/247 (66.4%) of the cases reviewed. The most frequent opportunities for learning identified were centred around written and verbal communication including handover, improving use of NEWS2 in 26 patients, and improving medicines management in 11. Both the recognition of the need for end of life care (in particular, in non-malignant disease) and improved delivery of palliative care were identified in 28 cases.

The most common area where care could be improved identified by the reviewers was long-term condition management. There were 199 patients with a long-term condition, so this represents 52/199 (26.1%) of this group (table 9.1).

Table 9.1 Areas of improvement in the overall quality of care

	Number of patients	%
Long-term condition management	52	21.1
Recognition of an underlying long-term health condition	27	10.9
Recognition of an acute illness	26	10.5
Recognition of deterioration of a known long-term health condition	25	10.1
Recognition of deterioration of an acute illness	23	9.3
No improvements identified	80	32.4

Reviewer assessment form data (answers may be multiple; n=247)

The clinical care provided to patients was found to differ from that provided in the wider community in 66/194 (33.3%) of those who died a natural death and in 13/49 (26.5%) of those who died a 'non-natural' death.

The reviewers were asked to comment on the reasons why they considered that care differed from that in the wider community as well as to highlight areas of good practice. There were 73 comments often covering multiple areas. Of these comments, 16 highlighted good practice, and 59 highlighted areas where there was room for improvement. There were four cases where both good and poor practice was identified, noting good mental health care but poor management of both long-term conditions and acute physical healthcare.

The most common areas where there was room for improvement were in long-term condition management (21 comments), management of malignancy or palliative care (18) and monitoring with NEWS2 or recognition of deterioration (11). A lack of hospital escorts was highlighted in two cases.

Good practice in the provision of mental health care, use of NEWS2 scoring and provision of palliative care input were each highlighted in three cases. This confirms that good practice is also possible in each of the areas which were also highlighted for improvement.

Reviewer: *“A delay in diagnosis and in making a DNACPR decision. There were repeated unnecessary capacity assessments as the patient was appropriately refusing treatments. No notice was taken of the patient’s wishes and the palliative care team should have been involved to advise on end of life care...”*

The reviewers rated the overall quality of healthcare as good in 100/247 (40.5%) patients. They identified room for improvement in clinical care in 99/247 (40.1%) patients. There was room for improvement in the organisation of care for 54/247 (21.9%) patients. Care was rated as less than satisfactory in 25/247 (10.1%) cases reviewed (23/25 were in deaths from natural causes) (figure 9.1).

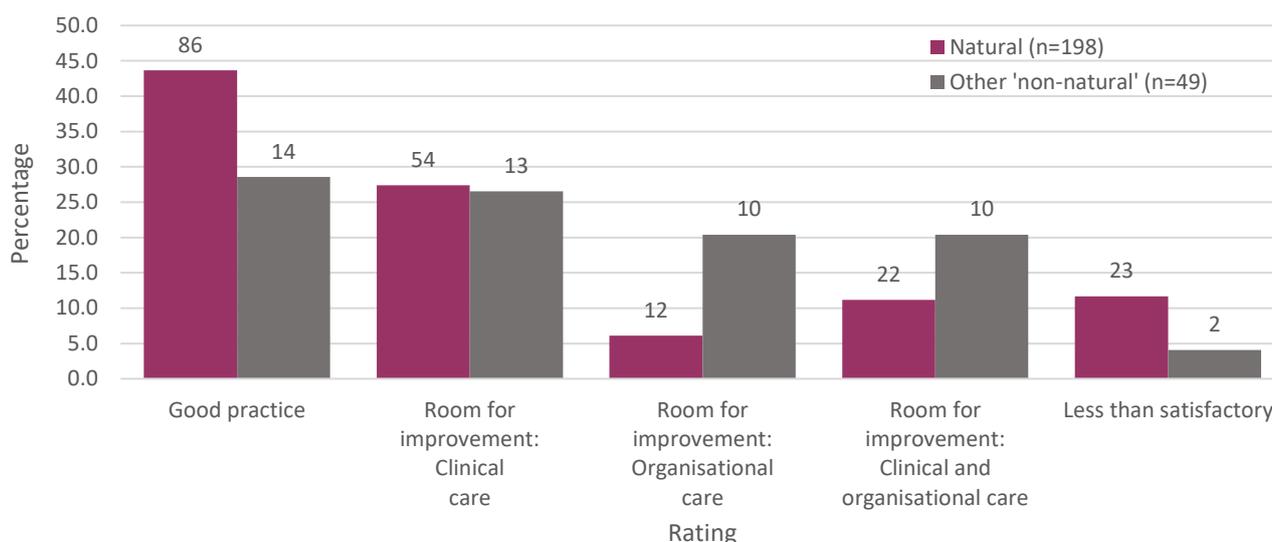


Figure 9.1 Overall quality of care
Reviewer assessment form data

Learning opportunities

Learning opportunities were identified in 164/247 (66.4%) of the cases reviewed. The most frequent opportunities for learning identified were centred around written and verbal communication including handover. This was focussed on handover between different parts of the healthcare system (prison/prison or prison/hospital) in 15 cases reviewed. There were opportunities to improve use of NEWS2 identified in 26 and to improve medicines management in 11. Both the recognition of the need for end of life care (in particular, in non-malignant disease) and improved delivery of palliative care were identified in 28 cases.

Reviewer: *“There could have been better recognition of palliative care needs in a non-cancer patient and skills required to manage heart failure in the community. There was a need for better liaison between hospital, prison, and healthcare staff regarding transfer of complex patients from hospital to prison.”*

There were also opportunities to improve collaborative working between prison operational and healthcare staff in 14 cases reviewed. Improved use of basic life support by prison operational staff was identified in nine cases.

In addition, reviewers identified areas of good practice in 133/247 (53.8%) cases.

Reviewer: *“We should highlight the importance of adaptability within prison healthcare – in this case they worked effectively with hospital teams to enable the patient to die where he wanted, in prison. They also maintained an impressively compassionate approach throughout.”*

CHAPTER 10

INDEPENDENT CLINICAL REVIEWS

KEY POINTS	
10.1	The single NHS clinical reviewer had appropriate expertise in 199/240 (82.9%) of the reviews. The expertise that was considered to be lacking was knowledge of advance care planning and palliative care in 17 cases, and wider medical knowledge in 15.
10.2	Appropriate specialists were not involved in 28/131 (21.4%) of the natural death reviews compared with 4/38 (10.5%) of the drug-related/'non-natural' deaths .
10.3	NCEPOD reviewers disagreed with the conclusions of the NHS England clinical reviews in 49/196 (25.0%) of the natural and 7/49 (14.3%) of the other 'non-natural' deaths. They thought that the reviewer was over-critical of the healthcare provided in 11 cases and that there was an important aspect of care that was not included in their conclusions in 33 cases . The most common areas that were not included in their conclusions related to palliative and end of life care in 14 cases and monitoring using early warning scores (NEWS2) in six.
10.4	Care was thought to be the same as in the community in 116/227 (51.1%) cases reviewed.
10.5	Care was thought to have been worse than in the community in 74/227 (32.6%) cases reviewed. This related to the management of long-term conditions (such as diabetes or hypertension) in 26, the provision of or access to acute care in 21 and poor provision of or access to palliative or end of life care in 18 cases.
10.6	The reviewers commented that the NHS England clinical reviews were more focused on policies and procedures and often did not look at wider aspects of the healthcare provided.
10.7	There was the potential to learn from the NHS clinical review in more than half of the cases. This applied to both the natural deaths where opportunities to learn were identified in 109/196 (55.6%), and the 'non-natural' deaths where they were identified in 28/49 (57.1%).
10.8	Of the 247 PPO reports reviewed , 47 did not have an associated action plan with recommendations . Of the 200 action plans available for review, there were 41/191 (21.5%) action plans where not all the recommendations were measurable and out of a total of 579 recommendations made across all the PPO action plans, 115/579 (19.9%) were not measurable.
10.9	There were 17 cases where the clinical reviewer was not considered to have the necessary breadth of knowledge to formulate an appropriate action plan .
10.10	The NHS England clinical reviews were rated as good by the NCEPOD reviewers in 140/247 (56.7%) cases. NCEPOD reviewers found more room for improvement in the reviews of the natural deaths where 18/198 (9.1%) were rated as poor or unacceptable .

All deaths in custody are subject to an independent clinical review arranged by the Prison and Probation Ombudsman (PPO) service. In England, clinical reviewers are commissioned by NHS England Health and Justice regional teams,^[36] and in Wales, by the Health Inspectorate Wales.^[37] A fatal incident report is produced for each death and the PPO publishes this report and an associated action plan. The reports and action plans are available for review on the PPO's website. The terms of reference for these reviews ask the reviewer to consider aspects of clinical care pertinent to the death.^[36]

There are currently three levels of review. Level one involves a desk top exercise by a single clinical reviewer and may involve telephone calls to the healthcare department for clarification. Level two involves a single clinical reviewer examining the records and interviewing healthcare staff. Level three is described as 'complex healthcare' with multidisciplinary input requiring a panel review with a lead reviewer, to examine records and interview healthcare staff. The decision on the level of review required lies with the reviewer, usually based on their initial assessment of the case records.

Concerns have been raised about the quality and independence of clinical reviews, suggesting that there is 'little evidence defending their existing parameters and execution, or indicating efforts to improve'.^[38] The guidance and standards for the review process are being updated as this report is released. It is therefore anticipated that the outputs of this report will be used to inform the updated guidance.

In this study, in addition to the medical records, reviewers were given copies of both the PPO report and the independent clinical review that was used to inform that report. During the set-up phase of this study, it became apparent that it would be difficult to measure whether some of the recommendations made in the published reports had been acted on or delivered.

Reviewers were asked to identify any opportunities for learning and to compare them with the findings of the clinical review document and the PPO report. They were also asked to rate the equivalence of healthcare (which is part of the current review process) and to rate how many of the recommendations had a clearly measurable outcome. The results are presented separately for the 198 natural and the 49 other 'non-natural' deaths. Where it was known, 2/245 reviews were done at level three (both for natural deaths) (table 10.1).

Most of the other 'non-natural' deaths, most often due to substance misuse (novel psychoactive substances ('spice') or opioids) (42/49; 85.7%) were reviewed at level two. The local context about drug use and access to illicit substance in the individual prison is clearly an important part of this process, likely to require interviews with staff from the prison.

The natural deaths were generally more complex medically, occurring in older people with multimorbidity. Of the natural deaths, 140/196 (71.4%) had level one reviews.

Table 10.1 Level of review that was agreed for this clinical review

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Level 1	140	71.4	7	14.3	147	60.0
Level 2	54	27.6	42	85.7	96	39.2
Level 3	2	1.0	0	0	2	<1
Subtotal	196		49		245	
Unknown	2		0		2	
Total	198		49		247	

Reviewer assessment form data

The NCEPOD reviewers considered that the single clinical reviewer had appropriate expertise for 199/240 (82.9%) of the reviews. They were more likely to consider that the reviewer did not have appropriate expertise for the reviews of natural deaths. This was the case for 36/192 (18.8%) of the natural and 5/48 (10.4%) of the other 'non-natural' deaths. The expertise they considered to be lacking was knowledge of advance care planning and palliative care in 17 cases, and wider medical knowledge in 15. There were a small number of cases where better knowledge of prescribing (4), and better acute care knowledge and skills (2) would have been useful.

Similarly, the lead reviewer was less likely to involve appropriate specialists in the review of natural deaths. Appropriate specialists were not involved in 28/131 (21.4%) of the natural death reviews compared with 4/38 (10.5%) of the drug-related/'non-natural' deaths. Additional involvement of a specialist in palliative care was thought to be required in 16 reviews and a specialist with wider medical knowledge in 13 cases (specifically a cardiologist in four).

When the NCEPOD reviewers examined the conclusions of the NHS England reviews and recommendations by type of death, they were more likely to disagree with those relating to the natural deaths. They disagreed

with the conclusions in 49/196 (25.0%) of the natural and 7/49 (14.3%) of the other 'non-natural' deaths. They thought that the reviewer was over-critical of the healthcare provided in 11 cases and that there was an important aspect of care that was not included in their conclusions in 33 cases. The most common areas that were not included in their conclusions related to palliative and end of life care in 14 cases and monitoring using early warning scores (NEWS2) in six.

The NCEPOD reviewers disagreed with the recommendations in the NHSE review in 46/196 (23.5%) of the natural deaths and in 6/49 (12.2%) of the other 'non-natural' deaths (figure 10.1). There were six cases where no recommendations were made and the NCEPOD reviewer thought they could have been. There were ten cases where the NCEPOD reviewer disagreed with at least one of the recommendations in the PPO report, generally suggesting that they were not relevant to the death. The most common additional recommendations suggested by the NCEPOD reviewers centred on palliative and end of life care planning in 11 cases, long-term condition management in 11 cases, and early warning scoring in eight cases.

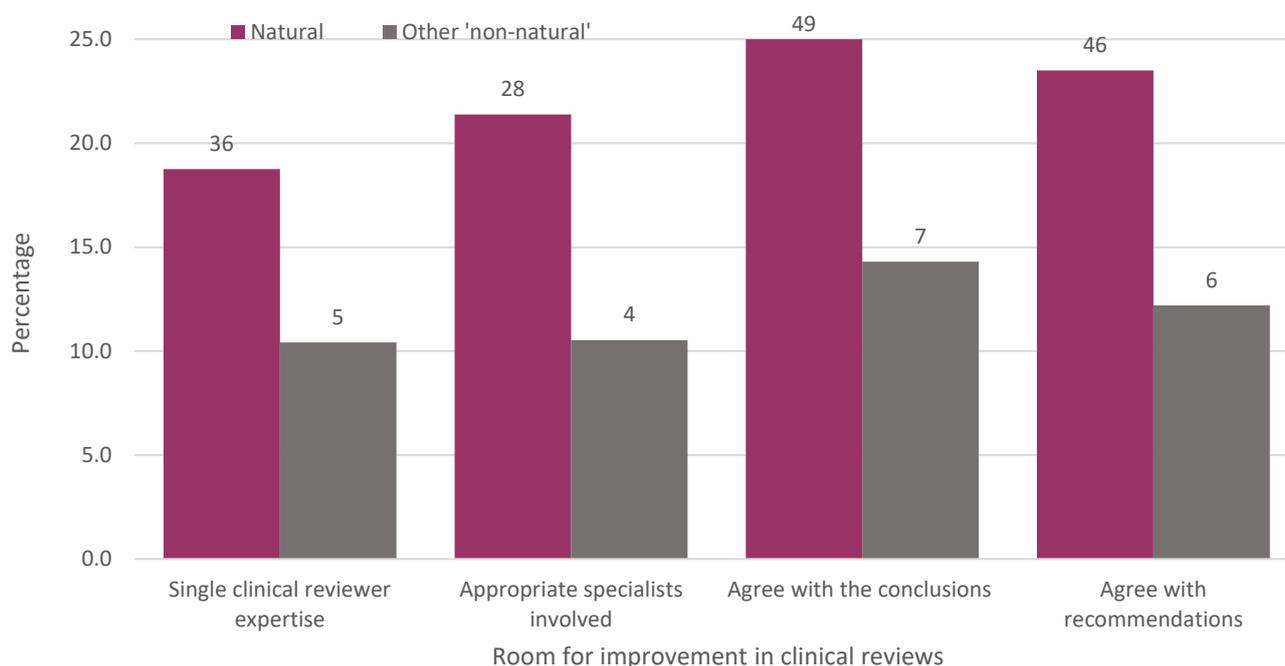


Figure 10.1 Room for improvement in clinical reviews. Answers reflect % where the NCEPOD reviewer answered 'no' suggesting room for improvement in clinical review process.'

Reviewer assessment form data

CASE STUDY

A patient was found dead in their cell with rigor mortis present. They had consulted prison healthcare with breathlessness a few weeks previously and were known to have heart failure. No investigation, follow-up or onward referral was arranged. They had been discharged from hospital follow-up after failing to attend an outpatient appointment. A CPR attempt was made at the time of death. The clinical reviewer made no recommendations.

The reviewers thought that several recommendations could have been made to improve delivery of healthcare in prisons and suggested the following:

Head of healthcare to ensure care plans are created for all long-term conditions, and that patients not attending appointments for long-term conditions are followed up to identify their ideas, concerns, and expectations for their future care.

Head of healthcare to ensure all staff aware that CPR not appropriate when rigor mortis present.

Equivalence

It is a legal requirement that patients within secure settings should receive the same quality and access to healthcare as people in the community, both in terms of the range of interventions available to them which meet their needs, and the quality and standards of those interventions with the aim of achieving equitable health outcomes.^[29] The principle of equivalence states that healthcare delivered in prison is at least consistent in range and quality (availability, accessibility, and acceptability) with that available to the wider community. Reviewers rated the clinical care provided as equivalent in 180/246 (73.2%) cases. There was no major difference in equivalence of healthcare provision between the natural and other 'non-natural' deaths (figure 10.2).

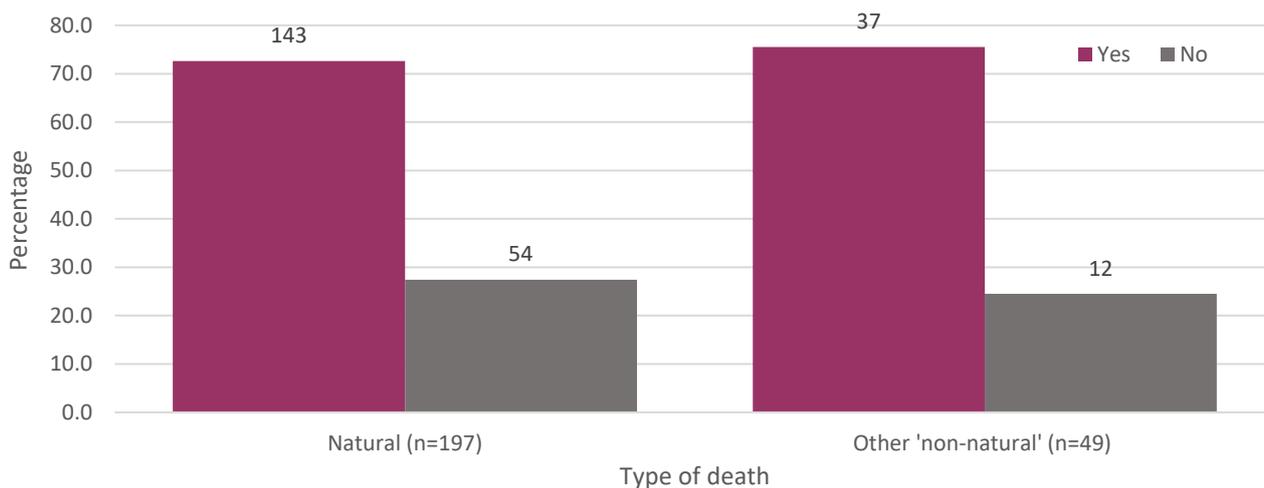


Figure 10.2 Reviewers opinion on the equivalence of care by type of death
Reviewer assessment form data

Care was thought to be the same as in the community in 116/227 (51.1%) cases reviewed. It was rated as better than that likely to have been provided in the community in 37/227 (16.3%). This related mainly to better access to drug misuse teams.

Care was thought to have been worse than what would have been provided in the community in 74/227 (32.6%) cases reviewed. This related to the management of long-term conditions (such as diabetes or hypertension) in 26, the provision of or access to acute care in 21 and poor provision of or access to palliative or end of life care in 18 cases.

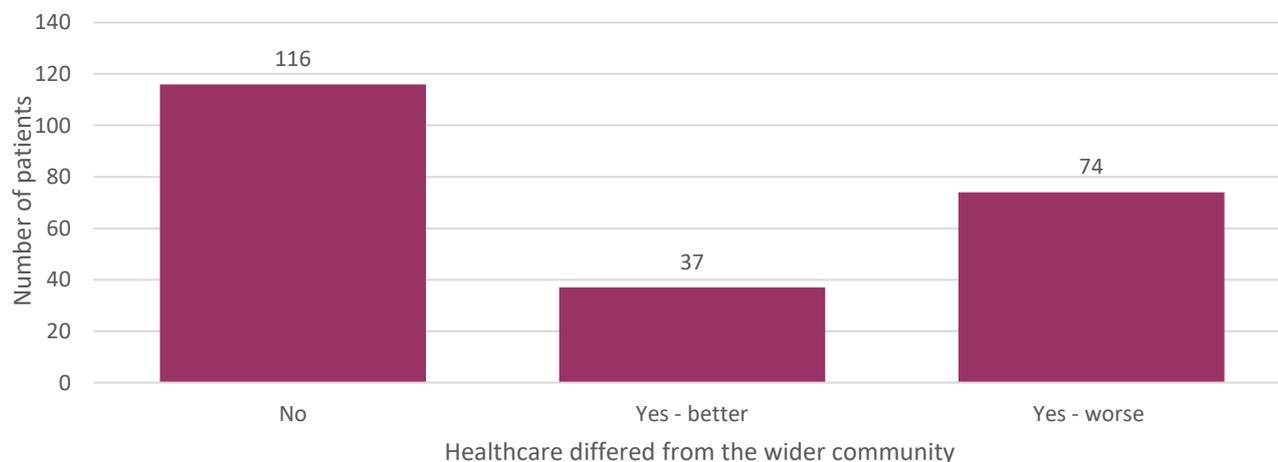


Figure 10.3 Reviewers opinion on whether healthcare differed from that provided in the wider community (n=227)
Reviewer assessment form data

Reviewer: “The healthcare was similar to that provided in the community. If anything, it was better as the patient had more immediate access to substance misuse teams...”

Reviewer: “In the community the patient or family member would have called an ambulance at the onset of severe chest pain. Here the patient was reliant on officers who did not recognise the severity, did not make an emergency call to healthcare and then an ambulance was not called until the ECG had been read...”

The terms of reference for clinical reviews specifically ask reviewers to assess the provision of healthcare against published policies and guidelines. Overall, guidelines and policies were followed completely in 94/224 (42.0%) patients. There was therefore room to improve practice by following guidelines in more than half of the cases reviewed. Guidelines were not followed in 32/224 (14.3%) patients. Guidelines and policies were followed completely in 76/185 (41.1%) and partially in 83/185 (44.9%) patients who died a natural death. They were followed completely in 18/39 (46.2%), and partially in 15/39 (38.5%) patients who died from other ‘non-natural’ causes (table 10.2).

Table 10.2 National policies, guidelines and procedures were followed

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes completely	76	41.1	18	46.2	94	42.0
Yes partially	83	44.9	15	38.5	98	43.8
No	26	14.1	6	15.4	32	14.3
Subtotal	185		39		224	
Unknown	13		10		23	
Total	198		49		247	

Reviewer assessment form data

The reviewers commented that the NHS England clinical reviews were more focused on policies and procedures and often did not look at wider aspects of the healthcare provided. However, when the overall rating of care by the NCEPOD reviewers was measured against whether policies, guidelines or procedures were followed, all of the cases where the reviewer rated care as less than satisfactory were in the group where they had not been followed. There were also 72/93 (77.4%) patients whose care was rated as good where policies were followed completely (figure 10.4). This association suggests that assessing compliance with guidelines and procedures gives useful information about the delivery of healthcare in prisons.

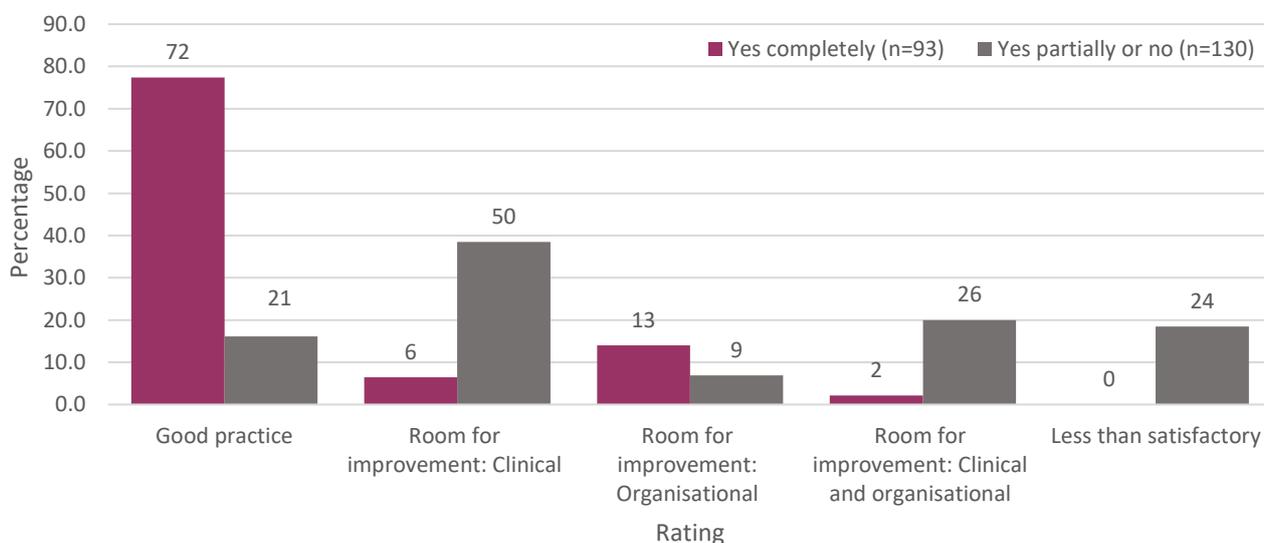


Figure 10.4 NCEPOD rating of care vs whether guidelines were followed

Reviewer assessment form data

The value of a review process was highlighted during this study. The reviewers found that there was the potential to learn from the clinical review in more than half of the cases. This applied to both the natural deaths where opportunities to learn were identified in 109/196 (55.6%), and the 'non-natural' deaths where they were identified in 28/49 (57.1%) (table 10.3).

Table 10.3 There were learning opportunities from this clinical review

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Yes	109	55.6	28	57.1	137	55.9
No	87	44.4	21	42.9	108	44.1
Subtotal	196		49		245	
Unknown	2		0		2	
Total	198		49		247	

Reviewer assessment form data

PPO recommendations

To deliver improvements in the prison healthcare system, each PPO report can include an action plan. Actions should have a clear, measurable outcome otherwise they will be unlikely to have an impact. Of the 247 reports that were reviewed, 47 did not have an associated action plan with recommendations. Of the 200 action plans available for review, the reviewers were able to give an opinion on the recommendations for 191. There were 41/191 (21.5%) action plans where not all the recommendations were measurable. Out of a total of 579 recommendations made across all the action plans, 115/579 (19.9%) were not measurable.

***Reviewer:** "The recommendation was to "consider". This is not measurable. It should have simply been to implement or introduce the option of a syringe driver when clinically indicated, including training of staff..."*

The scope of the recommendations was not considered to be appropriate in 41/200 (20.5%) action plans. The areas identified for improvement in the PPO report recommendations aligned with those in this report and included improvements in palliative care, long-term condition management and NEWS2 scoring. NCEPOD reviewers identified 17 cases where the clinical reviewer was not considered to have the necessary breadth of knowledge to formulate an appropriate action plan.

Overall quality of the NHS England clinical reviews

The NHS England reviews were rated as good by the NCEPOD reviewers in 140/247 (56.7%) cases. The reviews of the other 'non-natural' deaths (that were more commonly done at level 2) were rated as good or adequate in 48/49 (98.0%) cases. However, NCEPOD reviewers found more room for improvement in the reviews of the natural deaths where 18/198 (9.1%) were rated as poor or unacceptable (table 10.4).

Table 10.4 Case reviewers' opinion of the overall quality of NHS England clinical reviews

	Natural		Other 'non-natural'		Total	
	Number of patients	%	Number of patients	%	Number of patients	%
Good	108	54.5	32	65.3	140	56.7
Adequate	72	36.4	16	32.7	88	35.6
Poor	14	7.1	1	2.0	15	6.1
Unacceptable	4	2.0	0	0.0	0	0.0
Total	198		49		247	

Reviewer assessment form data

CHAPTER 11

HEALTHCARE SURVEY

KEY POINTS	
11.1	What works well in the delivery of prison healthcare: 51/82 (62.2%) respondents reported highly motivated teams working collaboratively to deliver the best possible standard of healthcare within prisons.
11.2	77/115 (66.0%) of the survey respondents stated that the SystmOne IT package could be improved to support the delivery of healthcare in prisons. 42/77 (54.2%) thought that the current position had an impact on the provision of safe and effective care.
11.3	The most frequent comments made were about the use of templates within the IT system. The use of common templates throughout the prison estate was raised as an improvement that could also improve efficiency. The overuse of templates was however raised as an issue that had the potential to reduce direct interaction with patients and could lead to adverse consequences. The need for increased staff training in the use of SystmOne was highlighted.
11.4	76/97 (78.4%) respondents thought there was room to improve the sharing of confidential information between healthcare and operational staff.
11.5	Of the respondents 86/117 (73.5%) commented on acute healthcare, 73/86 (84.9%) thought there was room for improvement in this area, 46/113 (40.7%) respondents suggested that there was insufficient support from healthcare professionals out of hours to provide safe and effective care for prisoners.
11.6	Respondents considered that the provision of support for physical healthcare in an emergency within the prison estate was better, with 78/113 (69.0%) at least somewhat agreeing that this was sufficient.
11.7	73/88 (83.0%) respondents thought that long-term condition management could be improved.
11.8	76/90 (84.4%) respondents thought that medicines management could be improved.
11.9	40/63 (63.5%) thought that end of life care planning could be improved.

Of the respondents, 61/117 (52.1%) had worked in prison healthcare for five years or more and 32/117 (27.4%) for two to five years. There were 102/117 (87.2%) who were permanent staff members.

Of the respondents, 94/117 (80.3%) worked in a male prison only, 4/115 (3.5%) worked in a female prison only and 17/115 (14.8%) worked in both types of prison.

The majority of respondents (63/117; 53.9%) worked in a Category C training and resettlement prisons (table 11.1).

Table 11.1 Prison type that the respondents worked in

	Number of responses	%
Category A (high security)	22	18.8
Category B (reception prison)	46	39.3
Category B (training prison)	16	13.7
Category C (training and resettlement)	63	53.9
Category D (open prison)	11	9.4

Healthcare survey data (answers may be multiple: n=117)

Areas for improvement in prison healthcare

Survey questions also covered the different parts of the clinical care pathway that were explored in detail in the peer review process. These included the initial health assessments, long-term condition management, acute healthcare, medicines management and end of life care, and the responses supported the findings of the peer review (table 11.2).

Table 11.2 Areas of improvement in the overall quality of care – healthcare respondents’ views

	Areas for improvements for prison healthcare							
	Acute healthcare	%	Long-term condition management	%	Medicines management	%	End of life care	%
Yes	73	84.9	73	83.0	76	84.4	40	63.5
No	13	15.1	15	17.0	14	15.6	23	36.5
Subtotal	86		88		90		63	
Unknown	31		29		27		54	
Total	117		117		117		117	

Healthcare survey data

Acute healthcare

The provision of acute healthcare to prisoners can involve assessment, monitoring, and escalation, and may result in a transfer to hospital. Provision of effective resuscitation is also necessary. Of the 86/117 prison healthcare staff who responded to the survey and commented on acute healthcare, 73/86 (84.9%) thought there was room for improvement in this area. More detailed questions about acute healthcare provision showed that 46/113 (40.7%) respondents suggested that there was insufficient support from healthcare professionals out of hours to provide safe and effective care for prisoners (figure 11.1).

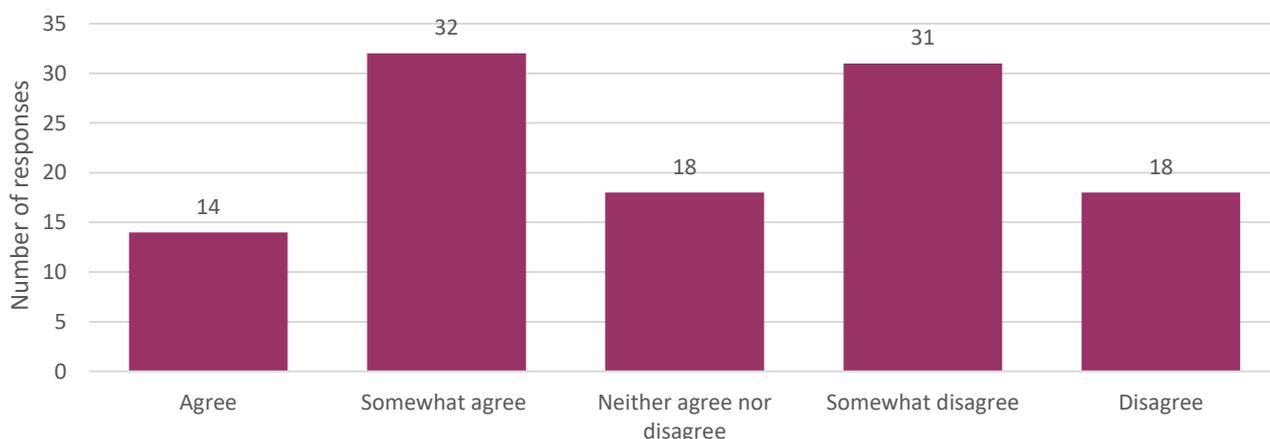


Figure 11.1 Sufficient support from healthcare professionals out of hours to provide safe and effective care for prisoners (n=113)

Healthcare survey data

Respondents considered that the provision of support for physical healthcare in an emergency within the prison estate was better, with 78/113 (69.0%) at least somewhat agreeing that this was sufficient (figure 11.2).

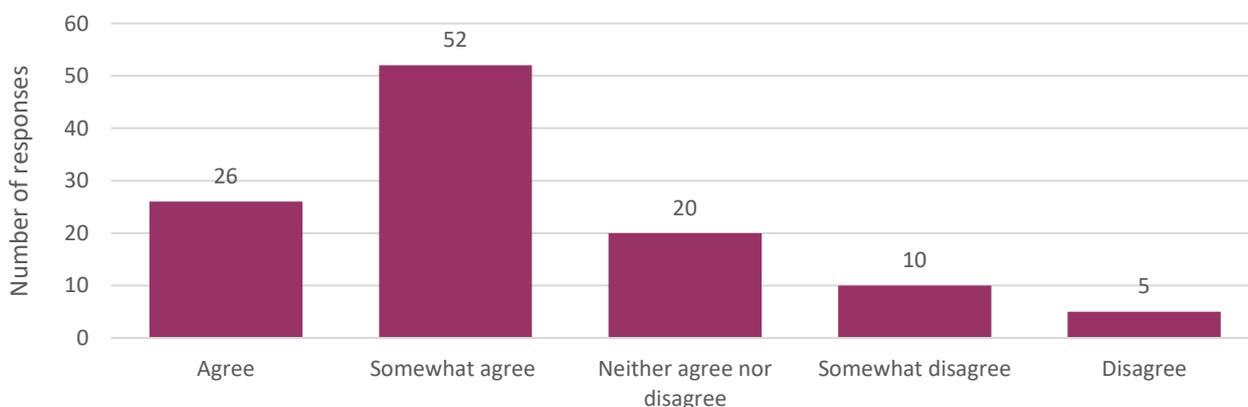


Figure 11.2 Sufficient support within the prison estate to provide a safe level of physical healthcare in the event of a medical emergency (n=113)

Healthcare survey data

The healthcare staff who responded to the survey were broadly confident to administer basic life support and first aid (table 11.3), although this may have reflected seniority.

Table 8.3 Personal confidence level at administering basic life support/ first aid

	Number of responses	%
I have all the necessary knowledge to carry out this task with a high degree of confidence	36	30.8
I am mostly confident and feel that I have a good level of knowledge of this area	47	40.2
I am fairly confident and feel that I have a reasonable/ fair level of knowledge of this area	19	16.2
I have some confidence but am aware of some shortfall	6	5.1
I have low confidence in this area and do not feel at all that I have the required knowledge to perform this task	0	0
Not required - these tasks are never part of the remit of my job description	7	6.0
Not stated	2	1.7
Total	117	

Prison healthcare staff survey

Suggestions were provided about how prison healthcare could be improved. Out of 73/86 (84.9%) responses, the commonest theme (in 31 comments) mentioned staffing levels (medical and nursing) having an impact on the ability to deliver adequate healthcare. There were 15 responses that mentioned the need for better joint working with prison operational staff. This was in relation to improved immediate response to acute illness and improved access to healthcare outside prison with better access to escorts. Concerns were also noted that equipment (e.g. call bells and healthcare equipment such as ECG machines) did not always work.

Survey respondent: "Clarity about how to access healthcare. Functional bells in all cells. Faster prison response out-of-hours. Ensuring the escalation of NEWS2 is utilised and there are enough staff to ensure escorts are completed in a timely manner"

Survey respondent: "Access to minor injuries care could be improved to prevent the need for residents to go to hospital"

Survey respondent: "Better organised monitoring of those unwell"

Survey respondent: "More needs to be done by the prison estate to facilitate hospital transfers for both planned and unplanned care. From personal experience there can be a lack of compassion from prison staff surrounding this issue at times"

Long-term condition management

Of the 88 healthcare staff who responded about long-term condition management, 73/88 (83.0%) thought that this could be improved. Comments were made on long-term condition management suggesting that it was not structured, there was limited capacity to include this in routine practice and where there was a high turnover of prisoners (notably in remand prisons), it was difficult to build this into working practices. Of the 65 specific comments on this area of healthcare, the most frequent area highlighted (in 25 comments) was low staffing levels that meant there was little or no provision of clinics for long-term condition management with the focus being on immediate healthcare needs.

Survey respondent: "Better tracking of recalls for annual reviews. Often patient reviews are missed, and they only get reviewed when they have an issue. Improved services are needed for an ageing population"

Survey respondent: "All long-term condition management is not easy in remand prisons. The one I am at has turnover of 450 a month"

Survey respondent: *“In some of the prisons I work in there is a focus on immediate needs, and little focus on long-term care. When patients are stable, there is often difficulty in getting primary care staff to take back the long-term management”*

Medicines management

Of the 90 healthcare staff who responded about medicines management, 76/90 (84.4%) thought that it could be improved. Of the 67 specific comments on this area of healthcare, the most common again related to staffing (in 21 comments). These comments reflected understaffing but more frequently suggested different models of care, including extended roles and the use of pharmacists or pharmacy technicians to enhance the service available and to free up time for other healthcare professionals.

Survey respondent: *“The pharmacist needs to be a prescriber, the workload for the pharmacy team is huge. At present they are struggling to meet the demands”*

Survey respondent: *“There needs to be diversification away from nurses undertaking endless medication administration rounds. We have started using pharmacy technicians to assist”*

End of life care

Of the 63 people who responded about end of life care, 40/63 (63.5%) thought that this could be improved, with 33 individual suggestions for improvement. Of these, the most common theme was around improving knowledge and skills of the prison healthcare workforce, including building better relationships with local hospices and palliative care teams. There were four individuals who said that the prison they worked in was not set up to manage end of life care. Other comments suggested the need for improved use of syringe drivers for pain control (acknowledging that there were fears over the use of needles) and the need for improved processes for release on compassionate grounds for prisoners who were clearly dying.

Survey respondent: *“Long term prisoners regard prison as their home and wish to die there. Efforts to safely use syringe drivers and other interventions should be maximised to facilitate this choice”*

Survey respondent: *“End of life care in a prison is far from comfortable and access to syringe drivers difficult because of fears over needles and access to opiates limits effective support”*

Survey respondent: *“Our prison is not really geared up to manage end of life care and one of the main aims seems to be to get dying patients to hospital in order that they do not die in prison”*

Survey respondent: *“Patients rarely get released on compassionate grounds due to complexity in the process of applying for early release”*

IT systems

The IT system used as the record keeping system in prisons was designed for use in primary care. Although much of the healthcare delivered in prison is similar to that delivered in GP surgeries outside of prisons, there are additional aspects of care that have to be included. These include mental health reviews, medicines management, and sometimes care provided in a healthcare bed or wing. There was a clear message from 77/115 (66.%) of the survey respondents that the SystemOne IT package could be improved to support the delivery of healthcare in prisons. Of the 77 who thought improvement was needed, 42/77 (54.2%) thought that the current position had an impact on the provision of safe and effective care.

The most frequent comments made were about the use of templates within the system. Templates that are in use vary between prisons. Some of the current templates were thought to be unhelpful, full of unnecessary information and difficult to search. The use of common templates throughout the prison estate was raised as an improvement that could also improve efficiency. The overuse of templates was however raised as an

issue that had the potential to reduce direct interaction with patients and could lead to adverse consequences. The need for increased staff training in the use of SystmOne was highlighted. The ability to make electronic referrals to local hospitals was suggested as another area for improvement by several respondents.

Survey respondent: *“Arden’s templates look very helpful; we have only just gained access”*

Survey respondent: *“It’s been designed for compliance and not for clinicians. Way too many alerts, horrible templates, huge unreadable tracts of information”*

Information sharing

Prisoners with healthcare needs remain under the supervision of prison operational staff. Healthcare staff are not always available in the prison for 24 hours of the day. In all care settings, effective handover and sharing of information between prison healthcare and operational staff is required to provide the best care.^[39,40] Of the 97 respondents who answered this question, 76 (78.4%) thought there was room to improve the sharing of confidential information between healthcare and operational staff.

Survey respondent: *“It is difficult for officers to effectively support if they are unaware of specific health risks”*

Survey respondent: *“GDPR is often used as a reason not to share information and staff understanding of GDPR is very often poor given mandatory training is usually a ‘tick box’ online module”*

Survey respondent: *“It would be helpful to have a formal handover mechanism for when we are concerned about a patient’s health and wish to ensure that their call bells will be answered in a timely fashion”*

Survey respondent: *“If more information was shared (with consent) there would be a better understanding by prison staff around issues and potential behaviours of the prison population. There needs to be more training for the prison staff to understand conditions like dementia and frailty...”*

Survey respondent: *“This is tricky as we need to balance patient confidentiality with the need to share information that helps prison staff understand the needs of their residents, especially health related vulnerabilities...”*

Good practice in prison healthcare

Respondents to the survey were asked to give their opinion about what works well in the delivery of prison healthcare. There were 82 responses to this question. The clear theme noted in 51/82 (62.2%) of them, was of highly motivated teams working collaboratively to deliver the best possible standard of healthcare within prisons.

Survey respondent: *“Where I work, we have highly motivated staff and good working relationships with the prison. There is close partnership working between physical and mental health services, and other allied services such as pharmacy, physio, GUM, opticians, dentists etc.”*

Survey respondent: *“In the environment I work in staff are motivated to make a difference. It’s only really resources that are lacking. I feel the culture is a positive one within the healthcare team in terms of motivation to make a difference”*

Survey respondent: *“In many of the prisons that I work in there are excellent relationships with GPs and primary care. Also, in some of the prisons, governors and prison staff take an active interest and are involved in supporting our patients”*

REFERENCES

1. HMPPS: [Safety in custody quarterly, update to December 2020](#)
2. Select Committee Publications: [Prison health, November 2018](#)
3. Office for National Statistics, [National life tables: Life expectancy in the UK, 2018 to 2020](#)
4. Public Health England: [New advice on reducing health inequalities in the criminal justice system, January 2017](#)
5. HM Chief Inspector of Prisons: [Annual report; 2018 to 2019, July 2019](#)
6. House of Commons Health and Social Care Committee: [Prison Health, Twelfth Report of Session 2017–19; 2018.](#)
7. National Prison Healthcare Board: [Response on Equivalence of Care in Prisons, October 2019](#)
8. Bridgwood A, Malbon G: [Survey of the physical health of prisoners, HM Stationary Office, London. 1995.](#)
9. [INQUEST: Deaths in prison: A national scandal, January 2020](#)
10. [Davies M, Rolewicz L, Schlepper L, Fagunwa F. Nuffield Trust: Locked out? Prisoners' use of hospital care Report, February 2020](#)
11. [Prisons and Probation Ombudsman: Learning from PPO investigations, Natural cause deaths in prison custody 2007-2010, March 20212](#)
12. [Ministry of Justice: Women and the criminal justice system 2019, November 2020](#)
13. [Office for National Statistics: Population of England and Wales, April 2023](#)
14. [Ministry of Justice: Offender Management Statistics Bulletin, England and Wales July-September 2021, January 2022](#)
15. [Packham C, Butcher E, Williams M, et al: Cardiovascular risk profiles and the uptake of the NHS Health check programme in male prisoners in six UK prisons: an observational cross-sectional survey, May 2020](#)
16. [Gray J, Craddock C, Couzens Z, et al: Estimating the burden of type 2 diabetes in the UK prison environment for the next decade, February 2021](#)
17. [British Heart Foundation: UK Factsheet, April 2023](#)
18. [Bradshaw R, Pordes B A J, Trippier H, et al: The health of prisoners: summary of NICE guidance; BMJ March 2017](#)
19. [The Prison Reform Trust: Bromley Briefings Prison Fact file, Winter 2021](#)
20. [Rockwood K, Song X, MacKnight C et al: A global clinical measure of fitness and frailty in elderly people; CMAJ 173 \(489–95\), August 2005](#)
21. [NHS England: National Guidance on Learning from Deaths, March 2017](#)
22. [Royal College of Physicians: National Early Warning Score \(NEWS\) 2. Standardising the assessment of acute-illness severity in the NHS. Updated report of a working party, December 2017](#)
23. [The National Institute of health and Care Excellence \(NICE\): NG57 Physical health of people in prison, November 2016](#)
24. [The National Institute of health and Care Excellence \(NICE\): QS156 Physical health of people in prisons, September 2017](#)
25. [NHS England and NHS Improvement: Primary care service specification medical nursing for prisons, 2020](#)
26. [The National Institute of healthcare and Care Excellence \(NICE\): NG209 Tobacco: preventing uptake, promoting quitting, and treating dependence, 30 November 2021](#)
27. [McFadzean IJ, Davies K, Purchase T, et al: Patient safety in prisons: a multi-method analysis of reported incidents in England. J R Soc Med, July 2023](#)
28. [The National Institute of healthcare and Care Excellence \(NICE\): CSK; Cardiac arrest - out of hospital care, September 2023](#)
29. [C. Edge, Stockley R, Swabey L, et al: Secondary care clinicians and staff have a key role In delivering equivalence of care for people in prison: A qualitative study of prisoners' experiences, June 2020](#)
30. [NHS Digital. Emergency readmissions to hospital](#)
31. [The National Institute for Health and Care Excellence \(NICE\): NG142 End of life care for adults: service delivery, October 2019](#)
32. [The National Institute for Health and Care Excellence \(NICE\): QS13 End of life care for adults, September 2021](#)
33. [Ministry of Justice & HMPPS: Early Release on Compassionate Grounds Policy, August 2023](#)
34. [Ministry of Justice & HMPPS: Release on Temporary Licence \(ROTL\) Policy Framework, October 2022](#)
35. [NHS England: Dying well in custody charter and self-assessment tool, February 2022](#)
36. [NHS England: Guidelines for the provision of Clinical Reviewers to support Health & Justice deaths in custody investigations, September 2018](#)
37. [Health Inspectorate Wales: Death in custody reviews](#)
38. [Tomczak P. Prisoner Death Investigations: Setting the Agenda for Change. Prison Service Journal 263 \(32-38\), December 2022](#)
39. [NHS England and NHS Improvement Health and Justice, Department of Health and Social Care, Ministry of Justice, Her Majesty's Prison and Probation Service and Public Health England Information Sharing Protocol across secure and detained settings.](#)
40. [Ministry of Justice & HMPPS Information Sharing Policy Framework](#)

GLOSSARY

Automated external defibrillators (AED)	This is a lifesaving device that can help save the life of someone experiencing a sudden cardiac arrest. They are portable, with clear step-by-step instructions so anyone can use them.
Basic Life Support (BLS)(Providers)	BLS describes a set of basic life-saving first aid techniques. The Resuscitation Council (UK) produces a set of guidelines for first aiders to administer Basic Life Support.
Cardiopulmonary resuscitation (CPR)	An emergency lifesaving procedure performed when the heart stops beating designed to temporarily circulate oxygenated blood through the body of a person whose heart has stopped.
Category of prisons	Male prisons are divided into four categories of security. The categories are designated with the letters A to D, with A being the highest level of security, and D the lowest. Women and young adults are categorised and held in either closed conditions or open conditions, according to their risks and needs. In exceptional cases, women and young adults may be held in a high security prison (category A).
Do not attempt cardiopulmonary resuscitation (DNACPR)	This decision is made by an individual and their doctor or healthcare team and means if their heart or breathing stops their healthcare team will not try to restart it.
Equivalence	This means that the health needs of the prison population are not compromised and that they receive an equal level of service as that offered to the rest of the population.
Fatal Incident Report	This is a searchable record of the PPO's fatal incident investigation final reports. These are published on the PPO website after they have been shared with the family of the deceased person, and the coroner's inquest has taken place.
His Majesty's Prison and Probation Service (HMPPS)	This is an executive agency of the Ministry of Justice responsible for the correctional services in England and Wales.
Long-term conditions	A long-term condition is an illness that cannot be cured. It can usually be controlled with medicines or other treatments, e.g. diabetes.
Ministry of Justice (MoJ)	A major government department, responsible for criminal justice, prison and probation services, civil courts, tribunals, and family law hearings, safeguarding victims and regulating legal services.
National Early Warning Score (NEWS2)	This is a system for scoring the physiological measurements that are routinely recorded at the patient's bedside. Its purpose is to identify acutely ill patients, including those with sepsis, in hospitals in England. The NEWS2 scoring system measures 6 physiological parameters.
Natural Cause Death	Any death of a person as a result of a naturally occurring disease process. This includes those contributed to by alcohol or drug dependence (where the death was related to the effects of long-term substance use) but not poisoning in a specific incident.
Clinical reviewers	Clinical Reviewers are healthcare professionals, either General Practitioners (GPs) or registered nurses, who are engaged by NHS England to undertake the clinical review of deaths in custody. Clinical Reviewers' may be commissioned by NHS England as either independent contractors or through a third-party provider.
National Research Committee Approval (NRC)	All researchers wanting to conduct research with staff and/or offenders in prison establishments, the Probation Service regions or within HMPPS Headquarters are required to formally apply for research approval to the HMPPS National Research Committee.
Other non-natural Cause Death	Any death of a person that cannot easily be classified as natural causes, self-inflicted or homicide. This includes accidents arising from external causes, including apparently accidental alcohol and drug poisoning and deaths of which, even after all investigations have been concluded, the cause remains unascertained or unknown.
Point of Care Testing	This is defined as medical testing at or near the site of patient care by specially trained healthcare (non-laboratory) professionals. These tests typically involve blood or urine testing. The goal of POCT is to collect the specimen and obtain accurate results in a very short period of time at or near the location of the patient.
Premature deaths	Premature deaths is defined as deaths occurring before the age of 75.
Prison and Probation Ombudsman (PPO)	The Prisons and Probation Ombudsman is appointed by the Secretary of State for Justice. They investigate complaints from prisoners, young people in detention (prisons and secure training centres), those on probation and individuals detained under immigration powers (detained individuals). They also investigate all deaths that occur among prisoners, young people in detention, detained individuals, and approved premises' residents due to any cause. The PPO also investigates the deaths of recently released prisoners that occur within 14 days of release (except homicide).
Rockwood Clinical Frailty Scale	The Rockwood Clinical Frailty Scale (CFS), ¹² first described in 2005, is a semiquantitative tool used to estimate an individual's degree of frailty on a scale of 1 (very fit) to 9 (terminally ill). Patients who score a 5 or higher are considered frail.

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Liz Walsh	Professional Lead for Justice and Forensics – Royal College of Nursing

The case reviewers who undertook the peer review

Abi Bartlett	Head of Clinical Services
Gerard Bulger	Prison general practitioner
Richard Christie	Prison general practitioner
Justine Cosby	Head of Healthcare
David Eccles	GP Principal/Consultant Forensic Physician
Catherine Glover	Clinical director
Jahura Hossain	General practitioner
Annelise Matthews	Consultant in Palliative Medicine
Kate McLintock	Prison general practitioner and NIHR Clinical Lecturer in General Practice
Deanna Mezen	Advanced Clinical Nurse Practitioner
Simon Newman	Interim Integrated Health Community Director of Nursing
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