# 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.

## SUMMARY

NCEPOD

Improving the quality of healthcare

# 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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# CONTENTS

# 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.

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* *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

**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

**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 COMMUNCATION AND HANDOVER

**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

**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

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 CLINCIAL REVIEWS

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 | Provide enough appropriately skilled prison healthcare staff to:<br>a. Undertaken healthcare assessments at the times they are needed, to include late receptions.<br>b. Ensure that initial healthcare assessments identify all healthcare needs.<br>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.<br>d. Provide prompt acute care as needed.<br>e. Ensure robust handovers are undertaken between staff on a day-to-day basis and if a transfer to hospital is needed.<br>*Primary target audiences: Ministry of Justice, Department of Health and Social Care, NHS England, NHS Wales, HMPPS*<br>*Supported by: Prison governors, CQC, HMIP* | **3.6 - 3.7**<br>**5.1 - 5.6**<br>**6.1 - 6.5**<br>**7.5** |
| | **ACUTE DETERIORATION, CLINICAL OBSERVATIONS, AND TRANSFER TO HOSPITAL** | |
| 2 | 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.<br>*Primary target audience: Prison healthcare staff*<br>*Supported by: Prison governors* | **3.6 - 3.7**<br>**6.8 - 6.11**<br>**9.1**<br>**9.5** |
| 3 | 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.<br>*Primary target audience: Prison healthcare staff*<br>*Supported by: NHS England, NHS Wales, HMPPS, CQC, HMIP* | **6.8 - 6.11**<br>**9.1 - 9.2**<br>**11.5** |
| 4 | Minimise last minute delays in the emergency transfer of a patient to hospital by:<br>a. Agreeing in advance a standard process applicable to most transfer needs.<br>b. Adapting standard process for prisoners with special restrictions/conditions in place.<br>c. Ensuring collaboration between healthcare and operational staff in prisons.<br>*Primary target audiences: Prison healthcare leads, prison governors*<br>*Supported by: Medical directors, NHSE England, NHS Wales, HMPPS, CQC, HMIP* | **7.1 - 7.6** |

| | | |
|---|---|---|
| | **BASIC LIFE SUPPORT TRAINING** | |
| **5** | 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.<br>*Primary target audience: Prison governors*<br>*Supported by: Prison healthcare staff, HMPPS, CQC, HMIP* | **6.12 - 6.13** |
| | **DISCHARGE FROM HOSPITAL TO PRISON** | |
| **6** | 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.<br>*Primary target audience: Hospital clinicians who discharge patients*<br>*Supported by: Hospital medical directors, NHSE England, NHS Wales* | **7.5 - 7.6**<br>**10.4 - 10.5** |
| | **END OF LIFE CARE PLANNING** | |
| **7** | Prison healthcare staff should receive training in end of life care planning to:<br>a. Identify patients approaching their end of life, including advanced non-malignant conditions.<br>b. Co-create advance care plans with the patient and their family/carers, to include out of hours care, such as anticipatory medications.<br>*Primary target audience: Prison healthcare staff*<br>*Supported by: Prison governors, HMPPS* | **8.1 - 8.8**<br>**8.10 - 8.11**<br>**9.5**<br>**11.9** |
| **8** | 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.<br>*Primary target audience: Prison healthcare leads*<br>*Supported by: Prison governors, HMPPS, local palliative care leads in hospital or the community, CQC, HMIP* | **8.1**<br>**8.7 - 8.11** |
| **9** | Provide guidance, including the clinical information required, to support prison governors and healthcare staff in applications for compassionate release.<br>*Primary target audience: HMPPS, prison governors*<br>*Supported by: NHS England and NHS Wales, CQC, HMIP* | **8.8 - 8.11** |
| | **IMPACT OF SUBSTANCE MISUSE ON LONG-TERM CONDITIONS AND MEDICATIONS** | |
| **10** | 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.<br>*Primary target audience: Prison healthcare leads*<br>*Supported by: Prison governors, HMPPS* | **3.1**<br>**3.3 - 3.4**<br>**5.2 - 5.5** |
| | **NHS CLINICAL REVIEWS AND FATAL INCIDENT REPORTING** | |
| **11** | Ensure that all recommendations from the Prisons and Probation Ombudsman (PPO) fatal incident reports have clear, measurable outcomes with a timeframe for delivery.<br>*Primary target audience: Prisons and Probation Ombudsman (PPO)*<br>*Supported by: NHS clinical reviewers* | **10.7 - 10.9** |

| | | |
|---|---|---|
| 12 | 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.<br>*Primary target audience: NHS England and Health Inspectorate Wales*<br>*Supported by: NHS clinical reviewers* | **10.1 - 10.3**<br>**10.6 - 10.7** |
| 13 | 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.<br>*Primary target audiences: Prisons and Probation Ombudsman (PPO), NHS England, Health Inspectorate Wales*<br>*Supported by: NHS clinical reviewers, prison healthcare staff, prison governors, HMPPS* | **10.7** |
| **INFORMATION SYSTEMS AND DATA SHARING** | | |
| 14 | 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.<br>*Primary target audiences: Commissioners, IT service providers, NHS England, NHS Wales*<br>*Supported by: Prison governors, prison healthcare staff* | **11.2**<br>**11.3** |
| 15 | 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.<br>*Primary target audience: Prison healthcare staff, prison governors*<br>*Supported by: NHSE, HMPPS, CQC, HMIP* | **11.4** |
| **FUTURE RESEARCH** | | |
| 16 | Establish an ongoing programme of research to evaluate the healthcare needs of prisoners, to ensure prison healthcare services can provide safe and effective care.<br>*Primary target audiences: National Institute for Health Research, NHS England, Welsh Government*<br>*Supported by: Prison healthcare staff, prison governors, HMPPS, CQC, HMIP* | **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.

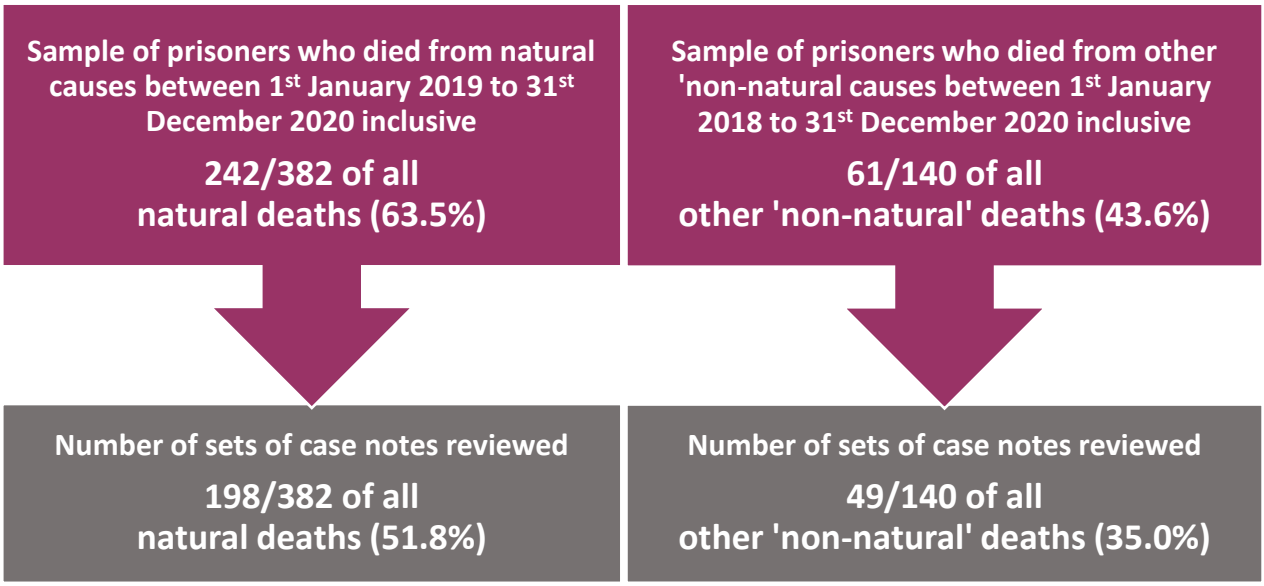


Figure 1.1 Data returns.

### Healthcare survey data

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

- General practitioners (20/117; 17.1%)
- Registered nurses (adult) (39; 33.3%)
- Registered nurses (mental health) (11/117; 9.4%)

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. |

# 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. |

# 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. |

# 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%**). |

# 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.** |

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| 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. |

# 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**. |

# 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.** |

# 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**. |

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| 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. |

# 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.<br>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 m**onitoring 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**.<br>Of the **200 action plans** available for review, there were 41/191 (**21.5%**) **action plan**s where n**ot 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 c**ases where the **clinical reviewer** was **not considered** to have the **necessary breadth of knowledg**e 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.** |

# 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 though that **long-term condition management** could be **improved**. |
| 11.8 | 76/90 (**84.4%**) respondents though that **medicines management** could be **improved**. |
| 11.9 | 40/63 (**63.5%**) thought that **end of life care planning** could be **improved**. |

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