Grant Thornton

Norfolk and Suffolk Foundation Trust's mortality recording and reporting

26 May 2023

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26/05/2023

Mortality data recording review

We enclose a copy of our report in accordance with your instructions dated 18th October 2022. This document (the **Report**) has been prepared by Grant Thornton UK LLP (**Grant Thornton**) for NHS Norfolk and Waveney Integrated Care Board (ICB), Suffolk and North East Essex Integrated Care Board (ICB) and Norfolk and Suffolk NHS Foundation Trust (the **Addressees**) in connection with a review of mortality data recording at Norfolk and Suffolk NHS Foundation Trust (NSFT) (the **Purpose**).

We stress that the Report is confidential and prepared for the Addressee and the organisations named in the agreement only. We agree that an Addressee may disclose our Report to its professional advisers in relation to the Purpose, or as required by law or regulation, the rules or order of a stock exchange, court or supervisory, regulatory, governmental or judicial authority without our prior written consent but in each case strictly on the basis that prior to disclosure you inform such parties that (i) disclosure by them is not permitted without our prior written consent, and (ii) to the fullest extent permitted by law we accept no responsibility or liability to them or to any person other than the Addressee.

The Report should not be used, reproduced or circulated for any other purpose, in whole or in part, without our prior written consent, such consent will only be given after full consideration of the circumstances at the time. These requirements do not apply to any information, which is, or becomes, publicly available or is shown to have been made so available (otherwise than through a breach of a confidentiality obligation).

To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Addressee for our work, our Report and other communications, or for any opinions we have formed. We do not accept any responsibility for any loss or damages arising out of the use of the Report by the Addressee(s) for any purpose other than in relation to the Purpose.

The data used in the provision of our services to you and incorporated into the Report has been provided by third parties. We will not verify the accuracy or completeness of any such data. There may therefore be errors in such data which could impact on the content of the Report. No warranty or representation as to the accuracy or completeness of any such data or of the content of the Report relating to such data is given nor can any responsibility be accepted for any loss arising therefrom.

Grant Thornton

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Period of our fieldwork

Our work was performed in the period between October 2022 and January 2023. This work reviewed mortality data recording and reporting between April 2019 and October 2022. We have not performed any fieldwork since January 2023 and, our Report may not take into account matters that have arisen since then. If you have any concerns in this regard, please do not hesitate to let us know.

Scope of work and limitations

Our work focused on the areas set out in our engagement letter, signed 12th October 2022.

Interviews were held with key staff using Microsoft Teams or other video conferencing applications. Analysis was completed using the data provided by the Trust.

The scope of our work has been limited both in terms of the areas of the business and operations which we have assessed and the extent to which we have assessed them. There may be matters, other than those noted in the Report, which might be relevant in the context of the Purpose and which a wider scope assessment might uncover.

General

The Report is issued on the understanding that the management of Norfolk and Suffolk NHS Foundation Trust have drawn our attention to all matters, financial or otherwise, of which they are aware which may have an impact on our Report up to the date of signature of this Report. Events and circumstances occurring after the date of our Report will, in due course, render our Report out of date and, accordingly, we will not accept a duty of care nor assume a responsibility for decisions and actions which are based upon such an out of date Report. Additionally, we have no responsibility to update this Report for events and circumstances occurring after this date.

Notwithstanding the scope of this engagement, responsibility for management decisions will remain solely with the directors of the Trust and not Grant Thornton. The directors should perform a credible review of the recommendations and options in order to determine which to implement following our advice.

Yours Sincerely,

Grant Thornton UK LLP

Grant Thornton UK LLP

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Executive summary (1 of 4)

Introduction

Norfolk and Suffolk NHS Foundation Trust (NSFT) is a mental health trust in the East of England which provides care to a population of around 1.6 million. The Trust provide mental health and learning disability care for people through inpatient, community and primary care settings.

Grant Thornton has been commissioned by Norfolk and Waveney and Suffolk and North East Essex Integrated Care Boards to review the collection, processing and reporting of data related to patient deaths at Norfolk and Suffolk NHS Foundation Trust.

To do this we:

- Reviewed local guidelines, policy documentation and corporate documentation
- Interviewed key staff members involved with producing and reviewing mortality data
- Analysed anonymised patient level data from clinical and incident reporting systems
- Reviewed internal and external mortality reporting and dashboards.

We have not audited individual records to test their accuracy, nor does this report give any view on the levels of mortality or the circumstances of patients' deaths. We have reviewed mortality reporting at the Trust; we did not review the process for serious incident reporting. Our findings are based solely on the information made available to us during the review. between November 2022 and January 2023.

The Trust has been working with NHS England since September 2022 to improve its processes, particularly in relation to mortality. Changes at the organisation made after January will not be captured within our findings. The recommendations from this report will support these improvements by providing focus and clarity on issues impacting on data recording and reporting.

It should be noted that quality and consistency of mental health data is a recognised national challenge. In addition, national guidelines over mortality reporting for mental health trusts are not as clear and defined as those in place for acute trusts, giving scope for variation in their implementation across different trusts. This lack of detailed national guidance limits the opportunity for mortality data comparisons and provides a challenge for the Trust in applying a nationally consistent process.

Overview

Based on the information made available to us we are unable to provide assurance over the mortality data reported at the Trust. Our findings are outlined below and are described in more detail over the next pages of the executive summary.

The Trust's intended methodology for reporting is in line with the expectations of national guidance, where it exists, and the processes in place at peer organisations. However, the Trust's implementation of this methodology requires further work to improve the reliability and usefulness of the information produced.

The Trust's mortality data management process is unclear and uses multiple systems to record and produce the data. These systems are a mix of applications, with some manual processes used to categorise and transform the data. There is no overarching documentation of the process followed and we saw no clear audit trail of the data as it moved through this process.

The reporting of mortality data to both internal and external audiences is inconsistent – this includes changes in reporting methodology and the way data is presented, and errors in two reports in the way information is interpreted and described were identified during the review.

In particular, the process of categorising and grouping expected and unexpected deaths and the decision making involved was unclear and inconsistent during our review, and the data on cause of death is not available for many community deaths. This is a key part of mortality reporting and the information produced forms part of the corporate board reporting.

These issues have led to questions of clarity within public facing documents, and reduced clinical relevance within the mortality information reported. This results in a lack of confidence of external stakeholders – including regulators and the public – in the data, and in the Trust's understanding of it.

The Trust is often reliant on other NHS providers for cause of death information for community patients and more needs to be done to provide access to this information. In resolving these issues the Trust will need to take responsibility for the actions they are able to complete, and to be clear on the requirements of partner organisations to what additional information they need and which organisation holds it. The Trust will need to be supported by the ICB and the other healthcare organisations within the health system to make this information available.

Executive summary (2 of 4)

The governance structures in place at the Trust are in line with national requirements, but operational understanding of this governance was unclear. More needs to be done to establish end-to-end oversight of the mortality data production and reporting process for all mortality, and to assure the board that mortality data reported is accurate.

Based on the evidence seen as part of our review more work is also required to support services to use the data available in order to ensure it is accurate and to understand key messages. Our experience demonstrates that data that is regularly used is data that improves.

The Trust has strong governance in its approach to deaths resulting from patient safety incidents – on site incidents are followed up by the team, as well as suicides where the coroner has notified the Trust. The Trust needs to bring the same rigour to improve the processes around the reporting of all mortality, and the understanding of all deaths for patients on their caseload. The need for further understanding of all mortality was highlighted as an issue by NHS England at the Trust's quality and safety committee.

Reporting

Within the corporate reporting documentation, board reports and annual Learning from Deaths reports, mortality data is presented inconsistently, and the methodology adopted has gone through multiple changes. This creates challenges to understand performance and fully interrogate the data presented. The lack of consistency within external documents has raised concerns about the accuracy of the data within them.

The Trust does not adopt a consistent reporting standard and has frequently changed both the methodology and presentation of mortality data in its board reports. Over eight consecutive board reports, information and the method of presentation changed six times, including how activity was broken down, how graphs were labelled, and the types of charts used. Within the board report graphs there were missing data points for some months. In others reports, a change in methodology was adopted, without being fully explained and without comparative analysis between the two methodologies being made available. This has led to confusion in both the classification of mortality between expected and unexpected deaths and the numbers of deaths which form part of Trust's mortality statistics. Although the methodology changes were appropriate, inadequate descriptions and an absence of the impact upon historic mortality data can cause confusion.

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As a result, when tracking through the chronology of corporate reporting from report to report the mortality numbers lack consistency without adequate explanation of the change in methodology and no comparative information used to show how the new approach corresponds to the previous one. Additionally, in two board reports the numbers of expected and unexpected deaths were incorrectly transposed.

The presentation of the Trust's internal mortality dashboard does not always align with its public board reporting. The numbers attributed to expected and unexpected deaths have differed between reports and the dashboard. Also the volumes attributed to individual groupings of the cause of death do not always align to the dashboard. The dashboard is available on the Trust intranet and has some basic analysis such as team level information and small charts showing timeline of causes of death.

Whilst the dashboard includes basic demographic information this is not presented alongside causes of death, but at an expected or unexpected level. During the review we saw no evidence of detailed analysis of mortality information aligned to population health, understanding health inequalities, or learning from mortality aligned to deprivation or particular patient groups. This level of analysis is crucial for internal and external scrutiny and to enable services to identify opportunities to improve care.

Data processes

The Trust uses a number of systems for the mortality recording process. The Trust's electronic patient record (EPR), Lorenzo, and the incident management system, Datix, are the principal clinical systems used, supplemented by IAPTUS and SystmOne, which support two individual services. Although the bulk of mortality data management and reporting is conducted within core clinical systems such as Datix and Lorenzo, this is supplemented with the manual use of excel, which lacks the same information governance and audit standards of the clinical systems and the use of this should be minimised to mitigate any potential risks to the Trust. The mortality dashboard used for internal reporting uses these systems as its data feed. Although there are pockets of documented processes, there is no comprehensive documentation that covers the process in its entirety.

Executive summary (3 of 4)

There are multiple methods of identifying a deceased patient within the Trust. Many are inconsistently implemented and lack definitive documentation. From the data analysed by Grant Thornton, 24% of mortality was notified and recorded directly by Trust staff across its inpatient and community teams. The remaining 76% was identified through the electronic process of reconciling patient data against the national NHS Spine, which is undertaken monthly. Other similar organisations perform this check on a more frequent basis. Historically, incorrect assumptions have been made locally that staff accessing a deceased patient's record will have completed the relevant mortality documentation required on the Trust's incident reporting system, Datix. The significance of this monthly time delay and assumptions around accessing patient records will potentially result in data reported by the Trust not being timely or accurate.

The Trust's process for determining the categorisation of death as expected or unexpected, which is a key aspect of mortality reporting and is defined below, is not clear or auditable. Where the death certificate was available, it was used to inform appropriate grouping of cause of deaths which appears on the dashboard, with different staff members assuming this was done in different ways; there was no clinical input or oversight of this step. The reliance on individual interpretation, without support, risks inaccuracies and inconsistencies in the data reported.

> **Definitions of expected and unexpected deaths**
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> Expected Death: Caused by a pre-existing life-limiting condition or if the person's age and frailty made death from a natural cause a reasonable expectation at the time of their death
>
> Unexpected death: The death of a service user who has NOT been identified as critically ill or death is NOT expected by the clinical team. If there is no known diagnosis of terminal illness or physical health complication meaning that the service user is deemed as approaching end of life or receiving palliative care. Where data or cause of death is unavailable this is defined as unexpected
>
> *Source: NSFT Mortality and Learning from Deaths Report, Jan 2022*

The generic category of *'Natural cause – specific not available'* is used where no cause of death information is available to the Trust, and accounts for 77% of all recorded mortality activity. Based on the Trust's definitions these deaths are categorised as unexpected.

More should be done to understand the causes of death and contributing factors for these patients. However, the Trust faces challenges in accessing this level of information for all deaths to be included within the Trust's mortality reporting, as it is often reliant on other NHS providers for cause of death information. The Trust is also reliant on partners to provide information on community patients where the coroner has not been involved in the patient death. Improving this position will involve system-wide collaboration. This lack of information is compounded by the number of incomplete fields (null values) that are present within the reported data.

The Trust is planning to implement the Better Tomorrow dashboard, however, it should be noted that the introduction of this will not address issues with the mortality data and reporting outlined in this report, as it focuses on the review aspect of the mortality pathway.

Governance and clinical engagement

The governance structures in place at the Trust are in line with national requirements, but operational understanding of this governance was unclear. The approach to reviewing and learning from deaths was clearly understood; however, there was a confused picture around senior ownership of overall mortality data reporting. This reflects the Trust's focus on serious incident reporting instead of all mortality reporting.

As a result, there are inadequate controls over the end-to-end process of mortality reporting. We saw no evidence of checks on inputs or outputs, limited and out-of-date documentation and insufficient evidence of information governance controls over all systems used within the mortality recording process. More needs to be done to provide assurance to senior staff and the board on the accuracy of underlying data.

The Trust has a good understanding of individual patients, but more work is required to support services to use this data to understand areas of interest that could support or inform potential improvements. During the review two senior clinical leaders stated that members of the Trust's clinical staff have limited faith in their data and do not use or analyse it in a structured manner.

In the patients included in the Trust's mortality reporting our analysis noted 164 patients who were not seen for over 2 years, up to a maximum of 9 years, prior to discharge. This highlights potential issues around caseload management and data management of the discharge process that may be impacting upon the Trust's mortality data.

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Executive summary (4 of 4)

We also saw no evidence of regular clinical validation of the data used to underpin mortality reporting or feedback loop in place between clinical and information teams on mortality reporting. Our work across the NHS has shown that when data gets used its quality improves, meaning it more accurately reflects the patients treated.

A better understanding of mortality reporting will improve the opportunities for learning across the Norfolk and Suffolk health system, and improve the benefit from collaborating with primary care networks and GPs to better understand the cause of death of patients on the Trust's caseload, and with all partners in the system will help to understand the links between physical health and mental health needs.

Recommendations

Based on the findings of the review we have made 16 recommendations across four key themes. These are described on the following page and include:

- Improve the mortality data pathway to automate and digitise the production of mortality reporting
- Agree a standardised reporting structure for internal and external reporting, and provide the tools to interrogate the data
- Improve the controls over mortality reporting and ensure clinical oversight, validation and use of the information reported
- Establish a clear improvement plan to address the issues identified in this report.

These recommendations were created with visibility of the Better Tomorrow quality improvement plan and are designed to supplement the ongoing improvement at the Trust. Our recommendations are focused on the recording and reporting of mortality, and not the process of reviewing deaths which was covered as part of the Better Tomorrow plan.

The Trust is part of a wider health system alongside other providers, and some of the recommendations relate to accessing data held by other providers. For these recommendations the Trust should provide leadership to understanding their requirements in this area, but will require support from the ICBs and other partner organisations to complete the actions.

As part of this review the Trust has completed an action plan which is included on the pages following the recommendations.

Recommendations

The recommendations are structured to focus on different operational groups and their roles within the data pathway. As part of this review the Trust has completed an action plan which is included on the following pages.

Data - focuses on the technical data management to be completed by business intelligence and related teams.

1. Improve the mortality data pathway to automate and digitise the production of mortality reporting, removing manual processes for transferring and transforming the data, and introducing an audit trail where user interaction is required. The data pathway covers: data entry by clinical and service staff, clinical system configuration for capturing and codifying data, export process from clinical systems, data management within data warehouse (or through manual intervention), rules and categorisations applied to support reporting, the presentation of reporting outputs, and the process for validating these outputs.
2. Develop standard operating procedures (SOPs) for each stage of the data recording process, and ensure these are kept up to date.
3. Develop reporting tools or method of measuring incomplete data fields to feed back into the organisation, and support training.
4. Use the Spine as the definitive reference source of identifying deaths, and update this information on a weekly basis.

Reporting – relates to the process of producing internal and external reports, dashboards, and related documentation.

5. Agree a standardised reporting structure for board reports, to include thematic analysis and consistent presentations of figures, axis and scales. Clearly define the Trust's methodology for mortality recording and reporting within board reports. Any changes should be clearly documented and the impact upon historically reported figures should be described to provide continuity.
6. Align the internal dashboard with external reporting to ensure that volumes on the internal dashboard clearly reconcile to numbers within board reports.
7. Work with public health and, when in post, medical examiner to identify key themes in the data and implement timely targeted interventions.
8. Use clinical input to update the cause of death groupings which are presented as part of the dashboard, and used in board reports, so that it is clear where the Trust is awaiting data (pending), or the Trust feels this data will not be accessible or will remain unknown.

Clinical engagement - the process of engaging with clinical service staff in the use and production of mortality data

9. Establish a process of validation and use of mortality reporting and analysis at service level, aligned to corporate reporting.
10. Review the process of retaining patients on caseloads, and subsequent discharge from caseloads, to ensure it results in consistent data across the services.
11. Create supporting training programme for all staff who input data into systems that have an impact upon mortality data. Ensure that the implications and impacts of incorrect or incomplete data entry are understood by staff.

Partnership working - whilst we are recommending that the Trust takes the lead in partnership working outlined in the two recommendations below, the Trust will need support from the ICB and its partner organisations to facilitate this joint working and knowledge sharing.

12. Establish links with primary care networks to explore opportunities to improve the completeness of the Trust's mortality data (including cause of death), supported and enabled by the ICB.
13. Explore opportunities for formal data sharing agreements between the Trust and primary and secondary care in the region.

Governance - the oversight and controls over mortality data production and reporting

14. Update the Trust's Learning from Deaths policy to ensure the Trust's governance addresses the issues in this report and explicitly references community deaths. Ensure the governance in relation to all mortality is clearly understood by clinical and corporate staff involved in the production and reporting of mortality information.
15. Establish a clear improvement plan to address the issues identified in this report, and report progress to a board committee.
16. Introduce a process of assurance over mortality reporting:
    - Introduce a clear audit trail and series of checks to ensure adherence with SOPs, and report outcomes to executive leads on a regular basis
    - Introduce or commission patient level data reviews to provide assurance over the accuracy of data recording.
    - Link to the clinical validation process established under recommendation 9

NSFT action plan (1 of 7)

As part of this review the Trust has completed an action plan describing how it is going to address the recommendations. This has been included on the following pages.

Recommendation	Priority	Management responsibility	Proposed actions	Timeframe
Data				
1 Improve the mortality data pathway to automate and digitise the production of mortality reporting, removing manual processes for transferring and transforming the data, and introducing an audit trail where user interaction is required. The data pathway covers: data entry by clinical and service staff, clinical system configuration for capturing and codifying data, export process from clinical systems, data management within data warehouse (or through manual intervention), rules and categorisations applied to support reporting, the presentation of reporting outputs, and the process for validating these outputs.	High	**Executive Lead** Chief Finance Officer (SIRO) **Lead for Delivery** Chief Digital Officer	1.Seagry consultancy and NSFT to review the technology, solutions and processes used to capture, collate and report mortality data. Interoperability, system upgrade requirement as and when required should be included as part of this review. 2. Seagry Consultancy will produce a list of actions with assigned owners to support improvement, processes and tools to assist NSFT in mortality reporting. 3. A single overarching Standard Operating Procedure (SOP) will be implemented following this work. This will include the formal change management process required when reporting requirements change. The SOP will include inputting of data, extracting of data, validating of data and reporting of data within a given timeframe. 4. An audit trail will be incorporated into the process as described in action 1.	3 months – August 2023
2 Develop standard operating procedures (SOPs) for each stage of the data recording process, and ensure these are kept up to date.	Medium	**Executive Lead** Chief Nursing Officer **Lead for Delivery** Director of Nursing, Patient Safety and Safeguarding and Medical Director for Quality	1. An overarching SOP will be developed which will detail each stage of the mortality data pathway. 2. The SOP will include roles and responsibilities within the process. 3. The SOP will describe the formal change management process when mortality reporting requirements change. 4. The Learning from Deaths policy will incorporate the requirements of the SOPs.	6 months – November 2023

NSFT action plan (2 of 7)

	Recommendation	Priority	Management responsibility	Proposed actions	Timeframe
3	Develop reporting tools or method of measuring incomplete data fields to feed back into the organisation, and support training.	Medium	**Executive Lead** Chief Finance Officer (SIRO) **Lead for Delivery** Chief Digital Officer	1. Reporting tool to be developed to measure the data fields missing on clinical record system, such as demographics. All Data fields must be made as mandatory as much as technically possible to eliminate missing data and avoid human errors. 2. To be reported and included in the Care Group Quality and Performance metrics and scrutinised in the Trust's Quality and Performance meeting.	6 months – November 2023
4	Use the Spine as the definitive reference source of identifying deaths, and update this information on a weekly basis.	High	**Executive Lead** Chief Nursing Officer **Lead for Delivery** Chief Digital Officer and Director of Nursing, Patient Safety and Safeguarding	1. Develop a system that utilises NHS Spine's automatic update to Lorenzo to reduce the need for manual downloads. 2. This action is included as part of recommendation 1. 3. A weekly report will be generated to validate any reporting of Death to Trust against the Spine. This assurance check will be included as part of SOP.	3 months – August 2023
Reporting					
5	Agree a standardised reporting structure for board reports, to include thematic analysis and consistent presentations of figures, axis and scales. Clearly define the Trust's methodology for mortality recording and reporting within board reports. Any changes should be clearly documented and the impact upon historically reported figures should be described to provide continuity.	High	**Executive Lead** Chief Nursing Officer **Lead for Delivery** Director of Nursing, Patient Safety and Safeguarding and Medical Director for Quality	1. The proposed standardised reporting structure for mortality will be presented through the Committee structure and agreed by the Board. 2. The Learning from Deaths quarterly Board report will include thematic analysis of key metrics such as age, diagnosis, cause of death and deprivation indices.	3 months – August 2023

NSFT action plan (3 of 7)

Recommendation		Priority	Management responsibility	Proposed actions	Timeframe
6	Align the internal dashboard with external reporting to ensure that volumes on the internal dashboard clearly reconcile to numbers within board reports.	High	**Executive Lead** Chief Finance Officer (SIRO) **Leads for Delivery** Chief Digital Officer, Director of Nursing, Patient Safety and Safeguarding and Medical Director for Quality	1. The Trust are working with Seagry Consultancy to agree the Mortality data pathway. Part of this work will include further development of Mortality Dashboard. 2. This will be underpinned by the work completed as part of recommendations 1 and 5. 3. The ability for Care Groups to drill down within the dashboard will be enhanced so they are able to interrogate their and other Care Groups data. 4. The improved dashboard will be supported by the Patient Safety Team and Mortality Team attending Care Group Governance meetings. 5. The newly developed dashboard will be available on the Trust's intranet.	3 months – August 2023
7	Work with public health and, when in post, medical examiner to identify key themes in the data and implement timely targeted interventions.	Medium	**Executive Lead** Chief Medical Officer **Lead for Delivery** Director of Operations (Medical Directorate) and Medical Director of Quality	1.The Norfolk and Waveney ICB have implemented a bi-monthly Learning from Deaths forum. This includes Public Health and Medical Examiners. NSFT are a member of this forum with data shared as part of this meeting. 2. Learning and themes from NSFT Mortality reviews will be shared with the ICB so wider system learning can be considered. 3. Development of Care Group reports and attendance of Mortality Team and Patient Safety Team to local governance meetings to share learning and implement targeted interventions. 4. Within the Learning from Deaths committee, the Mortality team will share local, regional and national data and learning to guide where improvements need to focus. 4. Ensure that NSFT are part of the membership of the Learning from Deaths forum in Suffolk and North East Essex (SNEE) ICB when commenced. 5. NSFT will continue to attend regional and national forums. 6. NSFT to be members of the Norfolk and Waveney ICB LeDeR forum.	6 months – November 2023

NSFT action plan (4 of 7)

Recommendation		Priority	Management responsibility	Proposed actions	Timeframe
8	Use clinical input to update the cause of death groupings which are presented as part of the dashboard, and used in board reports, so that it is clear where the Trust is awaiting data (pending), or the Trust feels this data will not be accessible or will remain unknown.	High	**Executive Lead** Chief Finance Officer (SIRO) and Chief Medical Officer **Leads for Delivery** Chief Digital Officer Director of Nursing, Patient Safety and Safeguarding	1. Review the data collected in the Trust Mortality dashboard to include all patient demographics, cause of death, diagnosis, medication etc.. to enable the drilling down both locally and strategically of key metrics. This will include 2 'unknown' cause of death categorisations 'awaiting cause of death' and cause of death not available'. 2. The Mortality process, criteria and screening will describe this requirement as part of the overarching SOP (Recommendation 2).	3 months – August 2023
Clinical engagement					
9	Establish a process of validation and use of mortality reporting and analysis at service level, aligned to corporate reporting.	High	**Executive Lead** Chief Finance Officer (SIRO) **Leads for Delivery** Chief Digital Officer and Director of Nursing, Patient Safety and Safeguarding and Medical Director of Quality	1. New Mortality Data Pathway as outlined in Recommendations 1, 3, 5 and 6 will detail the process for capturing, collating, validating and reporting mortality data. 2. Care Groups and Trust committees will be able to utilise the revised Mortality dashboard to drill down into individual Care Groups as well as maintain oversight from a Trust perspective. 3. The mortality data will be centrally produced, therefore the data will be consistent from 'Ward to Board'. 4. The dashboard will be available without patient details on the Trust intranet for all staff to review.	3 months – August 2023
10	Review the process of retaining patients on caseloads, and subsequent discharge from caseloads, to ensure it results in consistent data across the services.	Low	**Executive Lead** Chief Operating Officer and Chief Finance Officer (SIRO) **Lead for Delivery** Chief Digital Officer and Deputy Chief Operating Officer	1. The guidance which details the process for administration staff to follow describing the steps to be taken when discharging a patient from the service will be shared with all Business Managers to action. 2. Further guidance will be developed for administration staff as to the process to follow when a person on the team's caseload is found to be deceased. 3. Caseload Reviews should be carried at a minimum 6 monthly with the involvement of Medical, Nursing, Therapies and Local Manager input and should be embedded in local teams' standard practice	9 months – February 2024

NSFT action plan (5 of 7)

Recommendation		Priority	Trust management responsibility	Proposed actions	Timeframe
11	Create supporting training programme for all staff who input data into systems that have an impact upon mortality data. Ensure that the implications and impacts of incorrect or incomplete data entry are understood by staff.	Medium	**Executive Lead** Chief Finance Officer (SIRO) **Leads for Delivery** Chief Digital Officer, Deputy Chief Operating Officer, Medical Director of Quality	1. Implement training programmes focusing on the importance of mortality reporting dependent on the role the member of staff fulfils. 2. To be supported by learning bulletins which highlight the importance of accurate mortality data reporting and how this can assist in improving clinical care.	6 months – November 2023
Partnership working					
12	Establish links with primary care networks to explore opportunities to improve the completeness of the Trust's mortality data (including cause of death), supported and enabled by the ICB.	Medium	**Executive Lead** Director of Strategy and Partnerships **Lead for Delivery** Director of Nursing, Patient Safety and Safeguarding, Medical Director of Quality and Director of Operations- (Medical Directorate)	1. In order to inform the ICB where their assistance can be best be focused, the Trust will complete an audit of the available cause of death data. 2. NSFT will develop a standardised process led by the Mortality Team for contacting GPs, Coroners, Medical Examiners and clinical data systems to obtain the cause of death wherever possible. 3. This recommendation will be shared with the ICBs through the dissemination of this report and to be added as an agenda item on ICB Learning from Deaths Forums where/when in place.	6 months – November 2023
13	Explore opportunities for formal data sharing agreements between the Trust and primary and secondary care in the region.	Medium	**Executive Lead** Chief Finance Officer (SIRO) Chief Nursing Officer **Lead for Delivery** Chief Digital Officer	1. Establish formal data sharing agreements between the Trust, Primary and Secondary care within the region based on agreed parameters and guidance from clinical Leads.	6 months – November 2023

NSFT action plan (6 of 7)

Recommendation		Priority	Management responsibility	Proposed actions	Timeframe
			Governance		
14	Update the Trust's Learning from Deaths policy to ensure the Trust's governance addresses the issues in this report and explicitly references community deaths. Ensure the governance in relation to all mortality is clearly understood by clinical and corporate staff involved in the production and reporting of mortality information.	High	**Executive Lead** Chief Nursing Officer and Chief Medical Officer **Lead for Delivery** Director of Nursing, Patient Safety and Safeguarding, Medical Director for Quality and Director of Operations – (Medical Directorate).	1. Following confirmation of the revised mortality data pathway, the Learning from Deaths policy will be reviewed and updated to include the SOP referenced in Recommendation 2. This will include the nationally defined focus of mortality being both community and inpatient deaths. 2. The Learning from Deaths policy will be supported by a 'policy on a page' which will be available to all staff. 3. The circulation of information and learning bulletins 'Learning from Deaths Matters' will be published and disseminated throughout the Trust. 4. This will be supported by learning events.	3 months – August 2023
15	Establish a clear improvement plan to address the issues identified in this report, and report progress to a board committee.	High	**Executive Lead** Chief Nursing Officer and Chief Medical Officer. **Lead for Delivery** Director of Nursing, Patient Safety and Safeguarding, Director of Operations- (Medical Directorate) and Medical Director of Quality	1. The improvement plan will be monitored through the Learning from Deaths and Incidents committee and reported quarterly to the Quality Committee.	3 months – August 2023

NSFT action plan (7 of 7)

Recommendation		Priority	Management responsibility	Proposed actions	Timeframe
16	Introduce a process of assurance over mortality reporting: • Introduce a clear audit trail and series of checks to ensure adherence with SOPs, and report outcomes to executive leads on a regular basis • Introduce or commission patient level data reviews to provide assurance over the accuracy of data recording. • Link to the clinical validation process established under recommendation 9	High	**Executive Lead** Chief Finance Officer (SIRO), Chief Nursing Officer. **Lead for Delivery** Chief Digital Officer, Medical Director for Quality	1. Mortality Data Pathway: an audit process will be developed and implemented every 6 months. The audit will test the comprehensiveness of the mortality data pathway. This will be supported by the weekly Spine data verification as referenced in recommendation 4. 2. External verification will be sought by an external consultancy team who are experienced in data within the NHS. 3. Newly formed mortality team will provide data for board information via the developed clinical review pathway for deaths reported via the Spine as per recommendation 9.	3 months – August 2023

Introduction and approach

Introduction and approach (1 of 3)

Background

Grant Thornton has reviewed the collection, processing and reporting of mortality data at Norfolk and Suffolk NHS Foundation Trust (NSFT) at the request of the Trust, NHS Norfolk and Waveney Integrated Care Board (ICB) and Suffolk and North East Essex ICB.

The Trust requested independent assurance over its mortality recording and reporting following public and regulatory concern over the reliability and accuracy of reported data. There is concern locally around the clarity of mortality data and the ability to monitor reporting and recording.

Structure of the report

In this section of the report we outline the methodology and approach followed by Grant Thornton along with the stated aims for this piece of work.

The main report that follows this introduction is listed and outlined below. Apart from the background and approach all sections culminate with clear recommendations for improvement, which link back to those presented in the executive summary.

1. **Mortality reporting methodology:** Summary of the current national mortality guidance, the methodology chosen by the Trust to record and report its mortality data and the comparison of this to other mental health trusts.

2. **Processes:** The detail of how the Trust enacts its methodology into a process and the challenges this presents them with. Data provided by the Trust has been analysed by Grant Thornton to provide evidence for the impact of the process challenges.

3. **Clinical engagement:** summary of the evidence provided by the Trust to Grant Thornton of clinical involvement in data interrogation and the evidence of data informing clinical practice in the Trust.

4. **Governance:** overview of the current and expected governance arrangements to provide guidance and clarity to the current mortality reporting and recording process.

1. Public Health England: Health matters: reducing health inequalities in mental illness
2. The Five Year Forward View for Mental Health (england.nhs.uk)
3. NHS Mental Health Implementation Plan 2019/20-2023-24 (longtermplan.nhs.uk)
4. Office for Health Improvement and Disparities. Premature mortality in adults with severe mental illness (SMI) published 7 April 2022
Definitions [4]: *Premature mortality rate in adults with SMI* – the number of people with SMI who die under the age of 75 per 100,000 calculated for a three year period. *Excess under 75 mortality rate in adults with SMI* – the difference in premature mortality rate between people with SMI and those without SMI, calculated for a 3 year period.

National context

Nationally collected data shows the importance of understanding mortality within mental health. Public Health England's report[1] noted:

- It was estimated that for people with severe mental illness, 2 in 3 deaths were due to physical illness such as cardiovascular disease (CVD)

- Premature mortality is higher for people with severe mental illness (SMI)

Across the country there is geographical variation in mental health mortality. The NHS's mental health taskforce recommended more work to ensure the physical health needs of those living with severe mental illness were met [2].

National guidelines over mortality reporting for mental health trusts are not as clear and prescriptive as those in place for acute trusts, and we know from our work with other mental health trusts and national organisations that there are issues with the depth, consistency and relevance of clinical data. Improving the quality of mental health data was noted in the Mental Health Long Term Plan[3], highlighting a gap between physical and mental health data.

Aims and objectives of the review

The aim of the project was to provide the Trust and the ICBs with a view on the accuracy and effectiveness of processes related to the collection, processing and reporting of mortality data at NSFT. To do this, the following objectives were agreed jointly by the Trust and ICB:

- Establish the methodology for mortality data collection, processing and reporting at the Trust, including which patients are deemed to be under the Trust's care

- Understand whether the data reported accurately reflects the expected methodology

- Compare the established methodology with national guidance and practice at other organisations to understand whether the Trust is reporting in line with national expectations

- Benchmark the Trust's reported data against data from other organisations

- Provide clear expectations for the reported mortality position and make recommendations for improvement.

Introduction and approach (2 of 3)

Our approach

We used an established method for reviewing data processes and controls. We undertook the following activities to develop a clear understanding of the processes related to mortality data production, management and reporting at the Trust.

1. Benchmarking and document review

    a) Review of national guidance

    b) Review of peer guidance / publicly available policies around mortality reporting

    c) Review of NSFT policies and guidelines associated with the mortality recording process

2. Stakeholder interviews (a full list is in the appendix of this document)

    a) Discussing processes managed

    b) Issues / blockers to completing tasks

    c) Identify further supporting documentation associated with these tasks (including training)

    d) Validation or audit processes in place

3. Data analysis

    a) Compare data to Trust's methodology and see if this was followed

    b) Compare analysed data to Trust reported data; understand any variance

    c) Explore themes within the data which may help the Trust to improve reporting and learning going forwards

In following this approach we reviewed the Trust's processes across the mortality data pathway, from data entry to reporting outputs. The steps of the data pathway we reviewed are outlined below:

Step in data pathway	Areas reviewed
Input	• Documentation and Standard Operating Procedures (SOPs) • Training and support • Data entry by clinical and service staff
Systems	• Clinical systems and connectivity • Information captured outside of clinical systems • Documentation of processes and business rules • Links and integration with national systems
Data management	• System output definitions • Database definition and management
Reporting	• Rules applied to reporting outputs • Consistency of local and national reporting • Availability of reporting to service staff • Access to and relevance of benchmarking
Service engagement	• Clinical ownership of data • Use of information and reports by services • Process for data quality improvement
Governance	• Internal and external assurance over clinical data entry • Senior oversight of national submissions • Board reporting on clinical data quality • Effective change control and accountability for data quality

Following this approach allowed us to establish the Trust's current position and compare this to national guidance. Where areas of variance between Trust methodology and data exist we have worked to understand these and have collated this information to form an agreed set of recommendations for improvement.

Introduction and approach (3 of 3)

Glossary of terms

Term	Definition
Care Review Tool	A tool developed by the Royal College of Psychiatrists based on the structured judgement review tool
Datix	A healthcare incident recording system used by the Trust
Death by natural causes	The term used by a coroner when a death is as the result of the normal progression of natural illness, with or without significant intervention. This is not a separate category reported on by the Trust in its dashboard ('*natural cause – specific non available*' is used and includes unknown information) but natural cause is referred to in Trust bord reports.
Death certificate (also known as medical certificate of cause of death)	An official document, signed by a doctor, which records when and where a patient died and the cause of death. This contains two parts for the cause of death. Part 1 lists diseases or conditions leading directly to death, or the other conditions mentioned in part 1. Part 2 lists other conditions which contributed to death but not related to the disease of condition causing it.
Expected death	As defined by the Trust, a death caused by a pre-existing life-limiting condition or if the person's age and frailty made death from a natural cause a reasonable expectation at the time of their death
Integrated care board	A statutory NHS organisation responsible for developing a plan for meeting the health needs of the local population and managing the NHS budget and services of an area.
Lorenzo	An electronic patient record system used by the Trust
Mortality	The term mortality is used in medicine as a term for death rate, or the number of deaths in a certain group in a certain period of time.
NHS Spine	The NHS Spine allows information to be shared securely through national services
Patient safety incident	Term used by NHS England to describe unintended or unexpected incidents which could, or did, lead to harm for patient(s) receiving healthcare.
Serious incident	Defined in broad terms by NHS England as an event in health care where the potential for learning is so great, or the consequences so significant, that they warrant using additional resources to mount a comprehensive response. Their occurrence demonstrates weaknesses in a system or process which need to be addresses to prevent future harm.
Statistical process control (SPC)	An analytical technique which plots data over time, helping to understand variation and guide appropriate action
Structured Judgement Review	A methodology developed by the Royal College of Physicians for reviewing mortality which is used in the NHS.
Unexpected death	As defined by the Trust, the death of a service user who has NOT been identified as critically ill or death is NOT expected by the clinical team. If there is no known diagnosis of terminal illness or physical health complication meaning that the service user is deemed as approaching end of life or receiving palliative care. Where data or cause of death is unavailable this is defined as unexpected

Main Report

Mortality recording methodology (1 of 4)

Introduction and summary

This section will focus on the national and Trust defined methodology for mortality reporting. The Trust's methodology is then benchmarked against that of other mental health organisations and the impact of regularly changing the methodology discussed.

The Trust's current mortality recording methodology aligns to the nationally expected methodology. Nationally there is a lack of end-to-end guidance on mortality reporting. There are varied definitions for key metrics nationally making comparisons and benchmarking between trusts challenging. The Trust's currently used methodology is in-keeping with other mental health trusts, with both being derived from similar national sources.

In the two years before the COVID-19 pandemic an average of 49 people per month died within six months of contact with NSFT's services. During the COVID-19 pandemic this rose to 70 but by summer 2021 this had returned to 44 [1]. In January 2022 it was reported that on average one person per month died whilst under the care of the Trust's inpatient services [2].

Defining mortality reporting

Mortality recording and reporting encompasses

(a) the definitions which, when applied, impact the number of deaths to be included within the Trust's mortality reporting

(b) the process by which the Trust gathers and processes mortality information and

(c) how this is then fed back into the organisation for interrogation, understanding and learning.

Mortality recording and reporting is distinct from serious incident or patient safety incident reporting, although there may be overlaps where a single case is reported in more than one place. A death which is the result of a serious incident or patient safety incident should be recorded in that data collection and within the Trust's mortality data. Not all deaths are patient safety incidents and not all patient safety incidents are deaths. Unexpected deaths may not reach the criteria for serious incident review. This distinction is important to understand what this report has examined, and what it has not examined. This report is focused only on mortality recording and reporting and not incident recording and reporting.

Available national guidance and analysis

In the absence of complete and detailed national guidance trusts use a combination of the available guidance, supplemented by statements made in national reports, to establish their methodology for mortality reporting. Within their mortality guidance most trusts reference National Quality Board (NQB) guidance along with the 2015 Mazars report commissioned by NHS England [3]. The latter is not national guidance but a nationally commissioned report, the recommendations of which have been adopted variably by mental health trusts.

The NQB published guidance on Learning from Deaths in 2017. NQB guidance outlines that all Trusts should have a policy on how they respond to, and learn from deaths of patients. There are nationally defined processes in place for the reporting and learning from deaths. Information should be collected and published quarterly on deaths under a Trust's care, reviews, investigations and resulting quality improvement. The NQB report was written a number of years ago and has not been replaced by more recent guidance. In the intervening period to now there remains no one single national document which offers a clear framework and supporting terminology for trusts to apply when designing and implementing their mortality recording methodology and processes.

The 2016 CQC Learning, Candour and Accountability national report, which followed the Mazars report, highlighted issues around mortality identification, reporting and reviews across acute, community and mental health providers [4]. These are summarised below:

- Variation in the way organisations become aware of deaths of people in their care.

- Many patients die having received care from multiple providers. There are no clear lines of responsibility for the provider who identifies a death to inform other providers.

- No consistent process or method for NHS trusts to record when recent patients die after they have been discharged from the service.

- Electronic systems do not support the sharing of information between NHS trusts.

- Trust boards receive limited information about deaths of people using their services other than those that have been reported at serious incidents.

- When boards receive information about deaths, board members often do not interrogate or challenge the data effectively.

1. NSFT Board of Directors public session 23rd September 2021
2. NSFT Board of Directors public session 27th January 2022
3. National Guidance on Learning from Deaths; A Framework for NHS Trusts and NHS Foundations for identifying, reporting, investigating and Learning from Deaths in Care
4. Care Quality Commission. Learning, candour and accountability. A review of the way NHS trusts review and investigate the deaths of patients in England

Mortality recording methodology (2 of 4)

National mortality terminology guidance

There is no clear single definition of either an expected or unexpected death in national guidance. Some organisations use the Mazars framework (Appendix A) with others wording their own definitions[1]. There is limited guidance, for Mental Health providers, concerning the time period from discharge for which a patient is considered "under a trust's care".

The lack of national guidance means key terminologies are defined locally. The exact wording can impact the number of deaths which a trust reports within its mortality statistics. A detailed comparison of locally used terminology is included the appendix. There is variation around the definition of time frames for the deaths included as part of a trust's mortality reporting.

The Trust's current mortality recording methodology

The Trust's methodology for capturing deaths to be included within the Trust's mortality reporting incorporates the steps outlined below, which are compared to national practice on slide 20:

- Defining the time period of deaths to be included within the Trust's mortality reporting
- Monthly Spine tracing
- Categorising expected and unexpected mortality.

National Spine tracing

Accessed through clinical systems or via a designated portal the NHS Digital national Spine allows information to be shared securely between health organisations. This includes summary clinical information alongside basic demographics including birth and death notifications to support identifying patients and matching them to their health record.

When a death is notified by a health professional within their local clinical system or via the secure portal, the death notification message is generated by the Spine and then reflected in the Personal Demographics Service (PDS).

If a patient clinical record is held by multiple providers, then the notification will be acknowledged by those providers by either directly accessing the record of that patient or interrogating the Spine using a standard report called a Spine trace query. This report would notify an organisation of all the patients recorded within their clinical system that had a change in their PDS status including a date of death.

Methodology changes

Methodology changes can be positive and sometimes needed. If changes in methodology occur without explanation, rationale or context they can cause confusion for those trying to understand the data within a report. It also hampers the ability to track through reports and historical data over time. This challenge was reflected in the feedback from some stakeholder meetings. When changes are made the new methodology and the expected impact on mortality data should be explained to an appropriate level of detail within publicly facing documents to support those reading the data.

There is no formal documentation regarding the process for changing or amending the methodology of the mortality recording process. The Trust has changed is methodology on several occasions which impacts on the ability to track and compare deaths over time.

- Between October and December 2019 NSFT changed its approach to reporting of the total number of people known to its services who died. Prior to this period, data had only included people whose death was identified by reporting on the internal incident reporting system, Datix [2].

- January 2022 board reports noted that that the Trust had broadened its definition of those who have died to include people whose deaths were not notified to NSFT at the time of their death[3].

- In January 2023 the Trust changed its dashboard recording, from previously comparing unexpected and expected deaths to now using the terms 'natural' and 'unnatural'. It is important that terminology used is consistent with accepted national practice (e.g. expected and unexpected).

As part of this process the Trust has noted rules which have historically been applied to data which they will change going forward. Rules were applied where deceased patients would not appear on the reporting query when a patient record had been accessed by a member of staff post date of death. It was incorrectly presumed that the individual who had accessed the record would be creating the relevant Datix entry and applying the deceased status to the record.

1. National Guidance on Learning from Deaths; A Framework for NHS Trusts and NHS Foundations for identifying, reporting, investigating and Learning from Deaths in Care
2. NSFT Paper I, Mortality Report BoD September 2020
3. NSFT Paper G, Mortality and Learning from Deaths. BoD 27th January 2022

Mortality recording methodology (3 of 4)

* The Trust's methodology is defined with the context of national guidance. In some areas the lack of specific national guidance means NSFT use a different definition to other mental health trusts. The potential issues highlighted here are discussed later in the report.

Area	Nationally accepted practice	NSFT practice	Potential issues encountered by the Trust as a result of the Trust's methodology *
NHS Spine trace (Informing source)	No clear national guidance. Most mental health trusts perform Spine traces (as detailed in the previous slide) on a weekly or daily basis.	Monthly trace from the Spine, along with deaths communicated by inpatient and community teams directly to the Trust.	The time lag between time of death and the time that the Trust learns of it will impact on the relevance reports. Data will appear to change between reports because of the time it takes the Trust to learn of a death.
Time period for deaths to be included within the Trust's mortality reporting	Trusts are required to collect and publish on a quarterly basis, at a minimum, total number of inpatient deaths and those that the Trust has subjected to case record review. Acute trusts were advised to include cases of people who died within 30 days of leaving hospital; mental health trusts were advised to consider which categories of patients were within scope for reviews[1]. Most Trusts use patients who died within six months of discharge from caseload in line with the Royal College of Psychiatrists 'Guidance for reviewers'.[4]	All inpatient and community deaths, including those within six months of discharge from the Trust. The Trust have informed Grant Thornton that their Learning from Deaths 2023 policy describes the case record review selection process in line with NQB Learning from Deaths guidance.	The Trust's approach is in line with national practice, however the details of the definition chosen impacts the number of deaths considered to be part of an organisation's mortality statistics. Changing supporting processes or not keeping accurate caseloads also impacts reported numbers.
Expected and unexpected deaths	Guidance from NQB uses the terms expected and unexpected to outline deaths which should be subject to a case review. All trusts reviewed in our benchmarking exercise split their mortality reporting between expected and unexpected[1], although some broke this down further to use the terminology natural and unnatural. The NHSE Better Tomorrow team reported they would recommend expected and unexpected to be used.	*Expected* - if it was caused by a pre-existing life-limiting condition or if the person's age and frailty made death from a natural cause a reasonable expectation at the time of their death [2]. *Unexpected* - 'The death of a service user who has not been identified as critically ill or death is not expected by the clinical team. If there is no known diagnosis of terminal illness or physical health complication meaning that the service user is deemed as approaching end of life or receiving palliative care. Where data or cause of death is unavailable this is defined as unexpected [3].	Whilst the Trust's approach is broadly in line with national practice there are issues with the process of identifying expected and unexpected deaths which are detailed later in this report. There is a risk of inconsistent implementation without clear decision-making supporting documentation and clinical input.

1. National Guidance on Learning from Deaths; A Framework for NHS Trusts and NHS Foundations for identifying, reporting, investigating and Learning from Deaths in Care
2. NSFT Mortality and Learning from Deaths Report, Jan 2022
3. NSFT Unexpected and Sudden Deaths (in-patient areas only' policy, ref no. Q11a, version 06.1
4. Royal College of Psychiatrists: Using the Care Review Tool for mortality reviews in Mental Health Trusts

Mortality recording methodology (4 of 4)

Methodology benchmarking

To benchmark how the Trust has interpreted the available national methodology, we have reviewed the NSFT approach against other mental health trusts. To achieve this, Grant Thornton reviewed the comparator trusts publicly available mortality policies. It has not reviewed their deployment or the adherence to them.

Other mental health trusts follow a similar methodology to that employed by NSFT, with trusts accessing data from within their organisation, the Spine and collating this on an incident management system. The exact processes which underpin this overarching methodology differ between organisations.

Trusts vary as to how frequently they access the NHS Spine with most employing a daily or weekly trace. Some comparator trusts are more advanced than NSFT at linking GP and public health information into their mortality methodology.

The majority of mental health trusts including NSFT count deaths within their organisation mortality data if they are an active patient or occur within six months of discharge. In some cases this is broken into more detail and is reflected in full in the Appendix. Whilst some other organisations have further stratified their reporting rules based on cause of death, six months is the common standard. Due to issues outlined later in this report relating to understanding cause of death for community patients, the Trust would potentially be unable to implement a more sophisticated attribution method using the data available.

Mental health trusts have different wording for what is an expected or unexpected death. Of the trusts' methodologies reviewed most broke down deaths into expected and unexpected, although some chose to break these categories down further. Our experience is that Better Tomorrow recommend the terms 'expected' and 'unexpected' to be referenced in board and external facing reports. This varied wording means trusts do not have comparable categories so benchmarking expected to unexpected deaths nationally is a challenge.

Some trusts choose to break down expected and unexpected deaths into further categories in accordance with the Mazars framework, detailed in Appendix A. This includes subcategories referring to natural and unnatural below the umbrella expected and unexpected terms. A comparison between the Trust's mortality terminology and that of other mental health organisations is included in the appendix of this report. There was no evidence of a Trust using just natural and unnatural as definitions.

Conclusion and areas for improvement

The mortality recording methodology used by the Trust adheres to the principles set out in the available national documentation and follows a similar interpretation to other mental health trusts. Nationally there are mortality data challenges, so the Trust does not have the ability to solve all of the current issues alone.

Monthly Spine tracing results in a lack of contemporaneous information and in this area the Trust is different to other organisations who do this more frequently.

Some parts of the Trust's methodology are prone to individual interpretation. Implementing a continuing training programme for relevant staff to ensure the recording process is consistent and efficient would reduce the risk of variation due to individual interpretation and support staff making decisions on reportable data points.

Recommendations (mapped in detail in Action Plan at the start of this report)

	Recommendation	Priority
4	Use the Spine as the definitive reference source of identifying deaths and update this information on a weekly basis.*	High
5	Agree a standardised reporting structure for board reports, to include thematic analysis and consistent presentations of figures, axis and scales. Clearly define the Trust's methodology for mortality recording and reporting within board reports. Changes should be clearly documented and the impact upon historically reported figures should be described to provide continuity.	High
11	Create supporting training programme for all staff who input data into systems that have an impact upon mortality data. Ensure that the implications and impacts of incorrect or incomplete data entry are understood by staff.	Medium

* The Spine should not be the only source of mortality information but should be the definitive reference source and be accessed in a timely manner.

Processes (1 of 6)

Introduction and summary

This section comments on how the Trust puts into action its methodology. It reviews the documentation, processes and categorisation which make up the mortality recording and reporting pathway.

The Trust currently applies its mortality methodology through processes which involve multiple steps supported by different teams or identified individuals. Some of these individual steps have well-documented procedures, but the end-to-end mortality recording process has no overarching supporting documentation.

There are a number of systems involved in the overall recording process. This should be clearly documented and undertaken in a structured and controlled manner. Where possible this should also be automated and the reliance on individual manual inputs should be removed or mitigated as this can corrupt the final output of the Trust's mortality reporting and provide incorrect data.

Multiple systems are used for the recording of deaths at the Trust, with an individual Excel sheet used between clinical systems. The end-to-end process of mortality recording is undocumented with a lack of clear rules underpinning the recording pathway. This creates points of risk with limited assurance over the whole pathway.

The Trust uses Lorenzo as its main clinical system, but SystmOne and IAPTUS are used by certain services within the organisation. Patients who have records on these systems may also have a Lorenzo record, this is dependent upon which other services they may be registered to within the Trust. Grant Thornton have not seen clear documentation of the process for death notifications in these systems and how it links to the Trust mortality reporting. The exception to this is that we have sighted an SOP for recording a death of a service user within Lorenzo.

The recording process culminates in information stored in the NSFT Mortality dashboard, which informs internal and board reports. This dashboard contains basis demographic information, although this is not aligned to the cause of death.

The various processes and the challenges these present are summarised on the next page.

Mortality recording documentation

Similarly to the lack of national documentation the Trust lacks documentation of the end-to-end process of mortality recording. A lack of standard operating procedure covering the entire process of mortality recording results in inconsistency of data capture and input into clinical systems. Areas where detailed documentation is absent, but expected, are listed below:

- Grouping of cause of death, which appears on the Trust dashboard

- Categorisation of expected and unexpected deaths and the role undertaken by the patient safety team when reviewing Datix entries

- End-to-end mortality recording pathway

- Process for methodology changes and amendments

- No mortality specific guidance for staff completing Datix forms having been informed of a death

- No clear guidance for review decisions made by patient safety team following Datix review.

Figure 1 showing monthly unexpected and expected 'Natural cause specific non available' death totals from Datix, Lorenzo and the NSFT Dashboard from April 2019 to September 2022
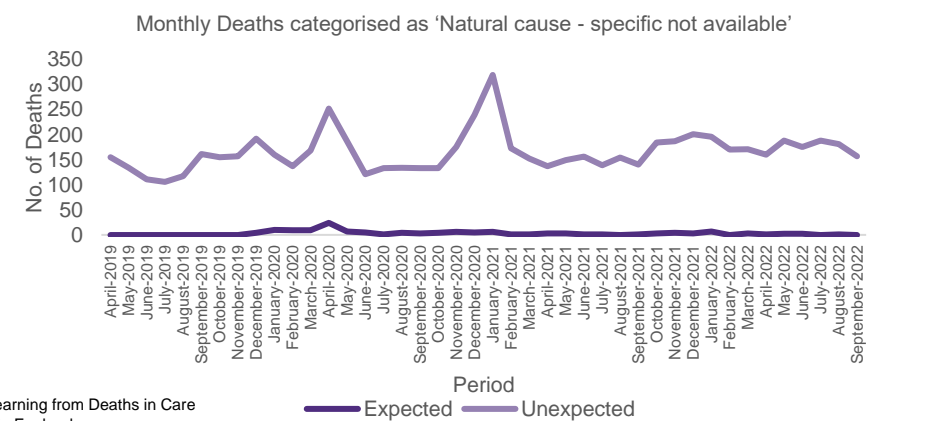
Monthly Deaths categorised as 'Natural cause - specific not available'

1. National Guidance on Learning from Deaths; A Framework for NHS Trusts and NHS Foundations for identifying, reporting, investigating and Learning from Deaths in Care
2. Care Quality Commission. Learning, candour and accountability. A review of the way NHS trusts review and investigate the deaths of patients in England

Processes (2 of 6)

Mortality recording process step	Associated challenges and risks
Death is reported from inpatient unit, community team or monthly patient master index tracing against Spine. Deaths notified by inpatient or community team are recorded to the main Trust electronic patient record (EPR), Lorenzo.	• Monthly tracing limits simultaneous mortality data availability within the Trust resulting in reported data changing over time as the Trust becomes informed of a death. • Grant Thornton saw no evidence of a mandated timescale for recording of deaths within the Trust. The Trust have informed Grant Thornton that this is included as part of the Leaning from Deaths 2023 policy. • Multiple data sources (including Lorenzo, Iaptus, SystmOne and Datix) risk inconsistencies and potential to cause differentials as the process undertaken may vary depending on how the Trust is informed of a death. • Access rights to record deaths on Lorenzo are limited to system administrator, meaning individuals within teams cannot change the death status. There has been misunderstanding within the Trust historically that the death status had been changed within Lorenzo when users accessed a record post date of death, when it had not actually been done.
Information from Lorenzo extracted for review in a spreadsheet	• The use of excel to store and process sensitive information is minimised with audit and security policies appropriately applied where this is necessary. • Extracting data from the clinical system loses audit trail and case/effect within that system.
For notified deaths an entry should be made into Datix (Trust risk management system) by the member of staff receiving the notification of death.	• Reliance on a variety of members of staff to be aware of the need to perform this task and do so in a timely manner. • Potential for individual interpretation when completing Datix without clear mortality specific supporting guidance within the Trust. The Trust could further work on supporting staff completing Datix forms to ensure only relevant information is collected and avoiding duplication with information already within Trust clinical systems.
Datix reviewed by patient safety team to determine next steps regarding reviews and investigation.	• Isolated input in pathway. Lack of involvement at other steps adds to the limited oversight of the pathway and is an example of siloed steps in the overall pathway.
Deaths categorised into unexpected or expected. Categorised based on cause of death and basic age information held within a locally stored excel workbook.	• Patient details held outside of core Trust clinical systems require suitable audit and security policies to be applied.
Death certificate information used to group deaths into cause of death seen on dashboard.	• Process reliant on individuals meaning it is susceptible to inconsistency and it is unclear how continuity remains when key individuals are away. • Bulk of deaths informed via the NHS Spine, where cause of death information is not always available. There is a reliance on individuals to chase the detail associated with these deaths, such as the cause of death, from other parts of the healthcare system, including GPs. This is a nationally recognised challenge for mental health trusts and improvement in the Trust's data for community deaths will require partnership working.
Excel workbook informs Trust's mortality dashboard, from where corporate reports are generated.	• The use of excel outside of core clinical systems is minimised with audit and security policies appropriately applied • Across the whole pathway responsibility is dispersed across a number of staff groups/individuals for the various processes • The final dashboard appears to under-report deaths when compared to Lorenzo and Datix figures (detailed on page 26).

Processes (3 of 6)

Data categorisation

Within the current recording processes there are steps which require categorisation, or grouping, of data. These key decisions are needed in order to inform the final dashboard and reportable figures. This adds value in supporting the Trust to review areas of potential focus. There is no documentation associated with this process which thus relies on individuals to make reliable and replicable judgments. At points this categorisation is done by an individual with no clinical oversight for input or support.

One of the key points of categorisation is expected and unexpected deaths; this delineation is reported regularly in board reports and published externally. Accurately and reliably sorting deaths into these two categories is key, which currently relies on an undocumented judgement processes.

Causes of death, measured per month, make up the main rows of the expected and unexpected screens of the Trust's mortality dashboard. This information is taken from a patient's death certificate and then categorised into the groups displayed on the mortality dashboard. Where available this is taken from the part 1c of the death certificate, followed by 1b with 1a used if neither 1b or 1c are completed. The process of using death certificate information to inform decision making around the groupings which appear on the dashboard is not supported with clinical input or SOPs. There is inconsistent understanding across the organisation as to how cause of death information is grouped.

The Trust's mortality dashboard uses a number of catch all terms which are not defined within its reporting. These terms, described below, lack clarity for those not closely associated with the recording process.

- *Natural cause - specific not available* – Records where a death certificate is not available.
- *Specific not available* – A legacy term which should not be on the dashboard as a separate item and has been replaced by '*natural cause – specific not available*'.
- *Unascertained* – A term only used by the Trust when this has been a coroner's verdict.
- *Unspecified effects of external causes* – This has been used in the past to cover a 1a cause of death of multiple fatal injuries after jumping from a height.

The term '*Natural cause - specific non available*' accounts for 77% of the total deaths analysed in the given period. Figure 1 on slide 22 shows the deaths categorised as '*natural cause specific - non available'* in the expected and unexpected groups over the months from April 2019.

The large proportion of deaths categorised as '*Natural causes – specific non available'* poses a challenge for the Trust in understanding the deaths to be included within the Trust's mortality reporting, and then using this information to implement meaningful learning. Where the Trust has done what it can to access a cause of death, but this information is not available, it may be clearer to use terminology such as 'unknown to the Trust'.

Pending cause of death

Pending cause of death was recorded 315 times across the time period examined by Grant Thornton, 44 of these are in cases of expected deaths and 271 in cases of unexpected deaths.

The majority of these pending cause deaths are in 2022, when 189 are recorded. This reflects the Trust's reported methodology that this term is used when a death is being further investigated, for example by the coroner, and once the cause of death is confirmed this should be updated on Trust records. However, there are still five records which remain under this category from 2019 and a further 12 in 2020.

As the numbers within this category are highest in recent years, this suggests updates are happening when information is passed on to the Trust. The ongoing attribution of some deaths as far back as 2019 to 'pending cause of death' may represent several factors:

- Trust may not be updating all records when causes of death are given. This could be because of difficulties in finding out this information or because the Trust is not checking back on cases it should be updating.
- Mortality investigations, like those through coroners' court, can take a long time, so information may not be available for months or even years after a death.

Processes (4 of 6)

There are challenges in accessing information on cause of death, especially if the death was reported via the NHS Spine. Ascertaining information on cause of death in these situations involves contacting the GP practice: sometimes information is unavailable and on other occasions there are barriers to sharing the information. Grant Thornton's experience is that the medical examiner role, recommended by the NHS England's Better Tomorrow team as part of good practice, should help the Trust to create links into GPs and other organisations to improve access to more information on the cause of death. Improving the quantity of data collected for cause of death will rely not just on the Trust but partnership working across providers in the system.

The lack of this information also demonstrates the need for the Trust to collaborate with other primary and secondary care organisations in the region to ensure that the whole system is learning and improving together and not in silo. Doing this effectively may mean rethinking and improving current pathways and processes.

NULL data fields

Missing data fields, or 'NULL' fields were prevalent across the data. The number of null fields in the data set for each year is shown in the graph on the right. Whilst the 2022 total is only 11,733, compared to 15,316 in 2021, the data for 2022 only covers nine months of the year.

Analysis performed across the 'NULL' fields showed these are particularly prevalent across certain categories including 'Local Specialty' and 'site' fields. There was also a large number of NULL field entries for ward names. For many patients, who were not inpatients at the time of their death, they will not have had an inpatient ward, but in leaving fields blank the data lacks reliability when analysed as a set. Using 'n/a' when a field is not applicable to the patient in question would help distinguish a non-applicable field from a missing data.

Some data fields were consistently well filled in over time. These include:

• Date of last seen appointment

• Team name

• Registered GP practice.

Lacking a fully comprehensive view of the data limits what Grant Thornton can conclude from the information provided. For the Trust, who use this same data to draw their own conclusions on mortality, the gaps in inputs significantly limit the trustworthy conclusions which can be made. Incomplete and missing fields in data limit the identification of outliers and the opportunity to target tailored interventions in the right areas.

Work to improve this may involve educating staff on what should be input into each field and enhancing staff understanding on why this information is so important. For other areas the Trust may need to consider which fields are necessary, both 'site' and 'local specialty' have two entries within Lorenzo which could cause confusion to individuals completing forms.

Figure 2 showing the total number of NULL entries in Lorenzo between 2019-2022

Number of NULL entries in Lorenzo Data across 2019 - 2022
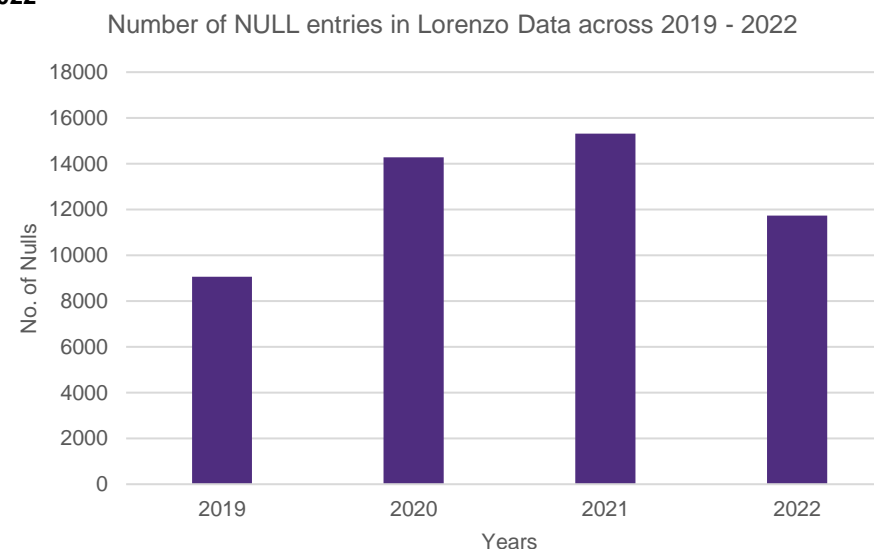
Processes (5 of 6)

Data gaps between systems

Grant Thornton reviewed data from DATIX, Lorenzo and the Trust's mortality dashboard covering April 2019 to October 2022. The three sources did not all cover the totality of this time period.

The data received was quality checked before analysis commenced, and it was found that the pseudonymised patient IDs were missing from both sets. IDs were mapped against both data sets to illustrate which patients were recorded on both systems and highlight the missing patients across the data. There were found to be 65 missing IDs in Datix, only three of these are attributable to the extra month of data received for Datix data. There were 324 missing IDs in Lorenzo (noting that one ID in Datix was 'Unknown' and 122 were missing/blank IDs). The disparity in data reflects the inconsistencies in recording and this difference in numbers could be deaths from other discrete peripheral clinical systems (IAPTUS, SystmOne) or deaths that occurred where incorrect reporting rules had been applied to exclude patients whose records had been accessed post death notification date.

Datix data had 259 records more than that of Lorenzo. Clinical systems other than Lorenzo are used for certain patient cohorts. These patients would have a Datix raised on death but may never have had an entry on the Lorenzo system. Without examining the other clinical systems (SystmOne and IAPTUS) we cannot be certain whether this is explains the discrepancy regarding the Datix records which do not have a corresponding Lorenzo record.

A significant number of NULL entry data fields were noted throughout the data from both systems and this is discussed later in this report. The initial quality check on the data also noted that local specialty fields in Lorenzo were included twice.

Table 1 showing Lorenzo and Datix pseudonymised ID records received by Grant Thornton from the Trust covering April 2019 to October 2022

	Lorenzo	Datix
Number of Patient ID records received	8871	9130
Number of records also present in comparator source (Lorenzo for Datix and Datix for Lorenzo)	8806	8806
Number of records not represented in comparator source	65	324

Comparison of sources

The methodology and implementation of current mortality recording processes result in a discrepancy between deaths recorded on Lorenzo and Datix and those which appear in the Trust's mortality dashboard, as shown in figure 3. Following the review, the Trust described a process of validation. Included in that process were additional steps to clarify the six-month standard and a further review of those activities recorded as appointments that were indirect or non face-to-face administrative activities. At the point of review, the process around these validation steps was not available so we have been unable to provide assurance over this. The data field used for the analysis below was 'Date of last seen appointment' and within the data one patient had a discharge date that was beyond the six-month time period.

Grant Thornton has only seen a visual of the dashboard so we have been unable to explore the reasons behind the differential here nor identify which patients are not being represented within the dashboard. The Trust informed Grant Thornton that their informatics team found extra information as part of this review process, this is not included in the graph below and we are unable to quantify the gap between the NSFT dashboard and Datix/Lorenzo that this information may represent.

Figure 3 comparing monthly death totals from Datix, Lorenzo and the NSFT Dashboard from April 2019 to October 2022

Monthly Death Totals (Apr 19 - Oct 22)
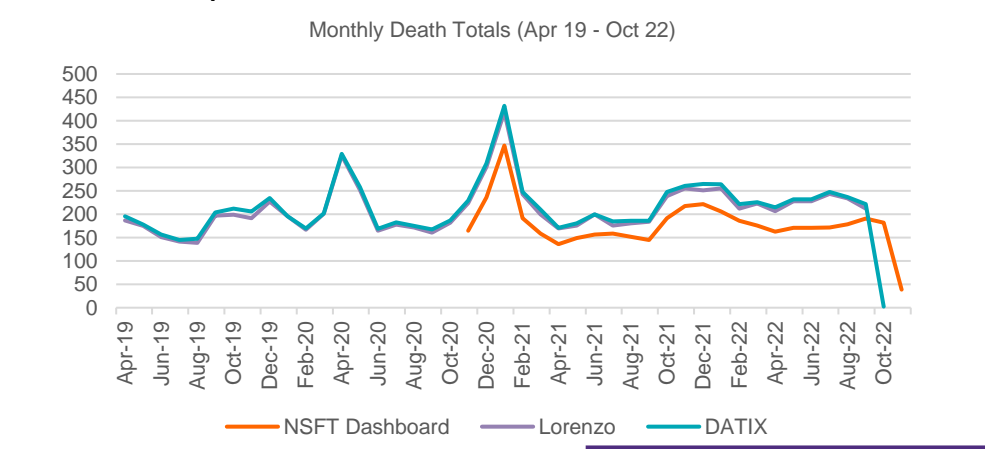
Processes (6 of 6)

Conclusion and areas for improvement

In implementing its mortality recording methodology the Trust uses multiple systems that have the potential to result in differences between sources of data. Within its mortality pathway processes, the Trust exhibits deficiencies which limit the potential to provide assurance over the pathway, and thus the accuracy and integrity of the mortality data reported from it. The current process is subject to human error and individual interpretation, with the lack of documentation around these failing to give the process clarity.

For the data recording process, the reliability and trust in the data reported by the Trust, would be improved by reducing the number of manual interventions of recording and reporting, thereby minimising the risk associated with the use of multiple systems and by improving the quality of data outputs and increasing audit capabilities.

Developing documented processes including SOPs for all areas of mortality data captured across clinical systems would help to ensure reliability in key areas of the mortality recording process.

The multiple issues identified with the Trust's processes have resulted in the inconsistency in data reported from different sources. These need to be addressed to ensure there is consistency and clarity in the numbers reported internally and externally.

Incomplete or missing data fields can pose accuracy and reliability issues within the data presented by the Trust. Further clinical engagement is needed to help improve the quality of data inputted into clinical systems and reduce the number of incomplete or missing fields. Increased engagement with other healthcare providers in the area would help to minimise the gaps around cause of death information which limit the conclusions which can be reached from the current data set, especially with regard to community data. The Trust will need support from the ICB in achieving this. Documented processes with clinical support are needed to ensure categorisation and grouping is replicable and aligns to clinical interpretation.

Recommendations (mapped in detail in Action Plan at the start of this report)

	Recommendation	Priority
1	Improve the mortality data pathway to automate and digitise the production of mortality reporting, removing manual processes for transferring and transforming the data, and introducing an audit trail where user interaction is required. The data pathway covers: data entry by clinical and service staff, clinical system configuration for capturing and codifying data, export process from clinical systems, data management within data warehouse (or through manual intervention), rules and categorisations applied to support reporting, the presentation of reporting outputs, and the process for validating these outputs.	High
2	Develop standard operating procedures (SOPs) for each stage of the data recording process, and ensure these are kept up to date.	Medium
3	Develop reporting tools or method of measuring incomplete data fields to feed back into the organisation, and support training.	Medium
4	Use the Spine as the definitive reference source of identifying deaths and update this information on a weekly basis.*	High

* The Spine should not be the only source of mortality information but should be the definitive source and be accessed on a timely manner.

Reporting (1 of 5)

Introduction and summary

This section contains discussion on the Trust's national data submissions, how it presents and evidences interrogation of mortality data within its reports, and analysis of figures presented in board reports compared to data received by Grant Thornton.

The Trust reports mortality data through board, annual and internal committee reports as well as using their data as part of national submissions. Reports vary in both graphical presentation of data and the actual data included over time. This makes it hard to track information and trends over time. Frequent presentation and methodology changes also limited the assurance which can be given over the accuracy of reporting.

Board reports reviewed as part of this report contain minimal evidence of interrogation of data to investigate peaks in mortality or understand areas of interest in the wider data. Board papers make broad, generalised statements to explain peaks in data, but these are not supported within those board papers by analysis of the Trust's data. The Trust does not consistently present the information referred to in its Learning from Deaths guidance. Reports contain more detailed discussions of inpatient deaths and patient safety incidents with limited evidence of community mortality being explored using the data, or the wider learning which may come from these being explored.

Internally, whilst there is a documented line for reporting through sub-committees into the board, members of staff interviewed by Grant Thornton reflected that they felt processes were not clear. Members of staff involved in the mortality reporting process described challenges around the mortality process feeling disjointed with feedback that clinicians could readily access the information they desired to support them. Mortality information is discussed or presented within a number of different forums across the Trust including, but not limited to:

- Trust board

- PSI annual report

- Safety and Mortality Committee (Patient Safety Review Group was renamed the Safety and Mortality Committee in September 2022)

- Quality Committee

- Audit and Risk Committee.

Board reports data presentation and evidence of interrogation

Mortality reporting is presented inconsistently between reports with no clear explanations behind the rationale of changes, or their anticipated impact. There is a lack of detail and thematic analysis within reports which fails to show a level of mortality data interrogation needed to learn wider lessons, especially in regard to community deaths included within the Trust's mortality reporting.

Over the last two years mortality is discussed every four months at board level, with papers included in the supporting papers on most of these occasions. In the Appendix of this document is a series of graphs taken from Trust board papers over time exhibiting the changing presentation style and the subsequent challenge to track through board reports. The inconsistency between these is summarised in the table on the next page, but includes changes in axis, data points and the way the graphs are drawn using different styles and colours. The time periods discussed in board reports varies. In some cases, reports discuss total figures over the past 2 years and in others they refer to monthly averages.

Reporting (2 of 5)

Throughout 2021 data is reported as 'all cause mortality', but in January 2022 the data is split into inpatient and community deaths. The numbers of deaths in the subsequent community graph is higher than the previously presented 'all cause mortality graphs'. At this time, the Trust broadened their definition of those who have died to include people whose deaths were not notified to NSFT at the time of their death. The precise impact of this change is unclear. The graphs presented in January 2022 also contain gaps on the graph, which board papers comment are due to the methodology change, these gaps are not present in earlier or subsequent graphs.

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The Trust takes its guidance for what to include in board reports from the NQB Learning from Deaths framework, this is included in the Trust's Learning from Deaths policy[7]. Both documents focus on the collection and reporting of inpatient deaths and deaths subject to a review. Consequently, the Trust does not have guidance in its internal Learning from Deaths policy on the level of detail which should be presented to the board for the reporting of community mortality. On a wider note, regarding data in board reports, in line with NHS Digital best practice recommendations, the Trust has moved to using SPC charts in its Integrated Quality and Performance Reports. SPC is included in serious incident graphs, but not in reporting of all mortality.

Board report	Coverage	Data presented within graphs in board report	Presentation
January 2021 [1]	Monthly mortality 2018-2020	All cause mortality	SPC RAG colouring of upper and lower limits No data point markers or clear link to time on x axis
May 2021 [2]	April 2018 – February 2021	All cause mortality	SPC Colour of confidence interval and average lines changed Data points clearly link to months on x axis
September 2021 [3]	December 2019 – July 2021	All cause mortality	SPC Similar to that presented in May 2021
January 2022 [4]	December 2019 – October 2021	Split into inpatient and community reporting. No all cause presentation. Missing data in graph	SPC for community; Run chart for inpatient Data points marked but not clearly linked to corresponding months
May 2022 [5]	April 2020 – November 2021	Expected or physical cause mortality and unexpected or patient safety incident mortality	SPC Data points marked but not clearly linked to corresponding months
September 2022 [6]	Brief discussion of mortality in Quality, Patient Safety and Mortality Report within the Quality Assurance Committee report	No graphs presented	No graphs presented

1. NSFT Board of directors public meeting papers 28th January 2021
2. NSFT Board of directors public meeting papers 27th May 2021
3. NSFT Board of directors public meeting papers 23rd September 2021
4. NSFT Board of directors public meeting papers 27th January 2022
5. NSFT Board of directors public meeting papers 26th May 2022
6. NSFT Board of directors public meeting papers 27th January 2022
7. NSFT Q01 Learning from Deaths Version 04 Final Update Sept 22

Reporting (3 of 5)

Board report data accuracy

Below is a comparison of statements taken from NSFT board reports which is compared against the data sample that Grant Thornton received for the Lorenzo and Datix systems. The aim of this exercise was to understand the consistency of board report data against Lorenzo and Datix.

Within the January 2022 board papers data is presented split into inpatient and community groups [1]. From the data sample provided it is not clear how these groupings have been decided upon. For the purposes of this comparison, Grant Thornton have assumed that a death notified via the inpatient team is an inpatient death, and a death notified via the community team or via NHS Spine is a community death. We have not included the small number of deaths that were notified via Legal Services. To aid clarity within its reporting processes the Trust should clearly set out the definitions which it uses in mortality data reporting, and the sources of information which inform these.

From this comparison the following conclusions can be drawn:

- The expected and unexpected death numbers are flipped between the data sample and the board reports

- Board reports change between reporting total or community and inpatient figures. The granularity of splitting out inpatient and community deaths is useful. Switching between the two is challenging for readers to relate numbers to those previously reported.

- Board reports change between using total numbers or average numbers over a 2-year period.

Table 2 comparing unexpected and expected deaths as presented in the board reports of January and May 2022 to the data sample provided. [1,2] Areas shaded in grey represented no data available (n/a) for that field in the board paper in question.

	Jan 20 - Dec 21 (Community)		Jan 20 - Dec 21 (Inpatients)		May 20 – April 22	
	Unexpected	Expected	Unexpected	Expected	Unexpected	Expected
Board Report (total)	320	2910	n/a	n/a	n/a	n/a
Board Report (monthly average)	n/a	n/a	n/a	n/a	16	153
Data sample provided (total)	3835	383	16	30	3934	345
Data sample provided (monthly average)	160	16	0.67	1.25	164	14

Reporting (4 of 5)

Evidence of data interrogation

Whilst data is presented in board reports there is limited evidence of interrogation into the data on either a routine or areas of concern basis. Where this analysis does occur, it remains high level and lacks a detailed investigation of the data.

There were efforts during the COVID-19 pandemic to evaluate the impact of the pandemic on the Trust's mortality figures [1, 2]. In this period the Trust benchmarked its expected and actual mortality against that of the region. They reached the conclusion that 'people who were in contact with NSFT's services were disproportionately affected, compared to the whole population of Norfolk and Suffolk'. The Trust explains some of the increased impact by reference to the age of the population in the Trust's area, although there is no statistical analysis of the two. Whilst this compares data in a notably challenging period for healthcare services, there is no clear evidence as to whether the peaks in data being discussed are directly attributable to deaths from COVID-19, factors associated with the pandemic or other factors not revealed due to lack of investigation of the data.

Internal reports present data differently to board reports and whilst they contain more detailed discussion this is focused on inpatient deaths and patient safety incidents. There is limited evidence of community death themes or learning beyond the expected and unexpected death categorisation stage.

The Patient Safety Incident (PSI) annual report also contains mortality data and reporting which is again presented differently to board reports [3]. In the most recent report unexpected community deaths are pulled out as a separate graph. This graph is another example of data being presented differently across reports and the challenge to follow data through the organisation. Whilst the PSI annual report does attempt to explain the rise in special cause variation within unexpected community deaths, the factors which were identified as contributary are wide ranging and lack specificity.

'The number of unexpected deaths during this period was impacted by Covid-19 and the virus variants, there is also seasonal variation numbers being higher during the winter period. Equally the impact on physical health due to lockdown restrictions (exercise, lifestyle habits and obesity) and restricted access to physical health care is a likely factor in this increase.'

The quote is taken from the PSI annual report. Whilst the comments made may have some general and national applicability, they do not all appear to have direct relevance to the data being presented. Previous winters had seen small rises in mortality, nothing on the level of that seen in 2021. The Trust does not present any supporting evidence for their statement that the impact of lockdown restrictions on exercise, lifestyle and obesity has directly influenced their mortality data.

The Trust should be clearly evidencing, where relevant, the impact of national and local healthcare challenges on the data being presented to ensure that beyond obvious factors, such as COVID-19, it is not missing factors impacting its mortality.

Figure 4 showing all unexpected community deaths as presented in the Trust PSI annual report March 2021.[3]
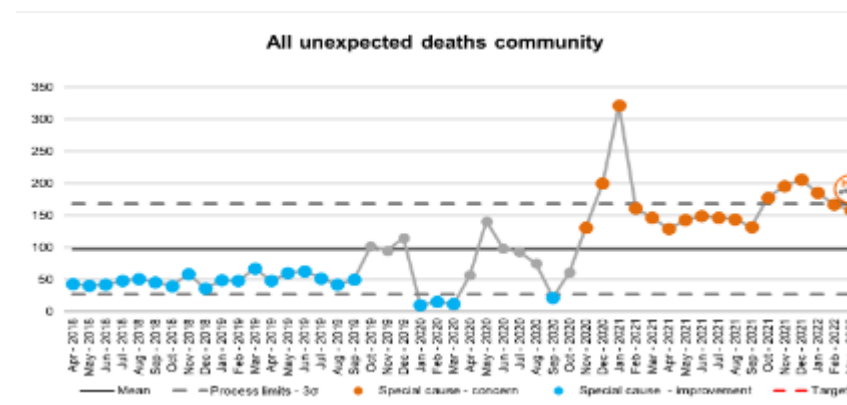
1. NSFT Board of directors public meeting papers 27th January 2022
2. NSFT Board of directors public meeting papers 26th May 2022
3. NSFT Patient safety incident annual report 1st March 2021 to 30th April 2022

Reporting (5 of 5)

Conclusion and areas for improvement

Reporting between internal and external documents is inconsistent and lacks an explanation for the repeated changes, or the impact that methodological changes, have had on the figures presented. These change makes comparing the data presented over time challenging and increases concern over the reliability of the information reported.

The information contained within board reports does not consistently align to that which is recommended within NQB guidance or Trust guidance. Reports lack evidence of interrogation of the mortality data to identify the themes within the data, which could then be used for improvements and learning.

To improve this position a standardised mortality reporting structure and presentation should be developed and adopted across the Trust. This should include trend analysis to help understand variation and drive the need for timely and accurate data.

A documented change control process should be developed to approve any changes to mortality reporting methodologies. Secondly, when this happens, comparatives should be presented to ensure reporting is consistent, can be monitored and historically tracked.

Mortality data should be clear to enable internal clinical and external public confidence in reporting. Mortality data needs to have a clear, supervised, pathway through the Trust with agreed formats of presentation.

Recommendations (mapped in detail in Action Plan at the start of this report)

Recommendation		Priority
5	Agree a standardised reporting structure for board reports, to include thematic analysis and consistent presentations of figures, axis and scales. Clearly define the Trust's methodology for mortality recording and reporting within board reports. Any changes should be clearly documented and the impact upon historically reported figures should be described to provide continuity.	High
6	Align the internal dashboard with external reporting to ensure that volumes on the internal dashboard clearly reconcile to numbers within board reports.	High
7	Work with public health and, when in post, medical examiner to identify key themes in the data and implement timely targeted interventions.	Medium
8	Use clinical input to update the cause of death groupings which are presented as part of the dashboard, and used in board reports, so that it is clear where the Trust is awaiting data (pending), or the Trust feels this data will not be accessible or will remain unknown.	High
14	Update the Trust's Learning from Death policy to ensure the Trust's governance addresses the issues in this report and explicitly references community deaths. Ensure the governance in relation to all mortality is clearly understood by clinical and corporate staff involved in the production and reporting of mortality information.	High

Clinical engagement (1 of 5)

Introduction and summary

This section focuses on the Trust's approach to clinical engagement on mortality reporting, including the approach to clinical validation and use of mortality data within the Trust. It also explores partnership working.

Within the data mortality reporting pathway there was a lack of evidence of how the collected mortality data is fed back to and used by service teams. The Trust has a good understanding of individual patients and clinical management of incidents, but more work is required to support services to maximise the use of mortality data to understand areas of interest that could support or inform how services could improve.

During the review two senior clinical leaders stated that members of the Trust's clinical staff have limited faith in their data and do not use or analyse it in a structured manner. This was reflected by other staff members we spoke with during the review who suggested a disconnect between the data production and reporting process, and its use in supporting clinical services. Moreover, there is limited evidence of the use of public health or health inequalities information to inform or supplement this data.

Clinical engagement forms part of data quality with the accuracy of information input to systems forming part of the data which is analysed in the mortality recording pathway. When clinical engagement with data is achieved this helps to improve both the quality of the data, which improves when the data is used, and subsequent improvements in patient care.

The Trust has highlighted engagement with primary care colleagues as limiting its access to death certificates which would better inform the cause of death element of the mortality pathway. The Trust attends public health and inequalities forums and undertakes work in specific areas such as suicide. To build on this, the Trust could further its engagement with public health or inequalities specialists to undertake mortality data analysis to support wider population health management. Doing so would benefit the Trust to help understand geography aligned to health inequality and allow targeted interventions.

Validation and use of data

Mortality data analysis needs to be clinically led to best understand the impact the Trust has on care provision and ensure any learning is fed back into the organisation. This needs to happen both at an organisation wide level and at a service level.

By empowering those who input data into the recording systems to use the data in practice, this will help to improve the quality of the data which is input. The Trust will need to work with services and individuals at the organisation who currently express concern about the purpose of data collection.

As well as having an organisational mortality data lead each service should have an identified lead for the mortality recording and reporting process in that area. Responsible individuals should be involved from the data entry point, working to focus on accurate, timely data entry to reporting and outcome discussion. Their knowledge of their services can help understand and inform service level data in formal outputs. These individuals should take part in the validation of mortality information and ensure feedback-loops back into services are working by tracking and reporting changes and improvement.

The need for clinical input into mortality data is shown by examination of the peak in January 2021. The most common cause of death here was '*Natural cause – specific not available'* (355), followed by 'COVID-19' (50), with the most common age profile being 65 and older (415 of 481 deaths). Examining the January 2021 raw data 'COVID-19' categorised deaths alone do not explain the spike in deaths. Table 3 below shows the number of deaths in the months pre and post January 2021. Depending on the source of death information, deaths in January 2021 increase between 111 and 203 per month from December 2020, far more than the 50 reported in January 2021. Given that the '*natural cause – specific non available*' category is used when the Trust is unable to access the death certificate there may have been deaths from COVID-19 within that category which are not reflected in the Trust's analysis.

The Trust is reliant on other providers for the cause of death in some situations and will need support from partners in helping to get a more holistic view of the causes of death of patients who are part of its mortality data.

Table 3 comparing monthly death totals from Datix, Lorenzo and the NSFT Dashboard from November 2020 to March 2021

	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021
NSFT dashboard	165	236	347	192	159
Lorenzo	224	301	419	243	200
DATIX	229	229	432	248	210

Clinical engagement (2 of 5)

As discussed earlier, board reports show limited evidence of analysis into the reasons behind this spike. Within the PSI annual report there is a brief discussion exploring the possible cause for the increased number of unexpected deaths in the community. The various explanations proposed include the impact of COVID-19, seasonal variation, the impact of physical health due to lockdown restrictions and restricted access to physical health care. There does not seem to be any analysis specific to the Trust underpinning these propositions, limiting the ease of attributing these factors to the data presented.

The Trust should look to provide statistical and data analytical support for the narrative suggestions within their reporting, to ensure they make evidence-based conclusions in their corporate reporting. Clinical input into this will help to interrogate the data and may help to combat the concern as to how data is used by involving the clinical community. These processes will need to be documented and clear to avoid causing more concern.

Caseload management

According to its own definitions NSFT should only include, within its mortality statistics, deaths of patients currently under the Trust's care (inpatient or community) or within six months of discharge.

As part of this review the Trust noted an element of its case management where records of patients who had not been seen for a number of years were still being included in Trust mortality data. The figure below shows a number of patients forming part of the Trust's mortality statistics where the patient had not been seen for over a year, and some who had not been seen for over 2 years.

Figure 5 showing the time lag between date of last seen appointment and the date of discharge

High Level - % Duration between last seen date and discharge date (Apr 19 - Sept 22)
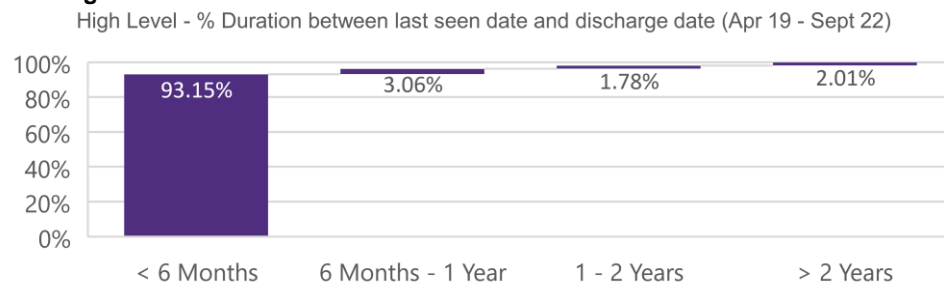
The Trust should review this cohort of patients to understand why these patients were retained on caseload, whether they required further clinical input prior to their discharge and whether there is learning that can be obtained to inform future care delivery.

If these patients have been discharged but this status not updated they will have been unnecessarily included in the Trust's mortality figures. As part of rectifying this specific issue the Trust has informed Grant Thornton it plans to undertake the required data cleansing and provide further training to team administrators regarding appropriately closing referrals and discharging patients in a timely fashion, following the completion of their clinical care. This will help ensure that the number of deaths included within the Trust's mortality reporting accurately represent the Trust's activity.

Discharges within one month

For 1,953 patients whose death is considered part of the Trust's mortality reporting, the date of death is within one month of discharge. This includes 278 patients whose date of discharge is the same day as the day they died. Of these 158 were informed via NHS Spine, 112 via community teams, and 6 through inpatients teams.

Given the number of patients who die within a month of discharge, more work is needed to understand this cohort, ensure this data is accurate and act on any learning. The Trust is currently working with GPs through Primary Care Networks to try to improve the capture of cause of death to inform this insight.

Figure 6 showing the time lag between date of discharge and date of death

Number of patients who died within 'months' of discharge date (Apr 19 - Sept 22)
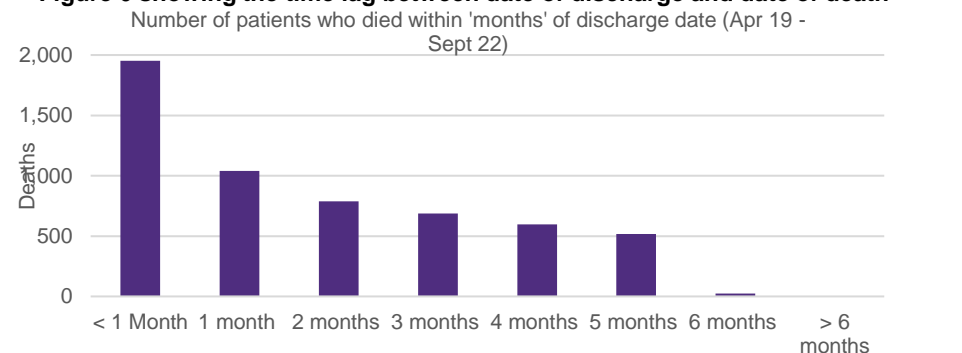
Clinical engagement (3 of 5)

A further 3261 patients, 37% of the total, had a discharge date recorded after the date of death. The majority of these were in the old age psychiatry or adult mental illness specialities, and 2699 of them were aged over 65.

There is a process question needed to ascertain why some patients are discharged on the day of death and why other records remain open for a number of days or weeks after death until they are discharged. The Trust needs to align its policy in this area and ensure staff understand and undertake their responsibilities around mortality reporting so that the data that is analysed tells the most accurate story.

Benefits of analysing by trend

Analysis of trends helps the Trust to both better understand the mortality attributed to it and, where necessary, undertake learning or changed practice. Trend analysis could be used to better inform individual services and help them to become more involved in the mortality recording process. For example, trend analysis on causes of death could help identify specific physical health causes of death, and where these are outside that expected of the local population. The Trust could use this information to target specific areas of the physical health agenda. Trend analysis will also identify variation and enable the Trust to see a deteriorating or improving pattern early, and intervene in good time if required.

Trend analysis can also be examined with regard to the accuracy and completeness of data, with the Trust being able to ascertain if there are particular services or teams that need more support to engage in the data process. The NSFT Mortality dashboard is available on the Trust intranet where it can be filtered to team level across care groups. Two senior clinical leaders suggested this information was not being accessed or used regularly by clinical staff.

Data is recorded for the registered GP practice and address of each patient. Extrapolating this information can give the broad geographical areas patients lived in. Understanding where a patient lived is important for informing detail around community deaths considered part of the Trust's mortality reporting. Geographical analysis may also help to understand areas where patients have certain physical or mental health challenges which could be targeted on a specific intervention basis.

The Trust has a Quality Improvement Plan which focuses on physical health care and includes interventions such as a smoke free programme.

Ethnicity

In January 2022 the board requested more information within its reports to ensure there was no disproportionate impact on protected characteristics. More information was requested in future reports on what was being done on the back of this information. In order to explore this properly the Trust will need to know the ethnic representations in the community it serves in order to understand any disproportionate impact.

Between April 2019 and September 2022 1868 deaths had an ethnicity recorded as 'not stated' and 1009 as 'not known', shown in detail in the appendix. Figure 7 below shows the number of patients that had an ethnicity recorded within the data provided to Grant Thornton. Without knowing ethnicities represented within the 'not stated' and 'not known' categories, the Trust will struggle to accurately understand whether or not there is a disproportionate mortality impact on certain protected characteristics.

The Trust have informed Grant Thornton that work is ongoing to improve this recording, which is being led by the Equality, Diversity and Inclusion (EDI) practitioner and ICT.

Figure 7 showing the recording of ethnicity for mortality reporting between April 2019 and September 2022
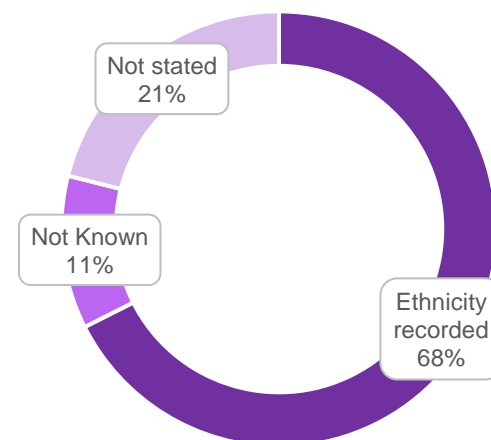
Clinical engagement (4 of 5)

Partnership working

Understanding and learning from mortality is not only the responsibility of metal health trusts, but also primary, acute and community providers involved in a patient's care. Given the well documented challenges mental health patients can have accessing physical health care, there may be system wide learning from which the Trust and its patients could benefit.

The Trust has noted the challenges it currently has in accessing information for some patients when liaising with other providers. If providers across the system can come together the benefits extend beyond learning opportunities listed below.

Learning opportunities associated with information sharing

- Death certificate sharing to better inform causes of death

- Care learning for mortality cases where care is split between providers

- Better understanding of patient journey between services

- Better understanding of provision of care between services.

The Trust attends ICB forums on Learning from Deaths and Addressing Inequalities of Health. This provides the opportunity to facilitate better joint working, sharing data and realising the potential benefits of these forums. By working together providers in the system have the opportunity to widen their understanding of the challenges patients can face, these are outlined in the table on the right.

The Trust is also part of public health suicide prevention workstreams, where they report that their data aligns, and undertake smoking cessation work alongside Public Health England (PHE).

Area	Opportunity
Physical health	• Better understand the challenges faced by mental health patients • Work together to improve physical health care access for mental health patients
Public health and inequalities	• Better understand the correlations between social inequality and health outcomes in the system • Map publicly available public health data on to geographical areas served by the Trust • Opportunity for the ICBs to enable public health experts to work across the system and providers
Service access and availability	• Align service provision to the areas it is most needed to help address inequality • Opportunity for jointly commissioned services aligned to combat the physical health challenge faced by mental health patients

Some comparator trusts undertake more work with partner organisations to link GP and public health information into their mortality methodology. These are highlighted in the box below.

Mental Health organisation best practice

- Linking into public health data and work with public health consultants to triangulate key messages
- Central team makes decision on expected/unexpected deaths
- Work with hospital library services to research and pull information to link into mortality data
- Work with organisations in the community to proactively help mental health patients access physical health care. For example, working with local GPs on mortality of patients with Serious Mental Illness (SMI).

Clinical engagement (5 of 5)

Mortality reviews

Whilst the Trust produces an annual report of Patient Safety Incidents (PSIs), more needs to be done to undertake routine structured analysis that triangulates mortality data with mortality reviews and safety incidents. The Trust's PSI guidance states that incidents which must be reviewed include 'Acts and/or omissions occurring as part of NHS funded healthcare (including in the community) that result in unexpected or avoidable death'. [1]

The Trust has outlined set criteria to determine whether a death is subject to a Structured Judgement Review (SJR).[2] This criteria includes 'all unexpected inpatient deaths attributed to natural cause and/or end of life care. A selection of community deaths where physical co-morbidity is a cause for concern'.

The Trust also considers analysis of deaths in line with the Patient Safety Incident Response Framework (PSIIF) 2022 where: bereaved families and carers, or staff, have raised a significant concern about the quality-of-care provision; particular diagnosis or treatment groups where a 'red flag' has been raised or; deaths where learning will inform the provider's existing or planned improvement work

Data from Datix was analysed to explore the number of SJRs performed over recent years. This is shown in Appendix G. Records in Datix where a review was undertaken were collated and grouped according to the type of review. In 2021, according to Datix, there were three inpatient unexpected deaths, two of these are recorded on Datix as having had an SJR. Of the 11 SJRs recorded for the same year five were for unexpected deaths and six for expected deaths. Seven SJRs were performed for inpatients, three for those informed via the community team and one informed via the NHS Spine.

Conclusion and areas for improvement

Internal and external clinical engagement is key to understanding, interrogating and using the Trust's mortality data and this is missing across the pathway as a whole.

It is only with clinical input and engagement with mortality data, and the process of its recording, that quality of data and the themes arising from it can be identified. Our analysis shows a lack of detailed investigation of peaks in mortality data. There is a lack of proactive caseload management which impacts on the number of deaths part of the Trust's mortality reporting.

Missing field completion in the data around protected characteristics and poor caseload management further limit the accuracy of conclusions which can be drawn from the available data. The Trust needs to solidify its processes around clinical engagement to move towards a more complete set of data.

Establishing closer links with partner organisations may help to improve the completeness of mortality data and help access those partners' expertise to better inform mortality. Clinical oversight and support should be provided for data captured within the reporting process. There is particular need for support around categorisation. Finally, staff should be educated around the use of mortality data. Knowledge of how data is used will help clinical engagement with the recording process.

Recommendations (mapped in detail in Action Plan at the start of this report)

Recommendation		Priority
9	Establish a process of validation and use of mortality reporting and analysis at service level, aligned to corporate reporting.	High
10	Review the process of retaining patients on caseloads, and subsequent discharge from caseloads, to ensure it results in consistent data across the services.	Low
11	Create supporting training programme for all staff who input data into systems that have an impact upon mortality data. Ensure that the implications and impacts of incorrect or incomplete data entry are understood by staff.	Medium
12	Establish links with primary care networks to explore opportunities to improve the completeness of the Trust's mortality data (including cause of death), supported and enabled by the ICB.	Medium
13	Explore opportunities for formal data sharing agreements between the Trust and primary and secondary care in the region.	Medium

1.	NSFT Q11 Patient Incident and Patient Safety Incident Investigation (PSII)
2.	NSFT Q01 Learning from Deaths Version 04 Final Update September 2022

Governance (1 of 4)

Introduction and summary

This section explores the current governance arrangements and controls over mortality data and presents the governance standard which national documentation suggests should exist.

Governance systems need to identify areas of risk and poor practice to enable timely intervention and improvement. Mortality governance should be transparent to enable assurance in the recording and reporting process. NQB guidance is clear that mortality governance processes should consider mortality rates and the results of case record reviews and investigations as part of a single governance framework.[1]

Whilst overall mortality performance is reported to the board and supporting committees there is limited scrutiny on community deaths and the underlying data. The Trust's governance over mortality focuses on serious incidents. The Trust's oversight over the end-to-end process of mortality reporting requires improvement and there are inadequate controls to ensure the data reported accurately reflects the service's understanding of their patients.

Learning from deaths guidance

The NQB Learning from Deaths guidance sets out the responsibilities expected from the board and non-executive directors, which those at the Trust will need to demonstrate [2]. These include:

- Boards must ensure robust systems are in place for recognising, reporting, reviewing or investigating deaths and learning from avoidable deaths that are contributed to by lapses in care

- Ensuring processes are robust and can withstand external scrutiny by providing challenge and support

- Being curious about the accuracy of data and understanding how it is generated, who is generating it and how they are doing this including whether the approach is consistent across the Trust, and being undertaken by sufficiently trained staff

- Ensure timely reviews/investigations.

From the Trust's current documentation it is not clear how these responsibilities are being consistently met.

Governance over mortality reporting at NSFT

The governance over mortality reporting at the Trust is complicated and straddles a number of corporate functions, in line with national requirements. The Trust's Learning from Deaths guidance lists responsibilities for different roles and teams within the organisation. These responsibilities are summarised in the table below [3] and the Trust's organisational governance diagram is included in the appendices of this document.

Role	Responsibility (from Trust's Learning from Death guidance)
Trust board	Ensuring robust systems to recognise, report and review deaths along with systems for learning from outcomes of reviews.
Non-Executive Directors	Testing the level of assurance that the Trust provides of safe and effective systems, Providing challenge when needed.
Chief executive	Holds overall responsibility for policy implementation.
Chief Medical Officer	Responsible for application of learning from deaths systems and assuring review outcomes with measurable actions.
Chief Nurse	Executive responsibility for the application of patient safety incident review system and patient safety incident framework and ensuring learning outcomes of reviews with measurable actions.
Medical Examiner (when appointed)	Seek assurance around the cause of death, the need for coroner notification and whether care before death was appropriate
Learning from Deaths Lead	Responsible for implementing the Learning from Deaths policy and ensure opportunities for learn from deaths
Safety and Mortality Committee	Assurance and understanding of mortality data; identifying trends and themes.
Patient Safety Team	Administration of the systems for Learning from Deaths and patient safety incidents.

1. NHS Improvement. Implementing the Learning from deaths framework: Key requirements for trusts boards July 2017
2. National Quality Board; National Guidance on Learning from Deaths 1st Edition March 2017
3. NSFT Q01 Learning from Deaths version 04 Final update September 2022

Governance (2 of 4)

The complexity of responsibility across the mortality recording, reporting and reviewing is demonstrated in this table. Some of the individuals spoken to as part of this process reflected challenges which suggested the documented process is not the experience on the ground, and there was a confused picture around senior ownership for overall mortality data reporting.

Based on the above table the board has responsibility for ensuring the processes for reporting are robust, and the responsibility for assurance and understanding of mortality data sits with the Safety and Mortality Committee. Mortality is also an agenda item within the Quality Committee, which is attended quarterly by ICBs quality leads.

The Trust has strong governance in its approach to inpatients – on site incidents are followed up by the team, as well as suicides where the coroner has notified the Trust. The Trust needs to bring the same rigour to improve the processes around the reporting of all mortality, and the understanding of wider community deaths for patients on their caseload.

This issue was highlighted by an external review by NHSE around Patient Safety Incidents. It was subsequently noted within the Trust that sight of mortality had been lost in the Patient Safety Review Group. This has since been renamed, in September 2022, the Safety and Mortality Committee, with an aim to split its focus between, on the one hand, patient safety incidents and, on the other hand, the impact that the Trust's care and treatment has on deaths in the community and inpatient populations. Grant Thornton has not seen minutes of subsequent meetings to measure progress against this aim[1] but understand that this group now meets with new Terms of Reference and workplans.

The consistency and completeness of mortality reporting to the board needs to be improved, alongside the quality and depth of analysis and narrative provided for community deaths. The board needs to ensure the data presented for monitoring is accurate, and that the analysis provided by the Trust gives them the tools to discharge their responsibilities in scrutiny and assurance over all mortality reporting, including community deaths. This is especially important given the seriousness of the subject matter and the level of scrutiny the Trust is under locally on this issue.

We have also highlighted the lack of evidence of structured clinical engagement with the data, and the lack of clinical ownership of the information reported. Governance processes at the Trust should ensure that information reported externally and nationally is a full and accurate reflection of the services' understanding of their patients.

To address this the Trust should update the Trust's Learning from Death policy to ensure the Trust's governance addresses the issues in this report and explicitly reference community deaths and the production of mortality data and reporting. It should also ensure the governance in relation to all mortality reporting and community mortality reporting is clearly understood by operational staff

Alongside this the Trust should introduce processes that cover gaining assurance over data processing, as well as ensuring data is validated with clinical staff. The mortality reported internally and externally should be subject to a clear process of senior-sign off.

It is recognised that national guidelines over mortality reporting for mental health trusts are not as clear and prescriptive as those in place for acute trusts, and that there are challenges for mental health trusts in producing consistent and accurate data. More robust controls and checks on the data will help to mitigate these issues and ensure there is clarity around the information reported by the Trust.

The table on the next page sets out how governance for the mortality reporting and recording pathway should be updated to address the issues outlined in this report. This brings together NQB guidance, learning from our experience of reviewing data quality across the NHS, and the issues identified during this review process.

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1. NSFT Safety and Mortality Committee September 2022, approved notes

Governance (3 of 4)

Area	Expectation
Senior oversight	• Clear board level oversight and responsibility linked to relevant subcommittee that includes a clear focus on community deaths • Single executive level oversight of end-to-end mortality reporting processes and outputs, including sign-off of submissions and reports • Clear responsibilities for senior clinical scrutiny of community deaths • Mortality lead with end-to-end mortality data process understanding to help ensure a joined-up process
Data quality and monitoring	• Established process for service level validation of data, and provision of tools to enable analysis and interrogation of data by clinical staff • Clear feedback loops for data quality issues to be identified and addressed • Quality check of inputs and outputs against source data • Full use of internal and external audit to establish the reliability of processes and the underlying patient level data to ensure data is reported accurately
Documentation	• Clear methodology made available publicly • Documentation of pathway including named responsible individuals • Audit trail for decision making steps (e.g. categorisation of expected and unexpected)
Information security	• Use of secure systems to hold and report patient identifiable information • Clearly documented information security protocols, and regular review of access • Regular information security training for all staff across the organisation

Partnership working

The Trust faces challenges with accessing data which is primarily held within primary care and other health organisations in the area. By facilitating the sharing of key mortality data the ICBs can play a role in increasing the quality of the mortality data reported by the Trust.

Work is also required to facilitate a greater degree of cross-sector analysis of mortality data. Working with public health professionals offers the opportunity to identify areas where inequalities may be playing into the mortality picture.

The Trust is part of the East of England mortality group and should look to work with organisations in this group to learn more about how mortality data is recorded at organisations with more established pathways. The ICBs can support the Trust by sharing best practice for mortality recording and data handling across the system, and where appropriate direct the Trust to engage with experts working in the system.

Alongside this, the Trust mortality leads attend the National Mortality Leads Improvement Group led by Better Tomorrow NHSE and the mortality team attend safety committees at other trusts to learn examples of best practice.

The ICB should also support the Trust to ensure appropriate plans and resources are in place within the Trust to address the improvements required in the Trust's processes, and to hold the Trust to account for the plans it sets.

Governance (4 of 4)

Conclusion and areas for improvement

The controls over mortality reporting at the Trust require improvement, and the governance and accountability needs to be clarified and reinforced. The Trust focuses its policies and scrutiny on serious incidents and inpatient mortality, and the overall governance over mortality is complex, resulting in a lack of ownership of the end-to-end reporting process.

The board needs to ensure the data presented for monitoring is accurate, and that the analysis provided by the Trust gives them the tools to discharge their responsibilities in scrutiny and assurance over all mortality reporting, including community deaths. A lack of evidence of structured clinical engagement with the data, and the lack of clinical ownership of the information reported, will also impact on the accuracy of the data recorded.

The findings of this review suggest that there is a need for assurance across patient level data. This could be done internally but an external review is suggested in order to provide independent assurance.

Recommendations (mapped in detail in Action Plan at the start of this report)

Recommendation	Priority
14 Update the Trust's Learning from Deaths policy to ensure the Trust's governance addresses the issues in this report and explicitly references community deaths. Ensure the governance in relation to all mortality is clearly understood by clinical and corporate staff involved in the production and reporting of mortality information.	High
15 Establish a clear improvement plan to address the issues identified in this report, and report progress to a board committee.	High
16 Introduce a process of assurance over mortality reporting: • Introduce a clear audit trail and series of checks to ensure adherence with SOPs, and report outcomes to executive leads on a regular basis • Introduce or commission patient level data reviews to provide assurance over the accuracy of data recording • Link to the clinical validation processes established under recommendation 9	High

Appendix

Appendix A: Mazars framework [1]

Below is a framework suggested by the Mazars report for classifying deaths. The aim of the suggested framework was to ensure deaths were considered for review with a degree of consistency. The table on the right is also taken from the Mazars report and is their broad descriptions of the suggested categories. The suggestion within their report was that a similar framework should be developed for each group of service users.
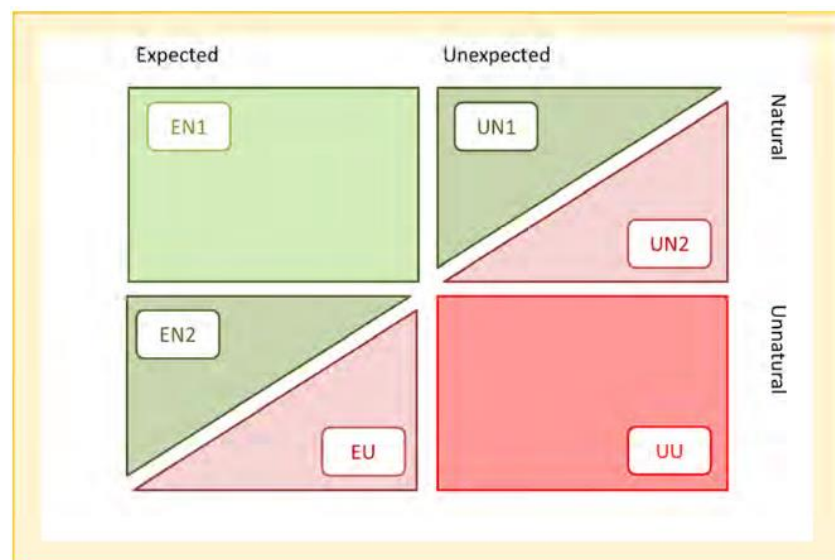
Type	Description
Expected Natural (EN1)	A group of deaths that were expected to occur in an expected time frame. E.g. people with terminal illness or in palliative care services. These deaths would not be investigated but could be included in a mortality review of early deaths amongst service users.
Expected Natural (EN2)	A group of deaths that were expected but were not expected to happen in that timeframe. E.g. someone with cancer but who dies much earlier than anticipated These deaths should be reviewed and in some cases would benefit from further investigation
Expected Unnatural (EU)	A group of deaths that are expected but not from the cause expected or timescale E.g. some people on drugs or dependent on alcohol or with an eating disorder These deaths should be investigated.
Unexpected Natural (UN1	Unexpected deaths which are from a natural cause e.g. a sudden cardiac condition or stroke These deaths should be reviewed and some may need an investigation.
Unexpected Natural (UN2)	Unexpected deaths which are from a natural cause but which didn't need to be e.g. some alcohol dependency and where there may have been care concerns These deaths should all be reviewed and a proportion will need to be investigated
Unexpected Unnatural (UU)	Unexpected deaths which are from unnatural causes e.g. suicide, homicide, abuse or neglect These deaths are likely to need investigating

1.   National Guidance on Learning from Deaths; A Framework for NHS Trusts and NHS Foundations for identifying, reporting, investigating and Learning from Deaths in Care

Appendix B: Local definitions of expected and unexpected deaths

The table below outlines the different approaches between NSFT and peer organisations around classifying expected and unexpected death in reporting.

Organisation	Expected death definition	Unexpected death definition
NSFT	'if it was caused by a pre-existing life-limiting condition or if the person's age and frailty made death from a natural cause a reasonable expectation at the time of their death'. [1]	'The death of a service user who has NOT been identified as critically ill or death is NOT expected by the clinical team. If there is no known diagnosis of terminal illness or physical health complication meaning that the service user is deemed as approaching end of life or receiving palliative care. Where data or cause of death is unavailable this is defined as unexpected'. [2]
Mental Health Trust in the East of England	The following subcategories are used for expected death: • Expected unnatural death – (EU) Expected but not from the cause Expected or timescale. e.g. some people who misuse drugs, are dependant on alcohol or with An existing disorder. • Expected natural death – (EN1) Expected to occur in An Expected time frame e.g. people with terminal illness or within palliative care services. • Expected natural death – (EN2) –was not Expected to happen in the timeframe. e.g. someone with cancer or liver cirrhosis who dies earlier than anticipated.	The following subcategories are used for unexpected death: • Unexpected unnatural death (UU) An Unexpected death from unnatural causes e.g. suicide, homicide, abuse, neglect. • Unexpected natural death (UN1) from a natural cause e.g. a sudden cardiac condition or stroke. • Unexpected natural death – (UN2) from a natural cause but didn't need to be e.g. alcohol dependence and where there were may have been care concerns.
Mental Health Trust in the South of England	Where a patient's demise is anticipated in the near future and his/her Doctor (GP or consultant) has seen the patient within the last 14 days before the death (for the condition that they died from). Further break down their deaths into the expected subcategories EN1, EN2 and EU	All other deaths that do not fit the criteria for expected Further break down their deaths into the unexpected subcategories UN1, UN2 and UU
Mental Health Trust in the North of England	Any death occurring at a stage in the patients' disease pathway at which death is inevitable and no active intervention to prolong life is planned or on-going.	Any death which has not been expected.

1. NSFT Mortality and Learning from Deaths Report, Jan 2022
2. NSFT Unexpected and Sudden Deaths (in-patient areas only' policy, ref no. Q11a, version 06.1

Appendix C: Local definitions of deaths to be included within mortality reporting

The table below outlines the different approaches between NSFT and peer organisations around deaths to be included within a Trust's mortality reporting which will be included in mortality reporting figures and may be subject to other mortality processes for example, structured judgement review (SJR).

Organisation	Attributable time
NSFT	Deaths within six months of the last contact with NSFT
Mental Health Trust in the East of England	Within their learning policy the Trust list out a number of categories which are listed below. • All child and infant deaths • All deaths of patient with an open/active referral • All deaths from suicide where the patient was discharged within the preceding 12 months • Deaths resulting from suspected self-harm or suicide post assessment by RAID Teams within the preceding 6 months (unless the patient had been referred into another Trust service, then use 12 months post discharge from the referred team • All inpatient deaths • Deaths of inpatients discharged in the preceding 30 days • Patients who die following transfer to an acute/general hospital • All learning disability deaths within 12 months of last contact including palliative care patients
Mental Health Trust in the North of England	Deaths up to six months after discharge
Mental Health Trust in the South of England	All deaths of people under the care of the Trust or discharged within the preceding 6 months
Mental Health Trust in the South of England	Within their learning policy the Trust list out a number of categories which are listed below. • Majority of unexpected deaths of service users/patients currently under the care of Oxford Health NHSFT or who have received a clinical interaction within the last six months. This should include unexpected unnatural and unexpected natural (UN2) • Those services which provide a 'single contact' such as street triage services/GP OOH will only need to enter such deaths if the care provided was the last care prior to death or if concerns were identified in the initial screening • All learning disability deaths • All inpatient mental health deaths • Expected deaths where any care concerns or areas for learning were identified by the clinical team • All patient who are detained
Mental Health Trust in the South of England	Deaths of patients up to six months post discharge are reportable (with the exception of those with Learning Disability, which is 12 months)
Mental Health Trust in the Midlands	All deaths of service users expected and unexpected who currently receive care from BSMHFT services including HMP Birmingham, are to be reported. Additionally deaths of patients up to six months post discharge are also reportable

Appendix D: Stakeholder engagement list

Individuals with the following roles from the Trust and external organisations were met with on at least one occasion as part of this review. Alongside this Grant Thornton also observed a session between the ICB and a local patient representative group in order to understand the wider public concerns around mortality reporting at the Trust.

Position
CCIO NSFT
Medical director for quality NSFT
Consultant Forensic Psychiatrist/Caldicott Guardian NSFT
Director for nursing for CFYP and NSFT patient safety specialist NSFT
Patient Safety Officer (Mortality) NSFT
Mortality DATIX processor NSFT
DATIX Data Manager NSFT
Chief Digital Officer NSFT
Information Governance Officer NSFT

Position
Information assurance manager NSFT
Information rights manager NSFT
BI manager NSFT
Data Protection Officer NSFT
Director of performance, transformation and strategy Norfolk and Waveney Integrated Care Board
Medical Director Suffolk and North East Essex Integrated care Board

Appendix E: Document review list

Document name
NSFT Quality Account 2020-2021
NSFT Quality Account 2021-2022
Discharge from Trust Services
NSFT 72 Hour Follow Up Standard Guideline
QO1 Learning From Deaths Version 4 FINAL update Sept 2022
ACCESS standard operating procedure
NRLS Organised data workbook period April 20 to March 21
Patient Safety Incidents and Patient Safety Incident Investigation (PSII) (Q11)
PSI annual report 21 22 v3
Unexpected and Sudden Deaths (Q11a)
Board Assurance Framework September 2022
Guidance to Governance Reporting and Accountability Framework December 2021 v5
NSFT Governance Architecture October 2021
NSFT Risk Management Framework v2.2 Nov 2021
Risk Management Strategy on a Page June 202
Risk policy v5.5 Dec 2021
East and west Suffolk QPM Report October 2022
GYAQ QPM Report October 2022
N&W CFYP Core QPPM Report October 2022
NN&N QPM Report October 2022

Document name
Minutes QAC 16th August 2022 - unconfirmed
Minutes QAC 20th July - unconfirmed
Confirmed Audit Risk Committee minutes 17th May 2022
Audit Risk Committee minutes 8th July 2022 unconfirmed
Mortality and learning from deaths BoD 23rd September 2021 Final
Mortality and learning from deaths – BoD 27th January 2022 Final
Mortality and learning from deaths report – BoD 27th May 2021
Mortality Report – BoD 28th January 2021
Mortality Report BoD 21st May 2020
Mortality Review and Learning from Deaths Reports BoD 23rd January 202
Mortality Report BoD September 2020
Norfolk and Suffolk scope document Nov 2022 v1.2
Secure services QPM Report October 2022
Wellbeing QPM report October 2022
WSN QPM report October 2022
Approved July PSRG notes 22
Approved September notes for SM

Appendix F: Board paper comparison graphs

Figure 9 showing Monthly Reported Mortality from 2018-2020 as reported in January 2021 papers. [1]
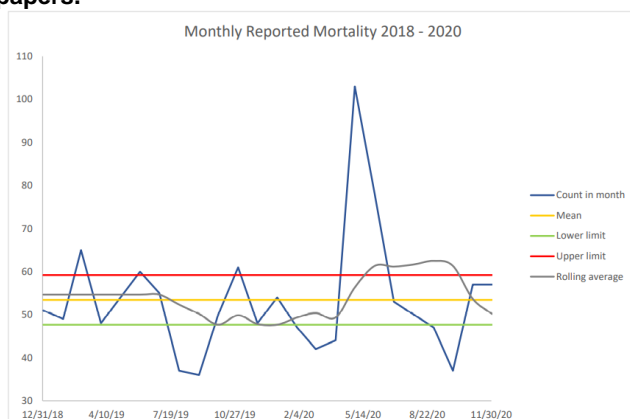
Figure 10 showing all cause mortality over three years of the total number of people who have been in contact with NSFT's services as reported in May 2021 papers. [2]
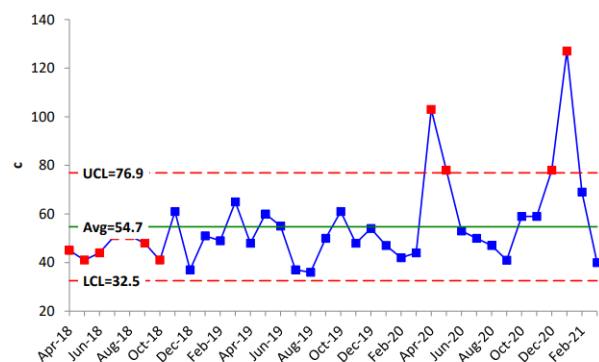
Figure 11 showing all cause mortality from December 2019 to July 2021 as reported in September 2021 papers. [3]
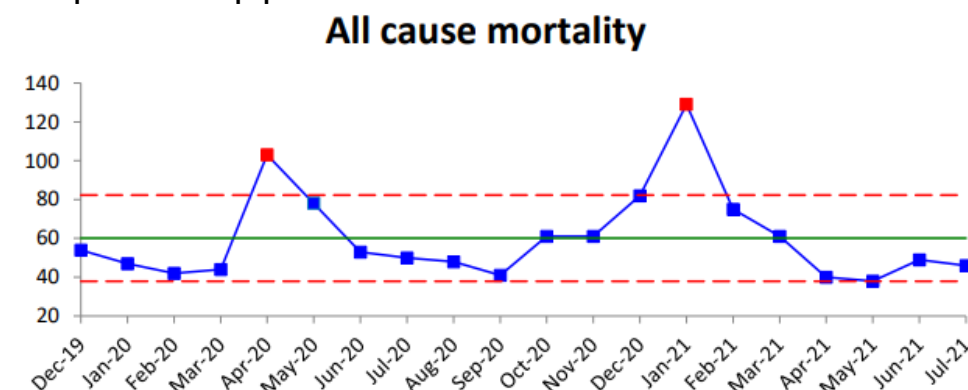
Figure 12 showing an SPC chart of community deaths within six months of contact NSFT from December 2019 as reported in January 2022 papers. [4]

1. NSFT Board of directors public meeting papers 28th January 2021
2. NSFT Board of directors public meeting papers 27th May 2021
3. NSFT Board of directors public meeting papers 23rd September 2021
4. NSFT Board of directors public meeting papers 27th January 2022
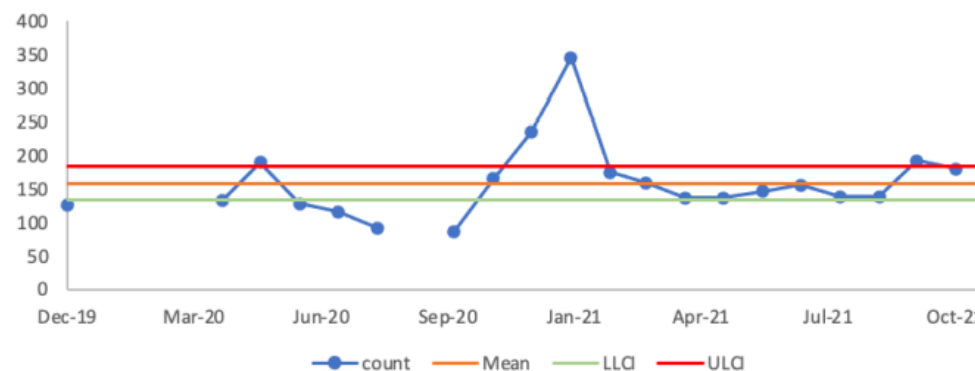
Appendix G: Reference graphs (1 of 4)

Unexpected v expected deaths

Figure 13 comparing unexpected and expected deaths from April 2019-Oct 2022

Lorenzo vs Datix - Expected & Unexpected Deaths (Apr 19 - Oct 22)
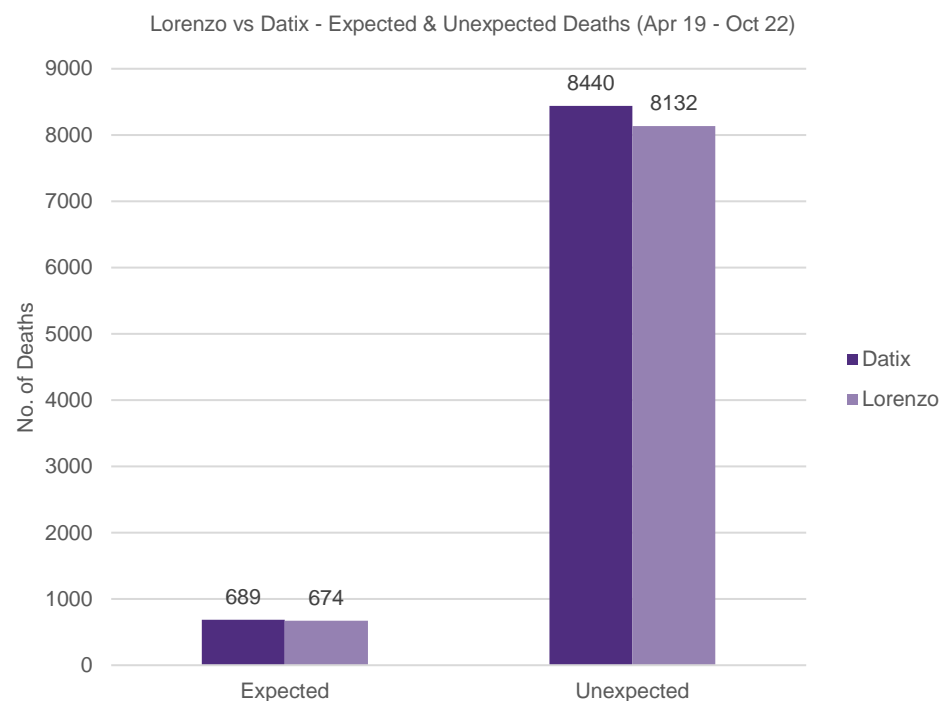
Appendix G: Reference graphs (2 of 4)

Ethnicity

Figure 14 displaying the number of deaths for ethnicity classifications excluding white ethnicity from April 2019-Oct 2022

Lorenzo vs Datix - Deaths by Ethnicity & Age (Apr 19 - Oct 22)
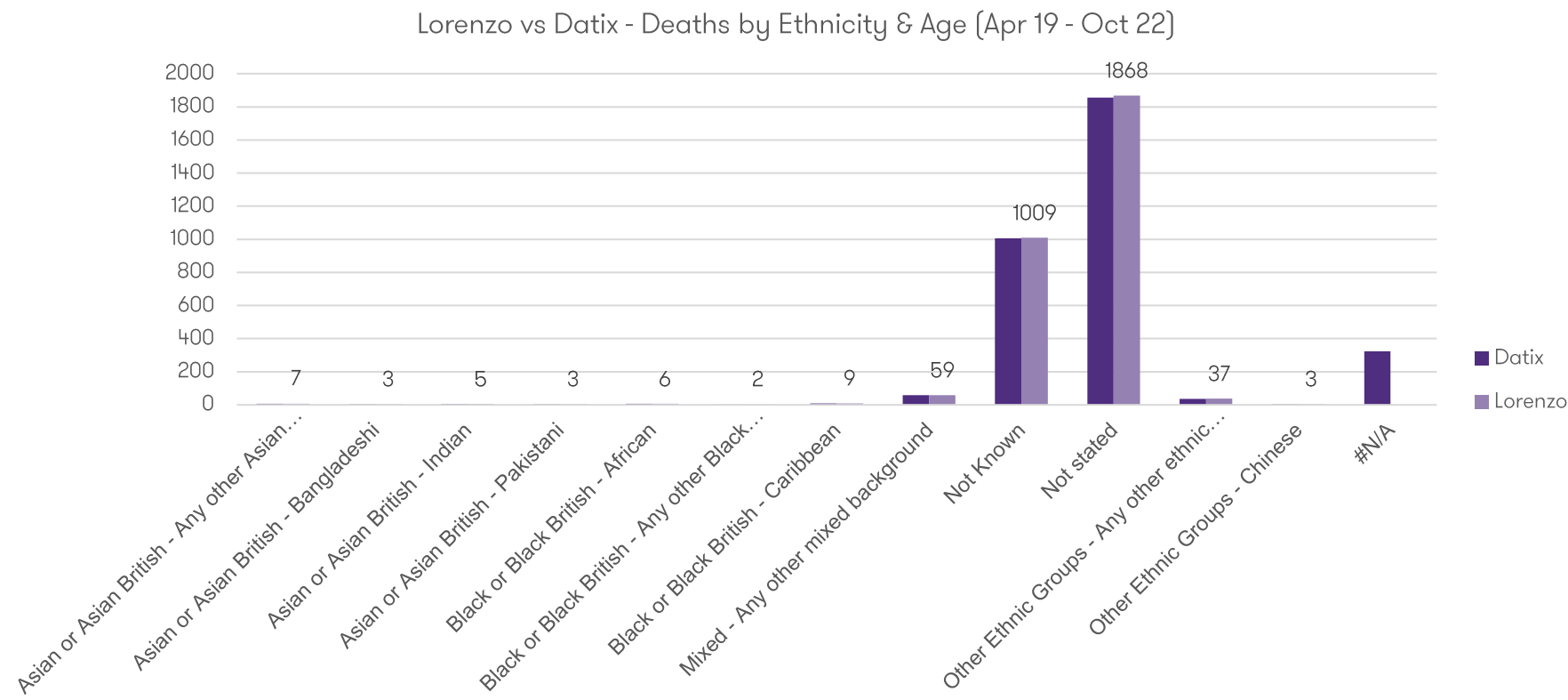
Appendix G: Reference graphs (3 of 4)

Structured judgement reviews

Figure 15 showing the number of structured judgement reviews performed each year from 2019 to 2022.

Structured Judgement Review (Apr 19 - Oct 22)
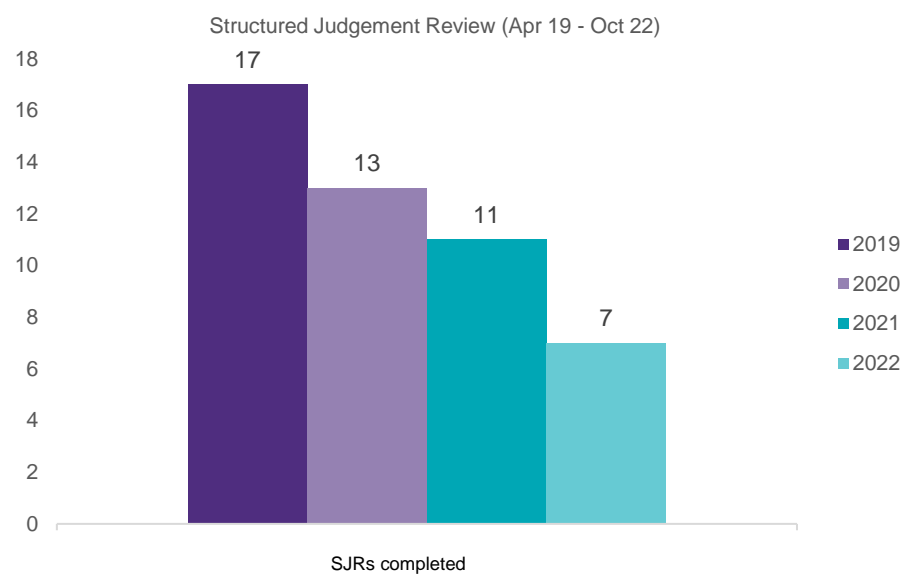
Appendix G: Reference graphs (4 of 4)

Missing data (Null fields)

Figure 16 showing the number of missing fields in Lorenzo data over the years analysed. Of note, 2022 data was not a complete 12 months. The table on the left shows the fields which were included as part of this analysis.

Number of NULL entries in Lorenzo Data across 2019 - 2022
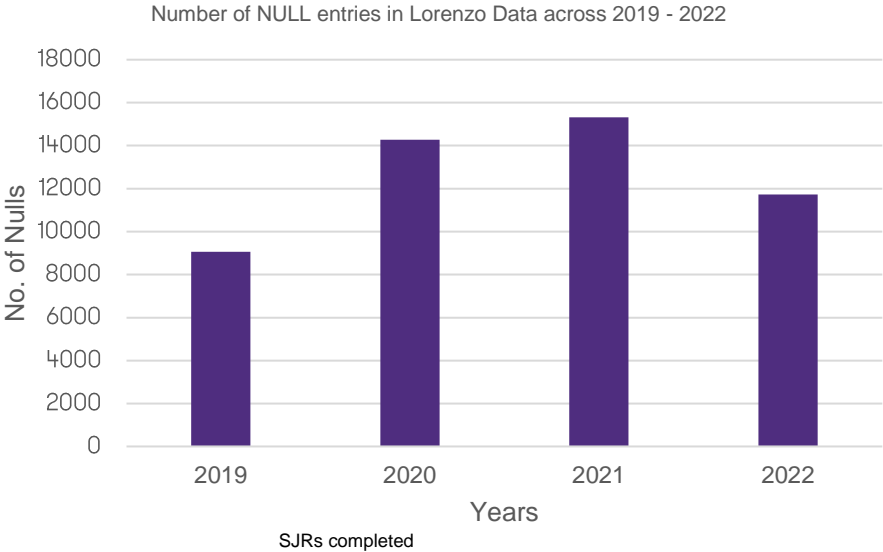
NULL Data Fields
Inpatient Discharge Date
Local Specialty 1
Local Specialty 2
Site 1
Site 2
Discharge destination
Date of lastseen appointment
Ward name
Team name
Referral closure or rejection reason
Local Authority/ Locality
Registered GP Practice

Appendix H: Data request

The following data was requested from DATIX

•Pseudonymised patient ID

•Age

•Date of death

•How was death identified

•Incident date

•Incident severity

•Unexpected/expected view

•Cause of death

•Discharge date

•DATIX rejection

•Learning disability review

•Under 18 child death review

•Service level investigation

•Serious incident

•Structured judgement review

•Other review

•Local authority/locality

•Registered GP practice

The following data was requested from Lorenzo

•Pseudonymised patient ID

•Age

•Gender (MSHDS)

•Ethnicity (MSHSDS)

•Date of death

•Date of recording of death

•Death cause recorded text

•How death was identifies

•Inpatient discharge date

•Local speciality

•Ward name

•Site

•Discharge destination

•Team name

•Date of last seen appointment

•Date of last DNA appointment

•Discharge date

•Referral closure of rejection reason

•Local authority/locality

•Registered GP practice

•Dementia flag

•Long term condition flag

•On end of life/palliative care pathway

Appendix I: Learning from deaths pathway

Appendix J: NSFT governance architecture

NSFT Governance Architecture
December 2022 V13

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