A National Retrospective Case Record Review Function

Specification development exercise

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Contents

GLOSSARY OF TERMS

Case Study Interviews (CSIs): NCEPOD conducted a series of interviews with individuals involved in RCRR at Trust level and individuals involved in similar initiatives in other fields (see Methodology and Appendix 2 for further information).

Component: An element (necessary or optional) making up the design of a programme in which RCRRs takes place at Trusts.

Consultation group meeting (CGM):NCEPOD held an all day meeting where a number of individuals and professional representatives of those involved in RCRR at Trust level were asked to give feedback on possible NRCRRF components (see Methodology and Appendix 1 for further information).

Data points: An element of a RCRR proforma including both specific information and free text/narrative entries.

Expert panel: A group of individuals from different roles all experienced in the use of RCRR and quality improvement work at Trust level.

National Retrospective Case Record Review Function (NRCRRF): The proposal for a nationally implemented and/or guided approach for conducting RCRRs at Acute and Specialist Trusts in England. The extent to which this activity will be directed and organised by NHSE and whether activity will be mandated or recommended is too be determined.

Primary reviewer: Individuals undertaking the detailed review of a case using a proforma (without the input and/or support of other members of the healthcare team), in practice normally a senior doctor or senior nurse. This would not include a screening reviewer (reviewing a care record in a more limited way than would be undertaken for a full RCRR).

Processes: The process within which a RCRR is conducted including but not limited to who conducts the review, what training they receive, how the cases are selected and the required governance steps expected to be undertaken in addition to conducting the review.

Proforma: The document (paper or electronic) used to support a detailed RCRR by prompting the reviewer to ascertain particular information of varying detail depending on the proforma.

Qualitative and Quantitative Analysis (QQA): NCEPOD undertook a qualitative and quantitative analysis of existing RCRR proformas provided by Trusts (see Methodology and Appendix 3 for further information).

Retrospective care record review (RCRR): The process of retrospectively reviewing the care of a patient through an analysis of the contents of their care record, usually supported through the completion of a proforma. Within the context of this work these individuals have died but this would not necessarily be the case when conducting a RCRR.

Specialty processes/programmes: RCRR activity taking place under the management of a specialty (e.g. oncology, maternity, surgery, acute medicine) considering cases only from within that specialty.

Trust wide processes/programmes: RCRR activity taking place under the management of the Trust as a whole considering cases from across different specialties and usually led by a staff member working as supra-specialty level (e.g. Associate Medical Director, Medical Director).

Wider consultation: Giving the opportunity for all the wider audience of those involved in the delivery or management of RCRR (now or in the future) to comment on proposals for any potential NRCRRF.

Wider team: Members of the healthcare team from a variety of different professional backgrounds and levels of seniority that will feed into the retrospective care record review process usually through discussion at a meeting.

BACKGROUND

In 'An Organisation with Memory', a working group led by the then Chief Medical Officer Sir Liam Donaldson in 2000 found that

"The NHS has no reliable way of identifying serious lapses of standards of care, analysing them systematically, learning from them and introducing change which sticks so as to prevent similar events from recurring."[1]

The recommendations of that report led to the creation of the National Reporting and Learning System which had within its functions a programme of allowing clinical staff to report adverse incidents or near misses as an attempt to capture, measure and learn from these events.

Interest in measuring the burden of harm done to users of NHS services has continued unabated since the publication of that report, with a distinct interest in measuring preventable[2] death. In particular, the media interest that resulted from the uncovering of poor care standards at Mid Staffordshire NHS Foundation Trust regularly referred to up to 1200 patients having died as a result of poor care.

This figure of 1200 deaths was drawn from Standardised Hospital Mortality Ratios. It is beyond the remit of this report to consider the efficacy of this measure or any related measures (such as the Summary Hospital Level Mortality Indicator) beyond highlighting that their use remains controversial with questions regularly raised by commentators and academics about their validity.

In light of these criticisms, there is a demand for alternative methods of measuring the burden of harm and preventable death in particular. Retrospective Case Record Review *'compares favourably with other approaches, particularly when used to measure serious harm and preventable death'*.[3]

Summarising the common approach in research studies Woloshynowych et al (2003) describe Retrospective Case Record Review as the following:

"Retrospective case record review studies are carried out in two stages. First…medical records are screened according to…predefined criteria (for example, unexpected death, hospital acquired infection/sepsis, unplanned return to the operating theatre) to identify records of patients more likely to have suffered an adverse event. Records meeting one or more of the screening criteria are forwarded for clinical review …In this second stage trained clinicians examine each case record in

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[1] An Organisation with Memory (2000) Department of Health, 1.12
[2] Also described as avoidable, unnecessary or excess deaths
[3] PRISM (2014) Hogan et al. Pg 78

detail to determine whether or not an adverse event has occurred and to extract information about the nature and causes of adverse events."[4]

Published in 2014, the Preventable Incidents, Survival and Mortality Study 1 (PRISM 1) study reviewed the care of 1000 adult deaths across 10 acute Trusts, with trained, retired doctors acting as reviewers using a standard form. They were asked to determine problems in care contributing to death and to consider the extent to which this was avoidable. This study concluded that 5.4% of deaths were preventable, equating to over 11,000 deaths per year in hospitals in England.

The Clinical outcome Review Programmes (formerly known as confidential enquiries), the National Confidential Enquiry into Patient Outcomes and Death (NCEPOD), the Confidential Inquiry into Suicides and Homicides (CISH) and MBRRACE-UK have an established programme of RCRR. Since its inception NCEPOD has moved from reviewing the care of surgical patients only and now undertakes RCRR of all conditions and procedures in all specialties and looks at morbidity rather than just mortality. There are others examples of the use of RCRR for measuring the quality of care provided in the NHS including the National Review of Asthma Deaths, published in 2013 by the Royal College of Physicians of London.

Measures of preventable death in NHS hospitals in England became a focus of media and public interest again when the Prime Minister and Secretary of State for Health asked NHS England Medical Director Sir Bruce Keogh to conduct *"a review into the quality of care and treatment provided by hospital trusts with persistently high mortality rates."*[5]

In his report, Sir Bruce recommended the commission of a study

"into the relationship between 'excess mortality rates' and actual 'avoidable deaths'. This will involve conducting retrospective case note reviews on a substantial random sample of in-hospital deaths from trusts with lower than expected, as expected and higher than expected mortality rates."[6]

The aim was to

"pave the way for the introduction of a new national indicator on avoidable deaths in hospitals, measured through the introduction of systematic and externally audited case note reviews. This will put our NHS ahead of other health systems in the world in understanding the causes of and reducing avoidable deaths." [7]

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[4] Case record review of adverse events: a new approach (2003) Woloshynowych, Vincent & Neal, Qual Saf Health Care 2003;12:411–415

[5] Review into the quality of care and treatment provided by 14 hospital trusts in England: overview report (2013) Keogh. Department of Health. Page 3.

[6] Ibid Page 7

[7] Ibid Page 7

This ambition has been represented in the most recent iterations of the NHS Outcomes Framework as a development indicator to measure *"Deaths attributable to problems in healthcare".* [8]

As a result, the PRISM 2 study was commissioned. This extended the review to 24 more acute NHS Trusts reviewing 100 deaths per site from a random sample from 4 Hospital Standardised Mortality Ratio strata. The aim was to explore the relationship between HSMR and avoidable mortality.

In addition, NHS England commissioned NCEPOD to undertake an organisational survey to determine what was already being done in terms of RCRR at hospitals in England. The scoping exercise demonstrated demand for a standardised proforma for undertaking RCRR and concluded that *"standardisation of case note review would be beneficial."*[9] But the study also identified

"That there are many different approaches to how mortality reviews are conducted, insofar as who attends, how frequently they are undertaken and how cases are selected and scored; and this can vary within a Trust."[10]

Taking into consideration these findings and the continued ambition for introducing a national measure, at the request of NHSE, the Healthcare Quality Improvement Partnerships (HQIP) commissioned NCEPOD to undertake a specification development exercise resulting in a guidance document for hospitals to improve the standardisation of, and learning from, case note review. The resultant report was also to encompass an options appraisal to inform any future commissioning and procurement of a National Retrospective Case Record Review function (NRCRRF) for hospital deaths.

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[8] The NHS Outcomes Framework 15/16 uses this terminology. Earlier iterations described it as "Hospital deaths attributable to problems in care."

[9] Indicator 5c Mortality Survey Undertaken by NCEPOD on behalf of NHS England (2014) Smith et al, NCEPOD, Pg 18

[10] Ibid, Pg 1

INTRODUCTION

When considering whether or not any proposed NRCRRF was likely to be considered a success, what 'success' would be defined as is complex.

The key point to note in this regard is the difference between the use of RCRR in academia or for making national assessments of care quality or the use of RCRR to asses care quality at a healthcare provider organisation, on an ongoing basis, as just one element of its day to day work. There are very different practical challenges and numerous potential interactions for the latter scenario that are absent in the former two.

It is beyond the scope of this project to exhaustively identify and test a definition of success, but NCEPOD proposes the following objectives to assist in considering what success would look like from the point of view of healthcare provider organisations and individuals working within them. Mortality reviews should:

1. Identify ways in which the quality of care provided by individuals and the organisation could be improved and engaging individuals within the organisation positively in the process of doing that
2. Proportionately and accurately measure any gap between what organisations and individuals would consider a good standard of care and the quality of care that is in fact delivered
3. Be conducted in such a way as to not create negative incentives for individuals within the organisation in terms of altering how they deliver care and how they conduct the reviews
4. Be conducted in such a way as to make use of a proportionate amount of the resources of the organisation in comparison to the resultant improvements in quality that will be achieved
5. Be conducted in line with the NHS principles of openness and transparency
6. Be implemented primarily as a quality improvement initiative but including provision for protecting patients and staff from any immediate risks of harm identified.

Later in this report the evidence base (or more accurately the lack of an evidence base) for helping decide what a NRCRRF should consist of will be described. It was in discussion about the ability of any approach to achieve the above objectives that the lack of existing evidence became apparent.

This presents particular challenges for all those involved in this field of work outside of academia and has impacted significantly on the findings of this report and proposals for implementation approaches. Nevertheless, this is a challenge faced by most if not all quality improvement initiatives. So we must seek to view success within this context.

PROGRAMME OF WORK

NCEPOD was commissioned to undertake a specification development exercise resulting in a guidance document for hospitals to improve the standardisation of, and learning from, case note review. The resultant report was also to encompass an options appraisal to inform any future commissioning and procurement of a National Retrospective Case Record Review function (NRCRRF) for hospital deaths.

The requirements were to:

1. Undertake and deliver the project in a 4 month timescale

2. Produce and submit for review a project plan and Gantt chart

3. Consult with RCRR pathfinders and other relevant stakeholders to include but not limited to;
    - Yorkshire and Humber Academic Health Science Network
    - Birmingham Children's Hospital NHS Foundation Trust
    - London School of Hygiene and Tropical Medicine
    - Organisations representing advocates for people harmed by care e.g. AvMA
    - Contacts identified through the Indicator 5c Mortality Survey undertaken by NCEPOD on behalf of NHS England.
    - NHS England Domain Leads

4. Ensure key interdependencies to this work programme were identified and accounted for

5. Develop the requirements relating to three key work streams which would form part of the final specification

6. Production of proposed costings relating to each of the three work streams.

7. Identify potential issues and risks relating to the delivery of each work stream.

The three work streams of any NRCRR were identified as follows with the components included outlined underneath

a. Training curriculum requirements for local Trusts
Including;
- Provide an outline of the key elements of a training curriculum that will support the education of clinicians and allied health professionals across Trusts in case note review methodology
- Ensure use of robust methodology based on best evidence that will help stimulate improvement in patient safety
- Include multiple delivery options (e.g. web-based eLearning, train the trainer, and instructor-led)

- Ensure a process for soliciting and learning from trainee feedback.

b. Operational delivery plan requirements for roll out of National Case Note Review function to Trusts

Including;

1. How participation by multidisciplinary staff in all NHS Trusts in England can be ensured
2. A single point of contact for all Trusts
3. How to maximise use of existing Trust training sessions
4. How to make best use of the existing cohort of RCRR assessors
5. The implementation of a pilot phase with ongoing evaluation
6. Consider how technology could support a national programme of learning from mortality reviews.

c. Ongoing support requirements to Trusts

Including;

- Post-training support and training
- Formative evaluation of local use/impact, patient/public perception approximately one year post-rollout

In addition, we were asked to consider and addressed how the NRCRR work programme would link effectively and support any other national mortality review work undertaken by DH/NHSE or other partner organisations such as the AoMRC.

REPORT STRUCTURE

The report begins with:

- A summary of the evidence sources used to produce the report.

- Presentation of the key findings and conclusions drawn from the report as a whole.

- Presentation of the options that would constitute the specification of a NRCRRF to include all the elements of the 3 work streams outlined in the previous section[11].

Whilst inclusive of these three work streams, in developing this report, it was helpful to consider developing and launching a possible NRCRRF as requiring the completion of the following more specific work streams through which the options are presented in the report:

DETERMINING THE CONTENT OF A NRCRRF

1. Deciding on the process and proforma to be recommended for implementation

2. Piloting

3. Incorporating feedback from the pilot

SUPPORTING IMPLEMENTATION OF A NRCRRF

4. Conducting a programme of training for individuals implementing a NRCRRF

5. Provision of a website to provide access to supporting materials and documents for the programme

6. Provision of a central database supporting the programme (non mandatory)

7. Implementation support

EVALUATION

8. Trust focused evaluation

9. Patient/public focused evaluation

For each of the above 9 sections a summary of the relevant findings of the evidence collected will be presented along with options for delivering the tasks. We also highlight the preferred option for delivery when considering all the factors including affordability, feasibility and outcome.

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[11] Training curriculum requirements for local Trusts, Operational delivery plan requirements for roll out of National Case Note Review function to Trusts, Ongoing support requirements to Trusts.

These sections are then followed by a timeline and costings for completion of the above tasks and a section containing a number of additional considerations including how any NRCRRF might link with any other national RCRR work, information on the approach used by NHS Wales, and the scope for involvement for Medical Examiners and the existing cohort of RCRRs.

Finally, as appendices are the primary evidence sources collected to support this report presented in order of their direct relevance to the discussion and main findings of the body of the report.

EVIDENCE SOURCES

A number of evidence gathering exercises were undertaken to enable production of this report.

Firstly, a literature review was conducted to identify key milestones in the development of RCRR both nationally and internationally. This included reviewing the findings of the aforementioned scoping exercise of current RCRR activity NCEPOD conducted on behalf of NHS England. This report is included as Appendix 4.

Secondly, a series of structured interviews were conducted across two distinct groups. One group was staff members from NHS Trusts undertaking RCRR work to develop our understanding of how these functions are operating in practice at the moment. The second group were key stakeholders in the field but outside of individual NHS Trusts e.g. Royal College/academic representatives. This source of evidence will be referred to as the case study interviews (CSIs) and is included as Appendix 2.

Thirdly, a quantitative and qualitative analysis was undertaken on a sample of 38 non specialty RCRR proformas in use at NHS Trusts to better understand what data are being collected and how. This source of evidence will be referred to as the quantitative and qualitative analysis (QQA) and is included as Appendix 3.

Fourthly, the findings of the first three parts of the work were used to develop a set of different components for different approaches being used in RCRR, which was described as the 'components paper'. A group of over 30 staff involved in leading and developing RCRR at Trust level were then brought together at a one-day meeting to provide their views on the relative strengths and weaknesses of these different approaches. Attendees were mostly Consultant physicians, often Associate/Deputy Medical Directors, as well as Medical Directors, mortality programme leads and registrars and representatives of the Royal College of Surgeons, the Royal College of Physicians, the Royal College of Anaesthetists and the Royal College of Emergency Medicine. Clinical Governance staff and a small number of allied healthcare professionals were also in attendance. This source of evidence will be referred to as the consultation group meeting (CGM) and is included as Appendix 1.

1. KEY FINDINGS & CONCLUSIONS

KEY FINDINGS

1. Appendices 1-4 provide the full findings of the evidence sources collected and used to inform the completion of this report. There are references to relevant findings in the sections that follow, considering different elements of developing and implementing a NRCRRF. However, below are the key findings that should be considered by those commissioning a NRCRRF.

2. **Key Finding 1:** There is no single consistently implemented proforma or process for conducting RCRR, with enormous variation in approaches across all the different elements constituting a RCRR programme.

3. **Key Finding 2:** There is demand for national guidance and support to implement RCRR programmes from individuals currently involved in RCRR and quality improvement work.

4. **Key Finding 3:** Whilst there is demand for national guidance and support to implement RCRR, there is also significant disagreement about what most (but not all) components of any such recommended approach should be. This is not just lack of consensus, but strong disagreement about what should be recommended.

5. **Key Finding 4:** There is no evidence base to support any one particular processes or proforma(s) being best practice or more effective for a care provider organisation running its own RCRR programme. In particular, there is no evidence base to support a methodology for individual care provider organisations to use RCRR to determine a reliable figure for preventable death rates.

6. **Key finding 5:** The greatest degree of consensus was for recommending a multi-faceted approach to running RCRR that includes most of the different components for what could constitute a programme, deploying different elements in different settings, resulting in a comprehensive whole.

7. **Key Finding 6:** There was not support for either local or national collection or publication of a figure of preventable death rates at Trust level determined through locally implemented RCRRs. This was primarily because of near universal agreement with Key Finding 4 that there was no evidence this could be done in a statistically valid way.

8. **Key Finding 7:** Even if it was proved to be possible for a robust preventable death rate to be calculated through internal RCRR programmes, it was made very clear that this would not be welcomed by the professions due to the risk of adverse impact on RCRR programmes acting as positive contributors to improvement and learning. If the use of a RCRR programme was to be used to calculate or be measured against a national 'death rate' then it would be seen as a performance management target and a focus of negative publicity. This view was that of the majority and expressed very strongly at all stages of this scoping work.

CONCLUSIONS

9. Later sections of the report present various options for developing and implementing NRCRRF but in considering the above Key Findings and NCEPOD's own experience of conducting quality improvement activity the following key conclusions have been identified.

10. **Key conclusion 1:** Though there is support in principle for a NRCRRF in some form, in light of the lack of widespread agreement of what constitutes best practice and lack of an evidence base it will be very challenging to gain comprehensive support from clinicians for all the different components of whatever approach is finally chosen.

11. **Key conclusion 2**: To help mitigate this challenge, we recommend that the programme resembles that described in Key Finding 5 and that whatever approach is finally chosen undergoes wider consultation to help secure credibility and support.

12. **Key conclusion 3**: Any attempt to implement local or central collection and publication of a figure of preventable death rates at Trust level, determined through locally implemented RCRRs, will be subject to widespread and strong criticism from individuals involved in RCRR at present, potentially leading to the failure of the overall implementation of a NRCRRF.

2. DETERMINING THE CONTENT OF A NRCRRF

The following steps have been identified as necessary for determining the content of a NRCRRF.

1. Deciding on the process and proforma to be recommended for implementation
2. Conducting a period of piloting with a sample of participating organisations of different Trust types
3. Making final adjustments to the recommended process and proforma on the basis of feedback from the pilot phase

2.1 Deciding on the process and proforma to be recommended for implementation

Background

13. In order to make recommendations on what steps could be taken to enable NHSE to identify a process and proforma(s) for NRCRRF, a review of different approaches already in use was undertaken to try and identify what might be considered best practice and what would or would not be likely to be positively received by Trusts and their staff. If we were able to identify a commonly used evidence based approach this would make it easier for NHSE to determine the components of any NRCRRF.

14. A key finding of the Qualitative and Quantitative Analysis (QQA) and Case Study Interviews (CSIs) was a clear lack of consistency in the proforma being used by Trusts to conduct RCRR. The summary table below demonstrates the degree of inconsistency between the proformas reviewed as part of the QQA (for the full analysis see Appendix 3). It identifies the consistency of inclusion or exclusion of a number of significant features (described as data points-see glossary) of proformas reviewed. The only feature of a proforma present in more than two thirds of proformas was not including any specific data points relating to patient diagnosis (with other related approaches being fewer than 5 diagnosis options or 5 or more diagnosis options). It was much more likely that any particular feature (either absence or presence of data points or options) was adopted in less than a third of proformas.

A feature of up to a third of proformas	A feature of more than a third and up to two thirds of proformas	A feature of more than two thirds of proformas
Less than 5 diagnosis options NCEPOD scale of quality of care Hogan scale of death preventability Less than 5 problems with care options Both Hogan & NCEPOD scale Day of admission MRSA/C Difficile related data points 5 or more diagnosis options Identifying good practice No problems with care options	Having 5 more problems with care options Having data points related to palliative care Co morbidities on admission 5 or more standards of care options No standards of care options Other death preventability score Having data points related to death certification	No diagnosis options/data points

Source of admission		
Time of admission		
Mode of admission		
SI Link		
No death preventability score		
Wider governance link		

15. In fact there were no duplicate proformas identified in any of those sent to NCEPOD by survey participants. The CSIs did include an interview with the lead of a regional programme using a common proforma but its use had not been evaluated at that stage.

16. The CSIs also demonstrated that there was enormous variation in the approach used to conduct reviews including:

- Whether cases were reviewed by an individual, in pairs or in wider groups
- The types and roles of staff conducting the reviews
- Whether the programmes sat within specialties or as Trust wide processes
- How cases were selected
- Whether a screening stage was used

17. There a number of tools and proformas used within the academic literature including the PRISM 1 and 2 proformas and the various iterations of the Global Trigger Tool. The PRISM 1 and 2 proformas were adapted for mortality reviews from those used in the Harvard Medical Practice Study, a design which has been in use for over 30 years in research studies estimating healthcare-related harm. But this does not translate into an evidence base to support its use outside of the controlled environment of an academic study, particularly in terms of ensuring reliable results at Trust level. This view was supported by the primary author of the PRISM studies.

18. Therefore, whilst the PRISM tool could be considered as a useful starting point for developing a proforma for use as part of a NRCRRF, it would likely need to be condensed and of course all the associated processes for its use would need to be determined.

19. It was unclear however, whether the lack of consistency in approach was just a result of a lack of direction/leadership in this area, and when presented with standardised approaches, consensus around a favoured methodology could be secured. The NRCRRF could then undertake a relatively small amount of development work to determine a process/proforma on the basis of consensus in place of an evidence based approach.

20. As such, informed by the QQA and the CSIs NCEPOD developed a 'components paper' paper that attempted to factor in all the different possible components of a RCRR at a Trust level. The components paper was used at the Consultation Group Meeting.

21. Appendix 1 provides all the data and findings. The key finding of the meeting was that there was no one single approach that would be considered favoured and that any one single methodology would carry with it significant weaknesses. For a large proportion of the different elements that would constitute a RCRR programme, any single approach advocated by some of the participants was considered inadequate by a majority of the remaining participants. Discussion on the day favoured a nationally recommended approach that advised a number of different elements using different proformas and processes for both Trust and specialty level.

22. The challenge presented by the lack of consistency is the lack of what could be considered an evidence base as to what works best. As a result, NCEPOD prefer those options below that recommend conducting a period of consultation of what is recommended nationally for implementation, as without this, any nationally recommended programme will lack credibility.

23. NCEPOD have identified a number of elements that it would be reasonable to recommend within any approach (see Appendix 2 - CGM report), but these elements are comparatively simple and the benefits of not including them in a consultation would be minimal compared to the benefit of securing greater credibility by consulting on all elements of a nationally recommended programme.

OPTIONS

24. Considering the above NCEPOD have identified the following delivery options.

25. **Option 1:** Using the PRISM proforma and the findings of the CGM and QQA, work with an expert panel to determine a method for a Trust wide programme of RCRR using a consensus technique (not specialty level).

26. **Benefits:** This represents the simplest option by avoiding wider consultation. A Trust wide only programme of RCRR will also be more easily implemented and evaluated.

27. **Risks:** NCEPOD were unable to find consensus around how a single tool like PRISM might be implemented in a meaningful way at Trust level and so any recommendations for its use are likely to be regarded of limited value by those involved in RCRR work at present. Furthermore, whilst the CGM findings can identify some elements where there was reasonable consensus on the process, such as implementing a mortality meeting to consider the findings of RCRR, for many elements there was not. NCEPOD would support the view that using a single tool in a single way would not result in a credible programme of RCRR.

28. **Option 2:** Using PRISM proforma and the findings of the CGM and QQA to form the basis of a proposed proforma and process to be used as part of a Trust wide programme (not specialty) and conduct a period of consultation to determine the exact design of the proforma and its use within a Trust wide process.

29. **Benefits:** By consulting on a Trust wide process only, consultation will be less extensive than Option 3. Consultation on the contents of the form and the process for its use as part of a Trust wide process will secure greater support for its wider implementation than Option 1.

30. **Risks:** NCEPOD were unable to find consensus around how a Trust wide only process might be implemented in a meaningful way at Trust level. At present, a significant volume of mortality review work is conducted within specialties. Any programme focusing on Trust wide processes alone would not capitalise on this positive existing work. Furthermore, any method used to select and review cases at a Trust level would likely be inadequate in terms of ensuring learning from deaths in specialities with low death rates where consensus at the CGM was that every death should be reviewed. Whilst a wider consultation exercise might enable some degree of consensus to emerge it is still likely to fall short of a process that is regarded as being of high value by those involved in RCRR work at present.

31. **Option 3-** Making recommendations for conducting RCRR for both Trust wide processes and specialty processes (see glossary for definitions). As with Option 2, the PRISM tool and the findings of the CGM and QQA would be used to form the core of a proposed proforma to be used in a Trust wide process with a period of consultation to determine the exact design of the proforma and its use within a Trust wide process. In addition, specialty representatives (e.g. Royal Colleges) would be engaged to determine suitable processes and proformas for use within their specialties. It may be possible to differentiate, develop and provide detailed guidance and support for the Trust wide processes complemented by less specific guidance and support for the specialty processes, with only summary advice and guidance provided and vice a versa. If focusing on Trust wide processes, supporting the development of specialty processes could be undertaken at a later stage or simply recommended to the professional groups to undertake independently whilst using the Trust wide proforma as the core dataset to maintain a standardised approach.

32. **Benefits:** The CGM consensus was that only recommending a multi-faceted approach to conducting RCRR at both Trust and specialty level would result in programmes that would be considered of high value by those currently involved in RCRR. A Trust wide process can provide a process that includes random case selection, independence of reviewers and detection of themes across specialties. Specialty processes have the benefit of allowing more specialist appraisal of care standards, greater multidisciplinary involvement and case selection methods better matched to the very different mortality profiles of different specialities.

33. **Risks:** This represents the greatest amount of consultation and stakeholder engagement work which has implications in terms of both time and cost. It would also be more complex to implement successfully at Trust level. Any monitoring and evaluation of implementation will also be more challenging.

Preferred Option: Option 3

2.2 Piloting

Background

34. Separate to any consultation carried out on what is being proposed for national implementation, there will need to be a pilot period of actual implementation of the finalised proforma(s) and processes recommended.

35. NCEPOD allows the first session of any confidential enquiry to be used as a feedback exercise where reviewers using the proforma in practice can suggest changes before the remaining sessions move forward with the finally determined proforma.

36. A balance must be struck between ensuring any pilot period is efficient and not overly time consuming, and ensuring sufficient piloting (in terms of both scope and duration) to ensure high quality feedback is obtained.

OPTIONS

37. **Option 1:** Pilot the recommended proformas and processes with a small group of Trusts including specialist and small and large Acute Trusts. Choose Trusts where there is already some form of established RCRR work being undertaken.

38. **Benefits:** By only working with Trusts with some familiarity with RCRR there should be a reduced learning curve when asked to pilot the NRCRRF. It will also mean any feedback is received from those with some experience of this work who might be more able to identify challenges and recommend improvements. As NCEPOD have identified a lack of consensus, working with Trusts already running their own RCRR will also allow evaluation of how a different approach is received at an organisation where there may be disagreements with the suitability of the final nationally recommended approach.

39. **Risks:** Working with Trusts where there is already established RCRR activity might not represent the 'average' Trust in terms of understanding of and support for conducting RCRR. This might give a falsely positive impression of how easily the nationally recommended programme can be implemented. It may also be that individuals with their own more established programmes might be more likely to disagree with elements of the NRCRRF where it differs from their own efforts. This would give a falsely negative impression in comparison to how a 'novel' audience might respond.

40. **Option 2:** Pilot the recommended proformas and processes with a small group of Trusts including specialist and small and large Acute Trusts with an even split between Trusts where there is already some form of established RCRR work being undertaken and Trusts where there is not.

41. **Benefits:** This will enable evaluation of the nationally recommended programme both from an 'experienced' and 'novel' perspective in terms of those implementing it. In order to include a reasonable number of Trusts of each type, this would likely require a greater overall number,

increasing the amount of feedback being collected, making a more robust evaluation more likely.

42. **Risks:** This would likely represent an overall larger cohort of pilot sites with the related increase in time and resources required.

Preferred Option: Option 2

2.3 Incorporating feedback from the pilot

Background

43. As highlighted above and evidenced through the QQA and CGM, there is a considerable degree of disagreement amongst those involved in RCRR at present as to what represents 'best practice', with most support being for a multi-faceted approach. It is helpful to reiterate this point when considering how to approach making adjustments to any nationally recommended programme on the basis of feedback from the pilot phase.

44. NCEPOD would not strongly advocate a further period of wider consultation on any changes made as a result of the feedback received, but it should be given consideration in light of the paucity of consensus within the field.

Options

45. **Option 1-** Task an expert panel with making modifications to the nationally recommended programme on the basis of feedback received from the pilot phase. Do not undertake wider consultation on the adjusted programme.

46. **Benefits:** This option reduces the timescales. If the pilot programme was subject to wider consultation initially, and the proposed modifications are minimal, it is unlikely to lead to changes that would not be supported by the wider group.

47. **Risks:** An expert panel cannot replace a wider consultation exercise and they may elect to make (or not make) modifications based on feedback from the pilot phases when wider consultation would have led to a different and/or 'better' choice.

48. **Option 2-**Task an expert panel with making recommendations for modifications to the nationally recommended programme on the basis of feedback received from the pilot phase and then undertake a wider consultation on feedback received and the proposed modifications made as a result. This option will only be likely to be considered if wider consultation was undertaken in developing the pilot nationally recommended programme, but it does not necessarily have to.

49. **Benefits:** Wider consultation will increase the chances of any decisions being supported by those involved in RCRR at present and may increase the quality of any decisions made regarding modifications.

50. **Risks:** This represents a greater workload and timescales.

    Preferred Option: Option 1

3. SUPPORTING IMPLEMENTATION OF A NRCRRF

NCEPOD identified the following key steps for supporting the implementation of a NRCRRF.

- Conducting a programme of training for individuals implementing a NRCRRF

-Launch of a website to provide access to supporting materials and documents for the programme

-Provision of a central database supporting the programme (non mandatory)

-Practical implementation support

3.1 Conducting a programme of training for individuals implementing a NRCRRF

Background

51. Training requirements for the roll out of this programme will be distinctly different from training requirements on an ongoing basis. This section is written assuming that there will be a necessity to train a large initial cohort of case note reviewers that represents a high proportion of the potential population of reviewers. Ongoing training will enable those joining the pool of reviewers at a later date to be trained. We have not produced separate options for this as it should simply be a smaller scale approach and would be more properly designed following experience of running the programme and the training to support it.

52. There will be potential differences in training requirements depending on the final design of the nationally recommended programme. For example, if a Trust wide only process is recommended this will be on a smaller scale in terms of reviewer numbers, than if Trust wide and specialty processes are recommended. This should be kept in mind when reviewing the options below.

53. In terms of the time required to conduct training examples from similar work were considered. The PRISM studies the National Review of Asthma Deaths (NRAD) and training for NCEPOD reviewers has been conducted over one day. However, PRISM used all retired Consultant Physicians and the NRAD and NCEPOD recruit from a specialist audience relevant to the subject. As such, if it is decided to include a wider team that will be looking more broadly at care issues, the training requirements will be greater. Furthermore, for all of these studies, there was/is a greater degree of readily available support, for those conducting the reviews, than could be achieved in an ongoing nationwide programme.

54. As highlighted in the CGM there was not support for the involvement of allied healthcare professionals as primary reviewers. There was support for other groups (e.g. senior nurses, junior medical staff) as primary reviewers with the involvement of Consultants in some form of review of their findings/cases. However, there may be more opportunities for their involvement through the wider team before/instead of becoming primary reviewers. As such there will be two groups to consider – the primary reviewers and the wider team, the training requirements for each role will be different.

55. CSIs described very little evidence of formal training programmes for those conducting RCRR at present. The majority were not able to describe any training at all for those conducting reviews. Any examples described were limited to a programme lead sitting down and going through the process using their own knowledge of how the proforma worked, which in some way would be considered as instructor led training at a local level. There was one example of a regional programme using a common proforma that had trained approximately 100 reviewers, primarily Consultants, with the expectation they would go on to train others at their organisations. But there had been no evaluation of the effectiveness of this programme.

56. The QQA identified examples of manuals that could be referred to when conducting RCRR, these were not commonplace but would be required for any national programme

57. As such, NCEPOD considered our own experience of training case note reviewers to identify a number of possible components of the review process for consideration by the CGM and for them to add any others that may have been missed. No additional components were identified by the CGM and there was a general consensus that all the components identified below should be included:

Participants were asked to rate the importance of different approaches on a scale of 1-10 with 1 being not important and 10 being very important.

The proforma - **the meaning and use of the proforma itself 76% rated 8 or above**
Making judgements - **being aware of factors such as hindsight bias 84% rated 8 or above**
Identifying learning - **understand what factors might be amenable to improvement 89% rated 8 or above**
Probability - **considering elements like preventability 71% rated 8 or above**

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58. In addition, NCEPOD recommends training to cover the issue of reporting serious concerns regarding individual practice (though this was not strongly supported by attendees at the CGM).

59. Training for the wider team would need to cover the same topics to support their understanding of the RCRR process, but need not be as detailed, particularly in how the proforma works. It should be noted that there was support for tailoring training for different professional groups (**65% of participants rated it as 8 or more out of 10 see scale above)**. NCEPOD have not considered this a viable option for initial roll-out, but it is something to be kept in mind for future development work.

60. In terms of delivery method, the lack of training programmes of any significance meant there was also a lack of examples of how training might be delivered. The aforementioned regional programme used face to face training in small groups with the expectation that those trained would be able to train others in the use of the proforma at their Trusts. But as mentioned, this had not been evaluated. This also means it would not be feasible to consider how the initial training for participation in RCRR could be matched up with other elements of a Trust training programme. There are a multitude of training sessions for the different professional groups, but their varied and irregular implementation would not make them suitable avenues for delivering the initial training for participation in a NRCRRF. However, an implementation support team could make use of these types of sessions to promote the programme and collect feedback from participants.

61. Annual mandatory training programmes represent the only potential avenue through which existing Trust training programmes could be utilised to support the roll out of a NRCRRF. There are always many competing topics for incorporation into annual mandatory Trust training, and it is beyond the scope of this review to make a recommendation that this becomes something Trusts are asked to include within that umbrella as this needs to consider the relative importance of other things that could be included instead of a module on any NRCRRF. This would be something for NHSE to decide upon.

62. Applying caution and not assuming it could be included into mandatory training, NCEPOD used the CGM to try and identify the approach that would be considered most suitable by those working in the field. Instructor led training was favoured **(79% rating as 8 or above see scale above),** much more so than a train the trainer approach **(at 56%)** or an E-learning alone approach **(28%).** Group discussion identified E-learning as being more likely to help as a refresher and as a supplement but there was a strong view that to ensure consistency a commonly experienced training programme should be used.

63. The recent programmes using RCRR (NCEPOD, PRISM, NRAD) all make use of an instructor led training approach. Another useful comparator is the planned approach for training Medical Examiners (ME). The training is 23 hours of E-learning, supplemented by a one day instructor led training session. The complexity of the ME training curriculum whilst greater than that likely to be required for primary case reviewers, may be a closer match as a model than the other examples noted.

64. In contrast to these findings, it is worth noting the widespread use of E-learning alone use across health education. This is commonplace in the majority of 'mandatory' training required by Trust staff. Though in our anecdotal experience, this learning can be of variable quality. However, the demand for instructor led training will need to be balanced against the cost and time implications for using this approach.

OPTIONS

65. **Universal:** Form an expert working group to determine a training curriculum to include detailed explanation of all the elements of any recommended proforma; making judgements, identifying learning and probability. A manual should be produced to accompany the proforma. Training time will likely require at least one whole day with options for delivery of the training curriculum as follows:

Mandatory vs. non-mandatory training

66. **N.B. please note this is not the same as considering whether to make participation in RCRR mandatory. You could make participation in the programme mandatory without making the training for conducting the reviews mandatory.**

67. **Option 1a:** Make completion of the relevant training package mandatory for all those conducting the nationally recommended RCRR.

68. **Benefits:** Making the training mandatory will increase the likelihood of those conducting the reviews doing so in the intended manner. This will reduce the chances of inconsistency within and between organisations, and minimise misunderstandings which may be incorrectly perceived as failings in the programme (with the associated negative view that would be taken as a result). Whilst the risks in terms of delay caused by awaiting training are discussed below, it

is commonplace within the NHS for staff to conduct work that requires mandatory training without doing so before commencing that work, but completing it within a reasonable timeframe (i.e. 3 months). As such, a mandatory approach may have all the benefits of Option 2 (non-mandatory) without the risks related to delays as described below.

69. **Risks:** There are many individuals already conducting RCRR who regard themselves as capable of interpreting a broad outline of any nationally recommended programme. These groups may resent a more time consuming training programme being mandated before they can carry on. Others may simply be disorganised and it may not be efficient to implement an absolute bar on participation without training. Furthermore, there may be no easy mechanism of monitoring and enforcing mandatory training.

70. **Option 1b:** Recommend completion of the relevant training package for all those conducting the nationally recommended RCRR.

71. **Benefits:** Making participation a recommendation might allow the work of any national recommended programme to commence (on the assumption that without the training experienced/senior individuals will be able to conduct reviews to at least some extent) promptly without any significant delays created by individuals waiting for/not organising to participate in training promptly.

72. **Risks:** Those conducting the reviews may do so in an incorrect manner leading to significant variation in how the reviews are conducted both within and between organisations. Misunderstandings of how the proforma/process is designed to operate may be perceived as failings in the programme with the associated negative view that would be taken of it as a result. As mentioned above, even 'mandatory' training is frequently not done or done in a much delayed manner. As such, not making the training mandatory within that environment might lead to very low completion rates.

E-learning alone

73. **Option 2a:** Develop an E-learning alone package aimed at primary reviewers and make it available to the wider team as well.

74. **Option 2b:** Develop two E-learning alone packages (one for primary reviewers and one for the wider team) and ask the respective groups to complete the different packages.

75. **Benefits:** Using E-learning alone will minimise costs in terms of reviewer and trainer staff time and should allow training of reviewers to take place more promptly. 2a will reduce workload during the package development stage by not necessitating a separate package to be developed.

76. **Risks:** There was not support for E-learning alone training at the CGM. It was considered inadequate as a method for enabling potential reviewers to be able to conduct review work effectively. An E-learning alone approach could lead to widespread variation in practice and low quality reviews. Option 2a could use unnecessary amounts of staff time as a specific training

package for the wider team could be less detailed and therefore take less time to complete than for one required for primary reviewers.

Train the trainer

77. **Option 3:** Develop an instructor led training programme and an E-learning package and for a small group of primary reviewers from each Trust who would then be responsible for training a wider cohort of primary reviewers and the wider team at their own organisations supported by E-learning packages for those individuals.

78. **Benefits:** A 'train the trainer' approach would be less time and resource intensive than instructor led training. It would potentially allow for more prompt training of reviewers (depending on the commitment/enthusiasm of the trainer).

79. **Risks:** Whilst preferred to E-learning alone, train the trainer was not considered as positively as instructor led training by the CGM. The risks previously discussed with E-learning still exist, albeit to a lesser extent. This could be mitigated by developing an intense and regular programme of training for those expected to train others, to raise the quality of that training. The ability to do this will be dependent on the time availability of those taking part.

Instructor led training

80. **Option 4:** Develop an instructor led training programme for all primary reviewers supplemented by an E-learning package for pre and post learning activity. Develop an E-learning package for the wider team.

81. **Benefits:** This approach maximises the chances of all those conducting the reviews doing so in a consistent way and with chances of misunderstandings being minimised. By incorporating E-learning pre and post, the face to face element of the programme can be minimised. This approach was strongly favoured by the CGM.

82. **Risks:** This approach will be resource intensive, requiring a significant programme of training and with the greatest ongoing training costs. The costs may be such that despite the views of the CGM, the cost of this approach is too great a barrier. This may be especially true if the national programme recommends Trust wide and specialty reviews take place.

Trainee feedback

83. **Option 5a:** Incorporate the collection of trainee feedback as part of the rolling programme of training via collection of post training evaluation both on the day and by encouraging trainees to send in feedback at a later date.

84. **Benefits:** This will be low cost and timely approach.

85. **Risks:** In our experience, the feedback collected with this approach risks not being representative (by usually only capturing strongly held opinions). Furthermore, feedback submitted before trainees have had experience of taking part in RCRR will be of less value.

86. **Option 5b:** Conduct a trainee feedback exercise as a separate programme after the programme has launched and there has been a greater amount of time. This could either be done on a rolling basis (on a regular basis select a random sample of trainees and active solicit their feedback on reflection after having been active participants in the NRCRRF) or as a one off exercise at a specified date after roll out has been established.

87. **Benefits:** This will provide the most effective measure for collecting feedback as it will allow for reflection on the content of the training programme after active participation. The greater the amount of experience accrued post training the more effective this will be. The feedback received is also likely to be more representative if actively sought rather than just given by those choosing to complete opportunities for feedback as in Option 5a.

88. **Risks:** This will represent a significant additional cost to the programme.

Preferred option: Options 1a, 4, 5a

3.2 Provision of a website to provide access to supporting materials and documents for the programme

Background

89. Any nationally recommended programme will benefit from having a website through which participants can access the relevant guidance documents and copies of any proforma(s) recommended for implementation[12].

90. The use of a web portal for communications should reduce the need for telephone contact when Trust staff have any queries about the programme. It can be used to host an updated FAQ page/document or discussion forum that would also serve to minimise enquiries by identifying solutions to common queries. It can also act as a focal point for any evaluation exercises that may be conducted.

OPTIONS

91. **Option 1:** Section within an existing NHSE umbrella website

92. **Benefits:** This approach will minimise the costs.

93. **Risks**: More difficult to promote and potentially more difficult for service users to locate.

94. **Option 2:** Dedicated website with separate web domain

95. **Benefits:** A dedicated web site is likely to be easier to promote and be more memorable/easier to find for users seeking supporting information/documents.

96. **Risks:** This would represent an additional cost.

   Preferred option: Option 2

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[12] There may also be useful additional communication strategies to consider as part of any launch of the programme but NCEPOD have not considered this a necessary part of this review. This should be progressed by NHSE through the normal internal communications channels available to it as it deems appropriate.

3.3 Provision of a central database supporting the programme (non mandatory)

97. A NRCRRF need not necessarily have a shared database function. Individual Trusts could conduct the work of the review and take their own decisions about capturing any outcomes (either electronically or through paper records). Most NHS organisations will run dozens of their own independent audits and care quality reviews that are never computerised as part of any wider database. That does not mean those reviews are ineffective or that their learning is not shared widely.

98. In terms of the use of databases for existing RCRR, the key finding of the CSIs was that in most cases 'electronic' data capture was simply an excel spreadsheet being used in a limited way. There were other more advanced examples but with variation in practice. The only regional data collection example does consist of an Access database with data emailed to the programme lead. This is at very early stages with only one Trust currently reporting. Other examples of data entry systems considered were local intranet rather than internet based data filing. There were no examples of software based databases collating the findings of RCRR integrating with other local systems (e.g. SI)-they were all standalone.

99. As such NCEPOD conducted interviews with some national data providers to provide some further context (NRLS, NHFD, NICOR). NRLS is a good example of integration in terms of its data collection feeds being used/accessed more widely. But the main NRLS function does not possess flexible architecture in its current form and each local system would need to be remapped for central data collection should changes be made. It does have the facility to provide a separate specific web portal for data collection (as currently used for anaesthesia patient safety incidents, developed in partnership with the Royal College of Anaesthetists) which would allow for changes to be made more easily. However, that that would need to be agreed as part of the wider programme of NRLS going forward. NRLS 2 had been identified as a potential channel through which mortality review programme data could be collected. On discussion with an NRLS 2 programme lead, it is unlikely that without additional funding and a significant additional scoping that such a function could be added to the standard NRLS 2 collection programme integrated with Trusts systems. However, there are plans to implement a standalone Primary Care module in NRLS 2 which will allow for data entry, as well as providing some safety management and quality improvement features. A similar module could in theory be provided for the NRCRRF.

100. The NHFD is an example of a well established national database that collates the data on hip fracture activity on the basis of locally uploaded data that can be partially verified with HES data. It provides for local commissioners to access the data and produces an annual overview publication in addition to reports on individual Trust performance. The database is provided externally from the NHFD audit team.

101. The NICOR run 6 audits and 4 registries on a number of different audits related to cardiac care. They operate a number of different databases of different types. All of the programmes are run in-house with in-house software developers. There is generally a shift towards web portal data entry (with audits originally run on Lotus Notes with a local database uploading information

to a central database). They provide individual and local comparator information in addition to national reports and other organisations (e.g. CQC) also have access to the data. There are some examples within their programmes of Trusts commissioning a local data conversion approach, but the vast majority requires individual data entry separate from local data systems.

OPTIONS

102.   **Option 1:** No central database function

103.   **Benefits:** This will likely represent a significant cost saving, both upfront and ongoing and will potentially reduce the bureaucratic burden on Trusts because of the absence of a need to cooperate with a centrally determined process for collecting data.

104.   **Risks:** Use of a central database would serve as an effective measure for reviewing compliance with the programme at Trust level. Without one, assessing compliance will be more challenging. This approach would also rule out undertaking any regional or national learning activity based on reviewing findings contained within the database.

105.   **Option 2:** Standalone database function. This would consist of a separately commissioned database that could either be a direct access programme through which a web portal is used to upload data directly with organisations able to download local reports or a locally hosted but centrally collected programme. NCEPOD did not find strong evidence with a preference to either approach. The sophistication of any reporting (in terms of analysis and reporting regional and national comparators) would be budget dependent. This could potentially be done through a non integrated NRLS portal rather than an entirely separately commissioned database.

106.   **Benefits:** This approach would be the lowest cost and the quickest to implement. It would also allow for maximal flexibility in terms of modifying the points for data entry (for example of changes are made to the proforma).

107.   **Risks:** As a standalone database there will be limited opportunity for integration with local data systems that would allow for pre populating/data mining/data verification. This will increase the administrative burden on staff in terms of data entry.

108.   **Option 3**: Locally integrated database function. As with the current NRLS programme, a database function could be commissioned that would integrate with existing databases in use at Trusts and provide ingoing support for integrating other databases established by local Trusts.

109.   **Benefits:** This would allow for more automated data mining and reduce the administrative burden on Trusts as a result. It will also allow for data verification to identify errors in how the programme is being run at Trust level. Depending on sophistication it may also allow for cross systems analysis with other quality improvement data collection being undertaken.

110.   **Risks:** This would represent a very significant cost and time burden. It would be comparable to the existing NRLS function and need greater ongoing technical support for participating organisations.

111. **Option 4:** NRLS 2 integrated database function. As NRLS 2 is being developed there may be opportunities to incorporate a database function for a national RCRR programme within it. CSIs with NRLS staff indicated that this would be considered a major additional programme of work and would not be easily integrated into current plans for functionality.

112. **Benefit:** By incorporating an integrated database function within NRLS 2 there would be significant costs savings in comparison to a standalone integrated database function and potentially even a discreet standalone database. Integrating it with NRLS 2 in particular would potentially allow for high quality data analysis across all the patient safety data due to be collected through NRLS 2.

113. **Risks:** As part of a much larger project, this approach would mean being tied to that projects timescales and potential delays problems. The size of NRLS 2 as an endeavour represents a greater risk of delays and problems than if a separate discrete programme was commissioned.

Preferred option: Option 2

3.4 Implementation support

114.   NCEPOD have defined implementation support as the availability of resources (in particular dedicated staff) to support Trusts in successfully implementing all the elements of a national recommended review programme. As a minimum this will include responding to queries about the proforma(s) and the recommended processes for its use, and may also include technical IT support (depending on decision regarding the central database function), promotional activity and safeguarding activity (again, dependent on the existence of any central database function).

115.   In considering this issue NCEPOD drew on the CSIs with other nationally run programmes of audit and our own experience.

116.   The National Hip Fracture Database[13] and the multiple Cardiac Audits have a central team and point of contact for participating Trusts. These are staffed by two WTE and 1.5 WTE (per audit) respectively, administering the scheme. The Cardiac Audits have further additional technical and clinical support across their multiple audits that is challenging to quantify on a per audit basis. Enquiries are primarily administrative in nature but commonly also include coding and technical enquiries as both of these programmes run central databases. The scale of the NHFD and the individual cardiac audits is likely to be less than that of a nationally recommended review programme and as such staffing requirements would be expected to be greater.

117.   On the other end of the scale, the NRLS team consists of at least 18 WTE staff with additional staff in senior roles with responsibilities beyond just NRLS (so not included in the total figure). The NRLS team includes permanent clinical staff responsible for the surveillance role of identifying any new patient safety issues that need to be highlighted across the NHS. It is likely that if central data collection of any kind occurs in the RCRR programme, a similar function will need to be undertaken to allow NHSE to discharge its safeguarding responsibilities.

118.   Clinical Outcome Review Programmes, such as NCEPOD are not directly comparable as they have more direct involvement in the actual programme of data collection, conduct all the analysis and deliver a summary report all over a condensed 2 year period (as opposed to a rolling programme of consistent data collection led by local teams). But the team size for each study is approximately 5 WTE.

119.   As the majority of the workload relates to the IT element for most of these programmes, the exact requirements of any central team/single point of contact will depend very much on the final design (if any) of the central database function of any RCRR programme.

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[13] It should be noted that both of the dedicated staff members were due to leave their roles without immediate plans to replace them, but the impact of this could not be considered ahead of time. It may reflect the relative stability and maturity of this programme and the strong levers for both positive engagement (the tariff) and the ability to verify data quality with HES data relatively easily.

120.   If there were not any central database/data collection, decisions about resource could be metered against the extent to which a central team could support/encourage roll-out of the programme. The NHFD took a 'road show' approach, visiting participating Trusts to advise on and support participation. This secured the involvement of approximately 100 Trusts prior to the tariff making participation essentially mandatory. As such, consideration should be given to allowing for a programme of positive engagement beyond the engagement that will take place for training purposes.

OPTIONS

121.   The options for this section are not presented as either/or options but instead, the distinct roles have been listed. It was beyond the scope of this review to determine exact workforce planning and there will need to be standard roles such as Project Management and general delivery support, project leadership, clinical leadership. As such these should be only be considered as approximate minimum staffing requirements identifying key roles. Option 1 would essentially be required whilst the other roles may not be depending on the design of the programme (i.e. central database function or not, promotional activity or not)

122.   **Option 1: Administrative Role:** Support limited to responding to enquiries on proforma/process. Approximately 0.5-1 WTE. Background of staff could be non-clinical if access to expert panel can be facilitated for some enquiries.

123.   **Option 2: Promotional role:** Positive engagement function through visiting Trusts to engage with staff and presenting at various avenues through which positive encouragement of use of any nationally recommended programme might be possible. 0.5-1.5 WTE Background of staff could be non-clinical, but clinical background for engagement role would be ideal.

124.   **Option 3: Central database administration role:** Responding to technical IT enquiries regarding administration of central data collection/use of the database. 1-1.5 WTE. Background non clinical.

125.   **Option 4: Data analysis role:** Reviewing aggregate and regional data and producing relevant reports. Safeguarding responsibilities. 1.5-2 WTE with safeguarding responsibility requiring clinical background for role holder and additional access to expert panel advice.

Preferred option: See comments above.

4. EVALUATION

In considering evaluation we have identified to distinct elements.

1. Trust focused evaluation

2. Patient/public focused evaluation

4.1 Trust focused evaluation

126.   The following elements of the programme have been identified, that would be considered key points of focus for evaluation. These are

- Implementation rates (not just considering self reported implementation)
- Delivery challenges experienced by Trusts for all elements of the programme
- Evidence of service improvement
- Evidence of clinical engagement
- A review of the proforma(s) providing an opportunity for changes to be made
- Feedback on the training programme

127.   CSIs identified a number of areas where particular attention should be paid. These include

- low levels of clinician engagement (and reduction in clinical engagement where RCRR were previously in place) as a result of disagreement with the design of the NRCRRF or the consequences of its implementation (for example use in appraisal, collection and publication of rates)
- staff not being supported/allowed to take part in NRCRRF by Trust managers
- reviewers not conducting reviews fairly (either by being particularly harsh as a result of internal animosity or being particularly forgiving out of concern of the consequences of negative findings) or accurately (because of failures in training or understanding of the process)

128.   Our experience of conducting this piece of work has highlighted that survey work can elicit helpful findings, it can sometimes fail to accurately reflect the full picture especially when declared activities were scrutinised more thoroughly through interviews.

129.   Furthermore, in the author's experience, site visits (for example attending a RCRR meeting where cases are scrutinised/and or discussed or attending a Trust management meeting where the findings for a RCRR programme are being considered and/or responded to) are even more powerful in providing an evaluation exercise with wider and more accurate insights into how activity is being conducted and received.

OPTIONS

130.   **Option 1:** Self reported evaluation through the use of an electronic survey.

131.   **Benefits:** This represents the simplest and lowest cost approach and can be expected to capture self reported benefits and successes and reflect at least in part the success of NRCRRF.

132.   **Risks:** As it is self report, it may not accurately capture the realities of how any NRCRRF has been implemented.

133.   **Option 2:** Self reported survey responses and structured interviews

134.   **Benefits:** This approach will allow survey findings to be further tested and scrutinised rather than taken at face value.

135.   **Risks:** Whilst interviews may be able to add a greater independent view point to evaluation, this will be done as extensively as Option 3.

136.   **Option 3:** Self report survey responses, structured interviews and site visits

137.   **Benefits:** This approach will provide the most comprehensive evaluation, being the most likely to accurate information.

138.   **Risks:** This approach would be the most costly and time consuming.

Preferred option: Option 3

4.2 Patient/public focused evaluation

139.   In relation to evaluation, the following elements of patient public involvement have been identified for evaluation.

- Negative impact on emotional wellbeing and the grieving process
- Views on the quality of communication/wellbeing support provided by Trusts
- Impact on litigation/complaints behaviour
- Links between pre-existing concerns and negative findings

140.   Whilst the work of any NRCRRF would certainly be of interest to the wider public, NCEPOD do not think wider involvement of patient/public in evaluation would be helpful given the likely scales of actual patient/public involvement. Please see Additional Considerations for the recommendations on the wider inclusion of patient/public representation in the development of any NRCRRF. NCEPOD would recommend evaluation through engagement with those individuals directly involved in the programme through disclosure of negative findings. These individuals could be recruited via Trusts with whom they have had contact.

141.   CSIs identified concern from patient representative organisations that disclosure would not be conducted in a sensitive and appropriate manner. Trust representatives recognised the lack of training and support for undertaking this kind of engagement activity as well. Patient representatives also described their belief that often when there has been a care problem that might be identified by RCRR, next of kin will already have been concerned. Evaluation will provide the opportunity to test this in part (to do so fully would require a wider research to establish a control group which we do not consider cost effective in evaluating a new programme).

142.   Given the sensitivity of the matters that will be considered it will be important to have in place arrangements for where evaluation subjects raise concerns that they would like to be followed up e.g. complaints about their experience or allegations of misconduct. In addition, evaluators will need to have access to processes to allow them to discharge their safeguarding responsibilities in relation to information they may receive even when follow up is no requested by subjects.

OPTIONS

143.   **Option 1:** Survey

144.   **Benefits**: If sample sizes are small this might limit the quality of the evaluation findings. Depending on the methodology used (e.g. online only) the population might also not be representative.

145.   **Risks:** Particularly in relation to the sensitivity of the issues that will be considered, surveying may not be considered appropriate and if used alone it might also fail to capture the richness of the experiences of next of kin.

146.   **Option 2:** Survey and structured interviews

147.   **Benefits:** Structured interviews would allow evaluators to establish positive engagement relationships which will be beneficial in view of the sensitivity of these matters. This should allow for richer and more comprehensive evaluation findings to be captured.

148.   **Risks:** Structured interviews will present additional costs and time requirements in comparison to just surveying.

Preferred option: Option 2

5. PROJECT TIMELINE & COSTINGS

Both the timeline and costings are based on implementation of the preferred options as indicated previously and summarised below:

DETERMINING THE CONTENT OF A NRCRRF

Deciding on the process and proforma to be recommended for implementation

Option 3-Wider consultation and NRCRRF content to include Trust and Specialty processes.

Piloting

Option 2-Pilot sites including experienced and novel Trusts

Incorporating feedback from the pilot

Option 1-Expert panel to incorporate feedback without wider consultation

SUPPORTING IMPLEMENTATION OF A NRCRRF

Conducting a programme of training for individuals implementing a NRCRRF

Options 1a, 4, 5a-Mandatory training, instructor led with ongoing collection of feedback

Provision of a website to provide access to supporting materials and documents for the programme

Option 2-Standalone website

Provision of a central database supporting the programme (non mandatory)

Option 2-Standalone database with central data collection and sharing

Implementation support

N/A-workforce estimates provided below

EVALUATION

Trust focused evaluation

Option 3-Survey, interviews and site visits

Patient/public focused evaluation

Option 2-Survey and interviews

5.1 Timeline

149.   The following timeline displays the overall flow of activities that we would expect for the implementation of any NRCRRF as described above. The software producing the timeline requires calendar dates to be used-they should be viewed only as month by month guides not calendar dates. To enable this to be concise evaluation as been included in Phase 5, but it should be noted in terms of calendar time and the specifications for this exercise it is expected to take place approximately a year post roll out of NRCRRF.
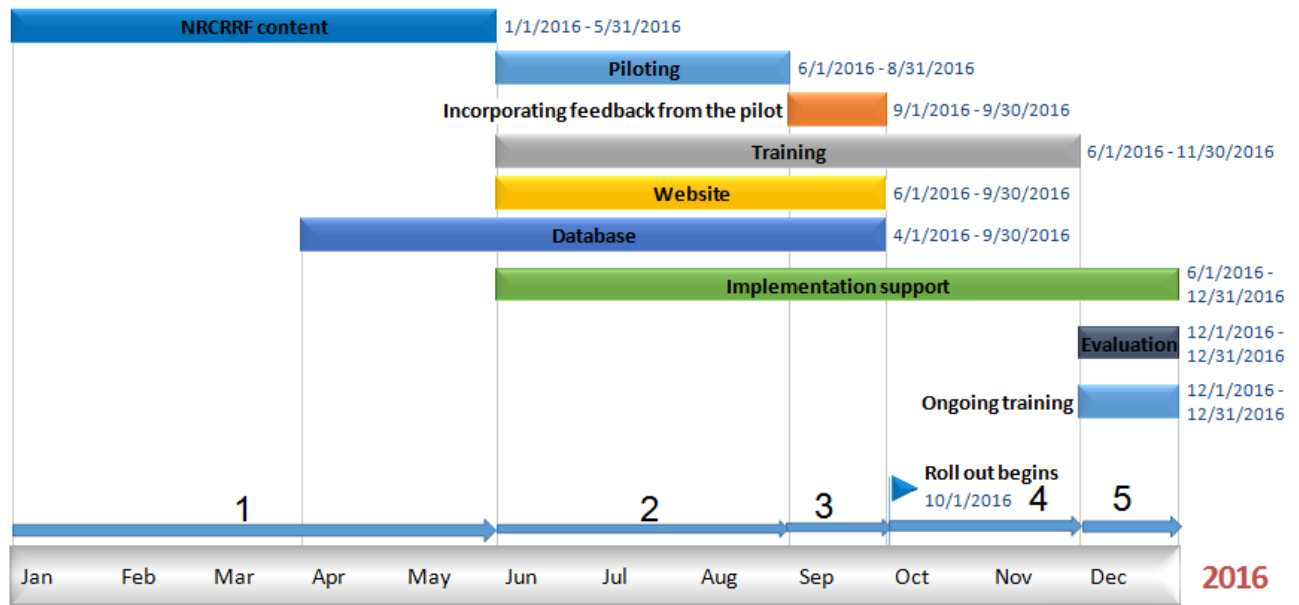
Timetable variations

NRCRRF content: Reduce by 2 months if limited consultation undertaken.

Piloting: Reduce by 1 month if smaller sample size used.

Incorporating feedback: Increased by 1 month if further consultation undertaken

Training: Reduce by 3 months if E-learning only approach is taken.

Database: Reduce by 3 months if limited functionality chosen.

Item	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5
NRCRRF content	Initiate development of NRCRRF content	Pilot proposed content of NRCRRF	Finalise content of NRCRRF based on pilot feedback	Begin Roll out of NRCRRF	
Central database	Initiate development of central database (if determined as necessary)	Continue development of central database	Finish development of central database based on pilot feedback	Launch central database	
Training		Initiate development of training curriculum and content based on pilot NRCRRF content	Finish training curriculum and content based on finalised NRCRRF content	Begin roll out phase of training	Begin ongoing training
Implementation Support		Support piloting, develop engagement & training plan	Begin engagement work	Begin implementation support	Continue implementation support
Website		Initiate development of website based on pilot NRCRRF	Finish development of website based on finalised NRCRRF	Launch website	
Evaluation					Begin evaluation

5.2 Costings

150.   We have developed the following costing estimate based on the programme consisting of the preferred options for the NRCRRF. Where we have determined that the activity can be conducted by the core staffing team we have not indicated a separate cost for the option with activity completed in whole or in part by the core team.

Item	Year 1	Year 2	Year 3
Core team staffing (1WTE@£50,000 PA, 2WTE@ £35,000 PA, 1.5WTE@£25,000PA)	£157,500	£0	£0
Core team clinical role (0.5 WTE Year 1, 0.25 year 2 & 3)	£50,000	£25,000	£25,000
Content development (90 clinical staff days, @ £500/day, travel & venue costs, PPI consultation costs)	£45,000		
Central database (initial procurement in Year 1, support and data analysis Year 2 & 3)	£100,000	£20,000	£20,000
Website	£7,000	£2,000	£2,000
Developing curriculum content (25 clinical staff days, @£500/day)	£12,500	£0	£0
Delivering instructor led training (20 clinical staff conducting approx. 15 sessions @£7500 per trainer)	£150,000	£0	£0

Developing supportive E-learning programme	£10,000	£2,000	£2,000
Ongoing training (one session a month with trainers supported by core team @ £2500 a session)	£0	£30,000	£30,000
Ongoing staffing (0.6WTE@£50,000 PA, 2WTE@ £35,000 PA, 1WTE@£25,000PA)	£0	£125,000	£125,000
Evaluation (15 clinical staff days @£500/day, PPI costs, tool development)	£0	£15,000	£0
Sub total	£532,000	£219,000	£204,000
Total (including 20% overhead to include travel, other expenses, meeting room hire, staff on costs, contingency)	£638,400	£262,800	£244,800
Total 3 year budget			£1,146,000

Cost variations

We have identified examples of key savings (either different options or variations on selected options) that could reasonably be made without a major detriment to developing any NRCRRF but reiterate that for each approach risks were identified and we do not recommended these options.

Content development-limited consultation: Cost saving in region of **£65,000** (-1 WTE @ £35,000 and -60 clinical days @ £30,000) through reduced staffing and external engagement costs by asking small expert team to determine content without wider consultation.

Content development-online consultation: Cost saving in region of **£30,000** (-60 clinical days @£30,000) by asking expert team to determine content and limiting consultation to unpaid online process.

Integrated website: Cost saving in region of **£5,000** without standalone website.

Evaluation: Cost saving in region of **£10,000** with survey only approaches.

Database: Cost saving in region of £50,000 Year 1 and £10,000 per year Years 2 and 3 with no integrated data collection but support for local data collection and limited central collation (total **£70,000**).

Database: Cost saving of in region of£75,000 Year 1 and £15,000 per year Years 2 and 3 with no central data collection e.g. pre-prepared access database for local use only (**total £105,000**)

In addition we have identified savings using a train the trainer approach (Cost saving in region of £100,000 on initial roll out, £20,000 per year Years 2 and 3 (total **£140,000**)) but this presents a greater risk of negative impact.

Further cost savings beyond those described would present significant risks to the success of the programme.

6. ADDITIONAL CONSIDERATIONS

6.1 Linking with other national RCRR programmes

151.   On the 8th February 2015 the Department of Health announced plans for an annual "national case-note review to work out the percentage of avoidable deaths by hospital" stating that "The review will be used to establish a national rate of avoidable deaths every year, and on that basis place individual hospitals into bandings according to the number of deaths estimated locally."

152.   We have been asked to consider "how the NRCRR work programme would link effectively and support any other national mortality review work undertaken by DH/NHSE or other partner organisations such as the AoMRC."

153.   The focus of this exercise has been to consider how Trust might conduct RCRR work themselves. The question to consider is how this work might interact with externally conducted exercises?

154.   It is feasible to advise that there might be no formal interaction of any kind. An internally conducted but externally supported programme as we have described could sit alongside a separate externally conducted programme. The benefit of this approach would be to avoid the necessity of seeking to align two separate programmes of work that may have different objectives and use different methodologies. The risk of taking this approach would be the chance that the two work streams increasingly diverge (particularly in terms of methodology) despite working under the same general banner, with very different results (qualitative and quantitative) being produced which would lead to frustration amongst those involved and potentially confusion for the public.

155.   What are the ways in which the programmes could be linked? The simplest approach could be to ensure the same proforma is used. This would improve the chances of the work streams aligning. However, using the same proforma will not alone ensure consistent methodology, particularly considering the diverse approaches we are recommending at Trust level. There would be a risk of even greater confusion if both work streams were using the same proforma and still producing different results.

156.   Another approach might be for the NRCRRF to consist of just meeting the demand for the development and publication of general guidance for conducting RCRR. The demand was for general guidance and a standardised proforma on which to build a programme, rather than for a detailed mandated entire approach. The guidance published would present options for how to implement RCRR and allow for flexibility of approach. If taking a non-mandatory approach, it may be assumed that local RCRR will evolve with greater differences in approach in a way that does not present two distinct 'different' activities with a risk of clashing. Whilst there could still be national data collection is some form, a flexible approach to implementation would make reduce its reliability as a local comparator. At the same time, any externally conducted

programme has a reduced risk of causing some of the possible negative impacts that an internally conducted programme would and a clear distinction of the two types of activity may be further beneficial in this regard.

6.2 NHS Wales

157.   In July 2013, the Welsh Government published 'Delivering Safe Care, Compassionate Care' which included mandating all hospitals to establish a consistent, standardised system for reviewing all in hospital deaths to detect potential harm. There has been variation in how this has been implemented with sampling and case selection commonplace and the use of a two stage approach. For example, Cardiff and the Vale UHB select cases where coding suggests a low risk of death (17% of their total deaths)[14] and then use a two stage tool to review these.

158.   To support the wider implementation of mortality reviews, a working group has led the development of a standardised proforma that was developed through wider consultation including national learning days. The resultant work is described as 'Universal Mortality Review' (UMR) and consists of a series of yes/no questions[15] to be answered for each death. It should be considered as a screening tool and not a tool for conducting an in depth review of care. It does not resemble any of the screening or full review tools considered in the literature review or QQA and it is sometimes altered for local use. This programme of work has not made recommendations around the process for implementation with wide variation in use recognised. Developing recommendations for implementation is the current focus of the working group. In discussion with them, we have identified some common themes:

* They also encountered widespread variation in practice and disagreement about how best to implement RCRR

* They used wider consultation to develop the UMR but are approaching development of recommending a process in a more controlled way using a small working group to determine the recommendations

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[14]

http://www.cardiffandvaleuhb.wales.nhs.uk/sitesplus/documents/1143/Agenda%20item%203.6%20Mortality%20and%20Harm%20.pdf

[15]Are you satisfied that the wording on the death certificate adequately reflects the cause of death? Has the death been referred to the Coroner because of uncertainty about its cause, or the circumstances leading up to it? Was this death anticipated, given the clinical presentation of the patient at admission? Is there any indication of concerns from family or carers about the care this patient received? Is there any evidence of documented concerns about this patient's care raised by other health professionals? Do you have any concerns about the care this patient received? If the patient's death was anticipated, is there evidence of the following: Use of the Integrated Care Priorities (ICP) document. DNACPR documentation. Indication that family/carers were reconciled to death. Based on your responses to the questions above, do you feel this case requires further review? Please give your reason.

- They also encountered a widespread anxiety about using RCRR to measure rates of preventable death

159. It is important to highlight that there are significant risks to drawing too strongly on the experience of NHS Wales when considering how to run an NHSE programme. Firstly, there are significant differences in scale. Secondly, the regional and national structures are different, particularly in terms of the organisational independence of their hospitals. Thirdly, we do not know if the stakeholder environment is comparable in terms of the degree to which there were established approaches at hospitals which nationally recommended approaches had to overrule. Fourthly, there is not good evidence about the success of the UMR in terms of implementation (some evidence suggests variation ranges from 47-100%)[16]. It is essentially a limited screening form, not a process or proforma for in depth review. We have identified the process and in depth review as being particularly challenging in terms of implementing a common approach.

6.3 Medical Examiners

160. At the outset of this review, NCEPOD gave consideration to the role that might be played by Medical Examiners (MEs) in any NRCRRF. We considered there to be potential strengths for an approach delivered by MEs as they would represent a consistent structure and workforce, have a high degree of independence and have a professional background and training suitable for conducting RCRR.

161. To further explore the potential overlap we met with Professor Peter Furness. Professor Furness has also given consideration to how MEs might implement a programme of RCRR to identify deaths preventable "by virtue of events occurring within secondary care" nationally and summarises the necessary steps as follows:

- a minor modification to the medical examiner training system to help them to identify consistently which deaths should be so recorded (as preventable)
- a minor modification of the medical examiners' database to allow such deaths to be flagged
- a minor modification of the medical examiners' database to allow the relevant information to be downloaded.

162. Professor Furness highlights the following advantages:

- It would cover all deaths in hospital, not just a random sample.
- It could, if desired, cover primary care, deaths at home and deaths in care homes etc. as well as secondary care
- It would take place immediately after death, so any necessary involvement of the coroner would take place at the appropriate time, rather than having to inform the coroner and inform the relatives some weeks or months after the death that the death had been potentially preventable.

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http://www.1000livesplus.wales.nhs.uk/sitesplus/documents/1011/PHW%20Mortality%20Reviews%285%29.pdf

- Scrutiny would be by medical examiners employed by Local Authorities, with all the independence that has been demanded of the new death certification system, rather than being undertaken by doctors employed by the Trust.

163.   Whilst recognising the benefits of this approach, it should be noted that an external programme of RCRR such as this would diverge from the Trust owned approach that we have considered as a mandatory component of any NRCRRF. Without Trust ownership and clinical engagement there is a risk of a reduced potential from positive learning and improvement. This approach does not represent an absolute barrier to this, and could be developed with supportive work undertaken to ensure maximum collaboration and positive learning between the Trusts and their staff and MEs. However, given the unclear timetable for the implementation of MEs, any associated NRCRRF would be similarly restricted and would not therefore be suitable for recommendation at this stage.

6.4 Involvement of existing cohort of RCRR

164.   We have defined the existing cohort of RCRR as those individuals conducting RCRR at Trusts at present and the cohort of individuals forming the PRISM programme of reviews.

165.   Individuals conducting RCRR at present will be doing so in varied ways using varied methodologies and as such there is limited scope for a specific programme of work to develop NRCRRF on an assumption of them playing a particular role. We should expect those individuals to act as potential local leaders and champions of any NRCRRF (dependent on their approval of the content of any NRCRRF) but it would not be feasible to view them as a singular group.

166.   PRISM reviewers have the advantage of having been through a consistent training programme and they have used the same tool in the same way. As such, they do represent a singular group. However, we cannot at this stage measure their willingness (as non Trust employees) to be similarly involved in any NRCRRF. And as such, again, the programme should not be designed with an expectation of their involvement. The greatest potential for their involvement would be in two areas.

167.   Firstly, if the proforma used in any NRCRRF is similar (or the same) as the PRISM tool, they would potentially be useful for supporting training in both the intense setup phase and on an ongoing basis. Secondly, we have identified strong support for local programmes of review and support for NRCRRF activity and these individuals would be suitable for involving in this work. They would be ideally placed to work with local reviewers to visit other Trusts to provide feedback on the quality and consistency of their RCRR, especially if the proforma used is similar (or the same) as the PRISM tool.

6.5 Patient and public involvement

168.   The CSI with a patient representative organisation identified a number of important issues. There was strong support for a NRCRRF and in particular for disclosure of findings to NOK to be mandated. Please see the full CSI report for full details but from it we have determined that any NRCRRF should

- include patient/public representation on its NHSE supervisory body

- using the suggested approaches described in the CSI as a starting point, undertake consultation with patient/public representatives to confirm the basis for and best practice in undertaking disclosure

- include this issue within training

169. We do not foresee undertaking these activities as requiring significant additional costs but have considered within out costings for content development.

APPENDIX 1- CONSULTATION GROUP MEETING REPORT

Contents

Introduction

The Quantitative and Qualitative Analysis (QQA) and Case Study Interviews (CSIs) identified a lack of consistency in how RCRR was being conducted at Trust level both in terms of the process and the proforma(s) used. A literature review failed to identify any one particular approach as suitable for recommendation. As such, informed by the literature review, the QQA and the CSIs NCEPOD developed a 'components paper' that attempted to factor in all the main different possible components of a RCRR at a Trust level.

We then held a one day meeting with a consultation group of over 30 staff involved in leading and developing RCRR at Trust level to seek their views on the relative strengths and weaknesses of these different options. Attendees were a mix of Consultants (surgeons, physicians, and anaesthetists), Associate/Deputy Medical Directors, Medical Directors, mortality programme leads, registrars, Clinical Governance staff and Allied Healthcare professionals. There were also representatives from the Royal College of Surgeons, the Royal College of Anaesthetists, the Royal College of Physicians and the Royal College of Emergency Medicine. The majority of attendees were Consultants which should be kept in mind in relation to the findings regarding involving the wider healthcare team.

The components were divided into three separate areas defined as Review Process Structure, Organisational Elements and Core Components of a case note based mortality review. At the meeting the 'components paper' was presented with each element discussed and then participants asked to rate on a scale of 1 to 10 whether they felt the inclusion of a particular approach was important for any nationally recommended programme with 1 being not at all important and 10 being considered very important.

We have previously described the degree of active disagreement surrounding any particular approach to implementing a NRCRRF. It was beyond the remit of this project to undertake a fully evaluated review of support for approaches to RCRR amongst the diverse and potentially large stakeholder audience. The sample size of participants and the absence of measures to ensure they were representative mean the findings of the CGM will have applicability limitations. It was more achievable to seek to find those areas where there are very clear preferences to allow a least a general sense of what a NRCRRF would consist of.

As such, we have not conducted a full analysis of all the scores provided, but instead findings are presented in groupings of related components ranked against percentages of individuals scoring an element as 8 or above alongside absolute numbers.

From reviewing the scores it was clear that nearly every component or data point had at least some participants rating them as 8 or above, providing another demonstration of the huge variation of opinion. It does not necessarily mean that a component or data point measured as having not received strong support in this report would be objected to widely if implemented or would not be of objective value. Establishing where that might be the case could only be achieved through wider consultation. We have tried to highlight in the discussion points where we noted strong objections to certain approaches. We also detail any key comments or discussion of note regarding some of the

options noted on the day, supported with comments regarding the overall findings of the CSI and the QQA.

We then summarise those areas where we have found what we have classified as strong (51%-75% rating as 8 or above) and very strong support (76%-100% rating as 8 or above). In the absence of an evidence base, these can form a cost effective measure of what can be considered best practice from an expert opinion standpoint and serve as a framework for the commission of a NRCRF.

Key Findings

It is helpful to highlight a number of findings from the discussion on the day that NCEPOD identified as important for the development of any NRCRRF. They reflect the findings of the CSIs.

1. There was enthusiasm for guidance about how to run RCRR at Trust level.

2. Whilst there was enthusiasm for guidance in principle, there was a lack of consensus as to what this guidance should consist of with some very strong disagreement about the inclusion or exclusion of some components.

3. RCRR was seen as having a high potential as a mechanism for supporting learning and encouraging peer review and self reflection amongst healthcare professionals.

4. There was strong concern that any centrally driven programme might reduce this positive potential by introducing a new focus on the outcomes of RCRR as individual and organisational performance management tools. Additionally, there were concerns that the introduction of elements related to quality governance and appraisal or making review findings higher profile within an organisation might have a similar affect.

5. There was particular concern about an overall figure for preventable deaths or percentage or number of patients receiving less than good enough care becoming a mechanism by which Trusts are ranked in terms of performance with associated negative publicity for organisations ranked the lowest.

Review process structure

Trust wide process or specialty processes

RCRR can take place under the direction/management of the Trust as a whole (for example under a generic quality division or under the auspices of the Medical Director) choosing cases from across the patient population at the Trust and asking a wide variety of professionals or a limited expert team to conduct the reviews.

Or it can take place within specialities, reviewed only by staff working within that specialty, potentially only considering quality of care issues with direct relevance to them and without the wider sharing of their findings. These divisions can vary in specificity for example Medicine or Surgery or Gastrointestinal Medicine or Vascular Surgery, but they are distinguished from Trust processes in that they do not draw from across the entire patient population.

As such all three elements received strong or very strong support with discussion on the day clearly indicated preference for supporting both elements as being vital to a successful RCRR programme. This is not as clearly represented in the figures as many participants rated either one or both of specialty and trust wide as 8 or above in addition to rating 'Both' as 8 or above.

Type of process	Number of participants rating as 8 or above	Percentage
Both	19	86%
Specialty	18	75%
Trust	13	68%

Individual review or paired or wider team review/mortality review meeting

Conducting a detailed RCRR can be done as an individual or with two or more people. This may be done to such an extent that there is one form completed on the basis of consensus or it may be overall individuals supporting each other at certain points of discussion with completion as a whole done independently.

Participants demonstrated very strong support for RCRR review conducted on a wider team basis. On further discussion on the day, wider team review was meant not in terms of conducting an entire RCRR as the wider team, but finalising or at the very least discussing each RCRR as part of a wider team. Discussion on the day indicated this was also the preference also for those who selected individual or paired review as the primary method for which the RCRR was completed. This was in keeping with the other finding below in relation to the inclusion of a meeting as a highly desired element of any RCRR processes.

Reviewer numbers	Number of participants rating as 8 or above	Percentage
Wider	11	77%

Paired	3	39%
Individual	11	58%

Mortality review meeting	Number of participants rating as 8 or above	Percentage
High	15	75%

Independence of reviewers-self review or within specialty or out of specialty

Consideration must be given to the risk of partiality impacting on the objectivity and therefore validity of any RCRR. A reviewer looking at their own care would present the greatest risk of partiality whilst ensuring reviewers do not work within the same specialty (and are therefore less likely to be close working colleagues) presents the least risk.[17]

There was strong support for within specialty and out of specialty review with self review not receiving strong support. For those that did support self review, this was considered suitable within a programme where others would have the chance to input into any RCRR for example at the aforementioned meeting considered strongly desirable as part of any programme. It was also raised that self review permitted a self reflective experience in addition to the peer review experience of the other approaches.

There were concerns that whilst out of specialty reviews might create a reduced risk of partiality they would also potentially lead to lower quality reviews in terms of reduced understanding of more specialist care quality issues when reviewing care outside a reviewer's field of expertise. On the other hand it was felt out of specialty reviews would provide fresh and different insights (and this can be seen as related to the benefits of having Trust as well as specialty processes with the former inherently introducing out of specialty reviews).

Independence of reviewers	Number of participants rating as 8 or above	Percentage
Within specialty	13	68%
Out of specialty	14	67%
Self review	6	30%

Multidisciplinary and wider team involvement in review

As mentioned in the introduction, it should be noted that there was very limited representation of other professional groups at the meeting. RCRR is largely conducted by Consultant grade doctors at present. During the CSIs we did not encounter any views to suggest this should not be the case and as such we did not think consulting on this point was needed at this stage. We found examples of senior and specialist nursing staff, registrars and to a lesser extent junior medical staff conducting

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[17] Aside from a programme where reviewers are external to the Trust, which was not been considered as a viable approach within the context of a Trust based programme of RCRR

RCRR independently. We did not find examples of other grades of nursing staff or other members of the allied health professions (e.g. pharmacists, dieticians, nutritionists) conducting RCRR independently and there was a commonly expressed opinion that they would not have the necessary expertise to do a full review on their own. This has been expressed by these groups in the past directly to NCEPOD. It was more likely for them to be taking part in the process through team discussion of cases rather than as independent reviewers.

This was supported by discussion on the day generally agreeing that non senior nursing, and other allied healthcare professionals would not be able to complete RCRR independently with a sufficient degree of reliability.

The greatest amount of support was for senior nursing staff and non-Consultant senior medical staff (NCSMS) (usually registrars) completing RCRR. There was support, though to a lesser extent, for junior medical staff (NCJMS) to complete reviews as well.

Throughout the discussion it was clear that any of these aforementioned groups undertaking RCRR would only be desirable within the context of their findings being subject to discussion and potentially further review by Consultant medical staff. This could be done through a wider team meeting as discussed above, but not necessarily.

Component	Number of participants rating as 8 or above	Percentage
Senior nursing staff conducting reviews	16	66%
NCSMS conducting reviews	15	62%
NCJMS conducting reviews	12	54%
Other AHPs conducting reviews	11	48%

Case selection

The CSIs found examples of using a random approach to case selection or determining some criteria through which deaths would be selected and also examples of more specialist screening tools that required a degree of training/expertise to be implemented. In some Trusts all deaths were reviewed.

There were significant criticisms during the discussion of all the approaches with each being seen as having important strengths and weaknesses. Random case selection would not be sufficient as there were some circumstances in which participants felt a death should always be subject to RCRR both within particular specialities and at Trust level. Screening/selection was not considered sufficient as participants felt any programme that only selected cases on the basis of pre determined criteria risked introducing a degree of bias to the findings and creating unrepresentative samples of the patient population. Arguments against reviewing all deaths centred on the practical and cost implications of doing so and, for those preferring it, on discussion this was usually through a two stage process with stage one being a high level screening step.
As such we found strong support for using both random and screening/criteria for case selection. Discussion on the day suggested the best approach would be to apply a mixture of both random case selection (most likely as part of a Trust wide process) and the use of screening, selection and random

approaches depending on specialty. It was also considered potentially beneficial for a Trust wide process to conduct themed reviews of particular patient populations through the use of selection criteria as well. It was felt that even Trust wide processes looking at the wider patient population would not replicate the high potential for good quality learning that could be gained from looking at higher numbers of a well defined group of the patient population in terms of identifying cross cutting themes for improvement (e.g. out of hours admissions). This point is also raised below in terms of proforma development. In comparison to the frequency of this approach being used by CSIs, there was less support than expected for reviewing all deaths.

Component	Number of participants rating as 8 or above	Percentage
Random	13	65%
Screening/criteria	12	54%
All deaths	8	40%

Quality control

Quality control can be broadly described as seeking assurance that the findings of individual RCRR are valid in terms of the conclusions being reached and information extracted. This can be challenging because there is not an objective framework against which all the elements of a RCRR can be judged. In place of an objective standard, inter rater reliability has become the standard in academic literature.

The CSIs identified only one example of a defined process of cross sampling, and no other examples of formal attempts at quality control. One of the main arguments for wider group involvement in RCRR, particularly for overview meetings, was to act as a quality control mechanism, but it was recognised this would not be as effective as formal processes.

Across these components, levels of support were not particularly high as there was a general consensus that these types of elements all risked stifling a spirit of positive improvement associated with the current work of RCRR. By making the idea of correct and incorrect review findings more explicit, it was felt the surrounding mentality around RCRR might become less collegiate and more adversarial.

There was not strong support for conducting cross sample reviewing or reviewer tracking. Discussion on the day identified this as being considered overly bureaucratic/time consuming relative to potential improvements in RCRR. There was even less support for a system for retraining those conducting RCRR and minimal support for a process that allowed individuals consistently conducting poor quality RCRR to be excluded.

Component	Number of participants rating as 8 or above	Percentage
Cross sample/reviewer tracking	10	48%
Retraining	8	40%

Reviewer exclusion	4	17%

CSIs also identified occasions where there had been internal disagreement between the findings of a RCRR and the opinion of the treating Consultant. One Trust had a clearly established process for such cases to be considered and decided by a senior staff member at Trust level (rather than one working within any particular division) and discussion on the day supported the Medical Director taking this role. There was strong support for the Trust arbiter approach. It was generally viewed inadequate in terms of independence to allow arbitration to take place within the specialty of the case and it was generally viewed as positive to allow the findings of an individual reviewer to be challenged in the interests of fairness.

Resolution of disagreement	Number rating that preference highest between options	Percentage
Trust	13	72%
Specialty	7	44%
Reviewer	7	41%

Participants were also asked how the overall quality of the RCRR (successful implementation of the agreed process as well as just reviewing the findings of individual RCRR) could be maintained through external review. There was not strong support for a programme of national review but there was strong support for a programme of local review, with Trusts visiting, reviewing and comparing practice amongst Trusts within their region.

Component	Number of participants rating as 8 or above	Percentage
National review	1	6%
Local review	13	59%

Organisational elements

Reporting of results - Board or subcommittee

CSIs identified examples of where the findings of RCRR were reported directly at Board level. Other examples included findings included in summary form as part of wider report on quality or mortality with more detailed findings considered at subcommittee level.

There was very strong support at the CGM for RCRR findings to be considered directly at Board level. In addition there was a suggestion that there was both an Executive and Non-executive Director with particular responsibility for responding to any findings. There was a suggestion that RCRR could be used as a source of patient stories to be considered alongside the technical findings of a case as a method of engaging Board members in quality improvement.

But there was also strong support for RCRR work to be considered at subcommittee level with discussion on the day emphasising that the findings should be considered by a subcommittee with a quality focus and with membership sufficiently senior to effectively respond to findings.

	Number of participants rating as 8 or above	Percentage
Reporting to Board	22	100%
Reporting to subcommittee	14	70%

Disclosure to next of kin

CSIs reported almost universal support for the principle of disclosing the findings of RCRR to next of kin. However, there were examples of where this was not being implemented despite recognition that it should be. There were other examples where it was reported as happening but without a clear description of how this was being undertaken, generating concern that it might not be in practice or at least not consistently. Concerns were expressed about what the threshold for disclosure should be when there were adverse findings that were considered more subjective. It was felt that unnecessary distress might be caused to grieving relatives. CSIs also captured concern about resultant litigation or complaints, but with others supporting the view that proactive disclosure reduces rather than increases this.

Discussion with Action Against Medical Accidents advised a low threshold for disclosure but suggested providing the opportunity for someone to decline receiving the information. They also emphasised that training and support was needed for those conducting the disclosure.

These discussions were exactly replicated on the day with very strong support for disclosure. But it should be noted that it could best be described as reluctant support-recognising it as the correct approach but with concerns about how to do it and the potential negative consequences.

Disclosure to NOK	Number of participants rating as 8 or above	Percentage
High	15	79%

Linking with appraisal

CSIs identified examples of where participation in RCRR was automatically reviewed as part of the appraisal process for Consultants. There were also examples of where the actual findings had been considered as part of appraisal in terms of the care outcomes for a particular Consultant's patients.

There was strong support for linking participation with appraisal, and not just for Consultants, but for all those where there would be opportunities to participate. There was not strong support for linking the results with appraisal. Participants were concerned that this might damage the potential of RCRR to act as a positive learning activity with people feeling comfortable about the care of their patients being reviewed.

	Number of participants rating as 8 or above	Percentage
Link participation	14	70%
Link results	6	30%

Concerns over individual practice

CSIs identified examples of where the findings of RCRR had been drawn upon at least in part to inform evidence to support performance management action against a clinician (as opposed to simply taking into account findings as part of general appraisal as discussed above). However, there was a widespread lack of formal mechanisms and procedures for supporting those undertaking RCRR to raise serious concerns about individual practice. When proposed as something to be considered, it was largely (but not universally) recognised as necessary.

We did find strong support for this at the CGM, though there was some very strong opposition from some individuals during discussion on the day. There were concerns that this would have a negative impact on the willingness of clinicians to positively engage in the process, particularly if one of their colleagues experienced a negative professional outcome as a result of the process. And there was a view that informally any serious concerns would be dealt with even if this was not an explicit part of the process. There was a suggestion that as a compromise this might be included discreetly within training, rather than including on the proforma explicitly.

NCEPOD's experience of good governance procedures for this type of work suggests that such a component is necessary and we note this was also in place for the PRISM studies. Whilst recognising strong disagreement from participants on this issue, in our opinion as an absolute minimum this should form a clear and explicit part of training for reviewers if it is not included as a prompt on RCRR forms.

Concerns over practice	Number of participants rating as 8 or above	Percentage
High	12	67%

Linking with SI processes

CSIs identified widespread support for allowing the findings of RCRR to feed into the SI processes at Trusts, even if there was patchy implementation. We found very strong support for this at the CGM as well. The QQA identified this was not commonly on proformas though, but discussion on the day supported this as well.

Link to SUI	Number of participants rating as 8 or above	Percentage
High	16	84%

Training

CSIs did not identify any extensive training curriculums for conducting RCRR at Trust level and usually the absence of any training of any kind. As such NCEPOD developed a summary of the elements we considered necessary and asked CGM participants to identify additional elements we had not included. There were no further additional elements and there was strong or very strong support for including all the elements we had identified as part of the training curriculum.

Curriculum content	Number of participants rating as 8 or above	Percentage
Identify learning	16	89%
Making judgements	16	84%
Proforma	13	76%
Probability	12	71%

In terms of training methodology, CSIs identified examples of train the trainer in use at one regional programme but otherwise any training that was delivered was instructor led. This was supported as preferable by the CGM participants.

Training approach	Number of participants rating as 8 or above	Percentage
Instructor led	15	79%
Train the trainer	10	56%
E-Learning	5	28%

There was also strong support for tailoring training to individuals dependent on their role within the process (primary reviewer or wider team) and their professional background.

Tailoring	Number of participants rating as 8 or above	Percentage
High	11	65%

Core components of a case based mortality review

The options presented for this element were based primarily on those found on existing proformas through the QQA. It should be emphasised again, that NCEPOD would not consider this exercise sufficient to make a strong recommendation as to what should be used in a RCRR for use at Trust, as it has not been subject to full consultation and the options presented were based on a review of 39 proformas which may not have been representative.

It would appear that the variation in what is included in RCRR forms at present is at least in part related to a lack of guidance/leadership on what should be included as there was strong support for including a large proportion of the presented data points in contrast to the lack of consistency on the forms actually in use, with discussion on the day generating less active disagreement when compared to considering the other components of implementing the programme considered in the other two domains. Though this does not discount that there was still a proportion of participants that preferred a much simpler form than the one that would result from incorporating all the data points strongly or very strongly supported by the majority of participants.

Patient demographic/clinical status

We did not consult on the suitability of including data points such as sex and age as this was done universally. Whilst there was very strong support for including co-morbidities, we did not find strong support for any particular way of doing it or for including any of the other patient demographic/clinical status data points below.

Comorbidities	Number of participants rating as 8 or above	Percentage
High	12	80%

How to record co morbidities	Number of participants rating as 8 or above	Percentage
Free text	10	37%
Short List	10	37%
Long list	7	26%

AMT (on admission)	Number of participants rating as 8 or above	Percentage
High	7	50%

Functional status	Number of participants rating as 8 or above	Percentage
High	6	38%

Patient journey

Discussion on the day highlighted the possible benefits of using electronic systems to automatically populate the majority of these fields. There was strong or very strong support for including all of the data points below.

Patient journey	Number of participants rating as 8 or above	Percentage
Admission at weekend	15	88%
Admission at night	15	88%
Admission OOH	14	78%
Ward movements	15	75%
Time of admission	11	65%
Mode of admission	11	65%
Source of admission	10	56%

Care events

There was strong or very strong support for including most of the data points below.

Care events	Number of participants rating as 8 or above	Percentage
Time of last senior review	16	100%
Time of last Con. Review	20	95%
Time until clerking	14	78%
Emergency surgery	11	69%
ITU admission/involvement	12	67%
High Mews	11	61%
Falls	4	29%
Transfusion	4	25%

Identify whether standards were met

These data points relate to a clinical care issue and ask for the reviewer to assess whether particular standards of care were met. There was strong or very strong support for including less than half of the data points below.

Standards of care	Number of participants rating as 8 or above	Percentage
Response to deterioration	19	95%
End of Life care pathway/palliation	14	74%
Management plan	13	68%
Acute Kidney Injury	8	50%

Core components of a case based mortality review

Antibiotics		7	44%
VTE assessment & treatment		7	44%
Recording of allergies		4	20%

Problems in care

There was very strong support for including a data point that allowed a narrative of the problems in care to be described, but there was also strong support for including a list from which pre determined categories of problems could be chosen. Discussion on the day suggested this was because a list alone would not allow for valuable undefined insights to be captured, but there was recognition that from a quality improvement approach categories of problems that could be measured and tracked over time would be valuable.

Problems in care	Number of participants rating as 8 or above	Percentage
Narrative	16	84%
List of problem categories	10	63%

In terms of what options should constitute the makeup of the list, there was strong or very strong support for including all of those contained within the components paper.

Problem categories	Number of participants rating as 8 or above	Percentage
Error in treatment	18	86%
Delay in treatment	18	86%
Delay in diagnosis	17	81%
Error diagnosis	17	81%
Delay Investigations	16	80%
Failure to rescue	14	74%
Drug error	12	67%
Infection	10	63%

Governance links

In keeping with the findings in relation to the organisational processes linking RCRR with SI and quality improvement processes, this was further supported by strong support for enabling this through actual inclusion as data points on the proforma.

Governance links	Number of participants rating as 8 or above	Percentage
Link to SI	9	60%
Link directorate process	9	64%

Core components of a case based mortality review

Link to Trust process	9	56%

Learning

There was very strong support for the proforma specific asking reviewers to consider the potential learning that might be drawn from the case and there was strong support for enabling this through both a narrative and categories approach, mirroring the discussion held in regard to the assessment if problems in care through narrative and categorisation. Additionally, there was very strong support for asking reviewers to identify aspects of good practice-something also strongly supported by CSIs despite very rarely being identified as happening in the QQA.

Is there learning?	Number of participants rating as 8 or above	Percentage
High	18	86%

Narrative/Categories/Both	Number of participants rating as 8 or above	Percentage
Both	13	62%
Narrative	8	38%
Categories	0	0%

Good practice	Number of participants rating as 8 or above	Percentage
High	15	94%

Specialty proforma

The QQA and CSIs identified that specialist proformas were in use within different specialist at some organisations, either as standalone proformas or as modified version of a pre-existing one. As described above in consideration of the question as to whether RCRR processes should be specialty or Trust wide, there was strong support for both Trust and Specialty processes over Trust wide alone processes. However we did not find strong support for any NRCRRF undertaking development of specialty proformas directly. Instead, discussion on the day indicated a preference for professional bodies to either develop specialty proformas from scratch or to ask them to develop additional additions to a proforma recommended for Trust wide use (to improve the ability to establish and share common data sets).

Furthermore, it was felt that this approach could also be used at Trust level to allow Trusts to focus on issues of particular concern to them, with NRCRRF potentially playing a role in developing 'off the shelf' issue specific sets of data point for Trusts interested in looking at particular issues in more detail (e.g. pneumonia, AKI).

Specialty proformas	Number of participants rating as 8 or above	Percentage
High	6	40%

Overall rating of care

It was noted in the QQA and CSIs that there is a significant contrast between current ambitions from the Department of Health to use RCRR as a basis for measuring preventable death, and the general absence of this (or indeed overall ratings of care of any kind) from RCRR work at present and the active disagreement that it would be desirable or achievable.

We did find strong support for including a data point related to considering overall quality of care (for example the NCEPOD rating). In keeping with the other findings there was not strong support for including a score of death preventability.

The discussion on the day reflected the findings of the CSIs-namely a lack of an evidence base as to how to do it effectively and the concern it would lead to performance management and negative publicity that would have an adverse impact on the ability of RCRR to act as a positive quality improvement too. These views were held very very strongly. It was considered that an overall quality of care score would be able to be measured more reliably, but there were also concerns that the use of this approach could have the same aforementioned negative impact.

Overall score	Number of participants rating as 8 or above	Percentage
Overall quality of care score	15	75%
Preventability of death score	8	42%

Further additional comments

There were a number of additional points raised through discussion on the day that do not fit neatly within one of the specific domains outlined above. As such we have included them in this separate section.

Capacity: There were concerns that at present and in the future that participating staff would not be allowed the necessary time or be given the necessary support to allow for RCRR programmes to be run effectively with any NRCRRF introducing undue pressure on staff time to allow participation.

Terminology: It was felt that shifting the terminology to one of peer review and quality improvement (as opposed to a focus on death preventability and good and bad quality of care).

Ownership: No matter what any NRCRRF might constitute, there was a desire to see this body of work remain under clinical and local ownership as much as possible.

Morbidity: There was a concern that the focus on mortality, only looking at patients that had died, would not necessarily reflect the overall burden of less than good enough care and the opportunities to improve on it. There was a suggestion that samples of patients that hadn't died might also have their care reviewed using the same mechanisms established for RCRR.

Setting: There was a concern that the focus on just hospital deaths and hospital care (not including primary and community care) would as with morbidity, not reflect the overall burden of less than good care and the opportunities to improve on it.

NOK and professional patient involvement: The possibility of involving the NOK in the process of reviewing the patients care was raised, as well as the possibility of involving lay or patient panel members.

Personal relationships: Related to discussions regarding the concerns about independence, there was a particular concern that national policy development failed to take into account the sometimes very significant negative personal relationships that exist between clinical professionals in local organisations. There was concern that this was not recognised when considering the design of programmes like the one being considered with an example given of how a case note reviewer might be reviewing the care provided by a colleague with whom they have an antagonistic relationship.

Components and data points receiving strong or very strong support

This section summarise those areas where we have found what we have classified as strong (51%-75% rating as 8 or above) and very strong support (76%-100% rating as 8 or above) or the preferred option for a necessary component. In the absence of an evidence base, these can form a cost effective and reasonably reliable measure of what can be considered best practice from an expert opinion standpoint.

As mentioned, it should be reiterated that it does not necessarily mean that a component or data point measured as having not received strong or very strong support in this report would be not be of value though and as such this section can act only as a general guide.

Review process structure

The strongly or very strongly supported components were

1. Running both Trust wide and specialty processes
2. Individual and wider team reviews, always allowing the wider multidisciplinary team to have involvement in the review of cases by discussion or a further review component
3. Implementing a mortality meeting to review findings of RCRR
4. Reviewers reviewing cases from within the same specialities
5. Senior nursing staff and senior and junior medical staff acting as primary reviewers within the context of allowing for wider comment
6. Random and screening/criteria used for case selection
7. Establishing a mechanism for an individual sitting outside of specialities (such as a Medical Director) to arbitrate disputes over RCRR findings
8. Establishing programmes of local peer review of RCRR programmes at different organisations

Organisational elements

The strongly or very strongly supported components were

1. Detailed findings from RCRR programmes to be reported at Board level and also to a specific subcommittee
2. Establishing a process for disclosing adverse findings from RCRR to be disclosed to next of kin
3. Link participation in RCRR to appraisal where it is possible for individuals to participate
4. Ensure there is a defined mechanism through which serious concerns regarding individual practice can be raised by reviewers
5. Link any RCRR programmes to the SI processes of a Trust
6. Train reviewers on identify learning, making judgements, the proforma and probability
7. Use instructor led or train the trainer approaches

8. Tailor training to the role (primary reviewer or wider team) and professional background of participants

Core components of a case based mortality review

The strongly or very strongly supported data points were:

Patient demographic/clinical status
Comorbidities (in some form)

Patient journey
Admission at weekend
Admission at night
Admission OOH
Ward movements
Time of admission
Mode of admission
Source of admission

Care events
Time of last senior review
Time of last Con. Review
Time until clerking
Emergency surgery
ITU admission/involvement
High Mews

Standards of care
Response to deterioration
LCP/palliation
Management plan

Problems in care
Narrative
List of problem categories

Categories of problems
Error in treatment
Delay in treatment
Delay in diagnosis
Error diagnosis

Delay Investigations
Failure to rescue
Drug error
Infection

Governance links
Link to SI
Link directorate process
Link to Trust process

Learning
Identify learning
Use narrative/categories
Highlight good practice

Overall score
Quality of care score

Components and data points receiving strong or very strong support

APPENDIX 2-CASE STUDY INTERVIEWS

These are the interview notes written for the case study interviews included for reference purposes with relevant findings noted in the body of the main document.

Contents

Case Study 1-Large Acute Trust

Case study interview record

Noted features from survey/proforma: Actions/outputs tracking across the Trust.

Individual: Quality and safety officer, non clinical.

Notes:

Process: There is a Trust wide patient safety committee-primarily looks at Dr. Foster data. Monthly meeting. Two mechanisms related to case based reviews. Every death on site reviewed with the full proforma but this is not particularly detailed. Some discussion but concluded filtering not considered appropriate. Though this is under constant review and they might do more detailed reviews but of fewer cases. Additional reviews based on Dr. Foster. For example aspiration pneumonia/sepsis. Then more specific reviews e.g. add in antibiotics/CURB.

High death rate specialities discussed in monthly Governance meetings with wider attendance. But no clear structure for review/oversight from outside of specialty. Site based mortality reduction committee-some variation in practice. For example one site not discussing/considering cases without issues in proforma.

Reviewers: 95% done by Consultant/registrars. Originally small group of Consultants taking part from outside of specialty. Now wider participation but within specialty review is the norm. Consultants kick back regarding support/time of governance. Audit has PA, mortality not so.

Data: Spreadsheet record of all deaths reviewed with top line yes/no answers. Used for trend analysis. Excel spreadsheet. Built on PAS system for patient deaths. Second excel log with issues and actions.

Learning: Weekly physicians meeting with Consultants and juniors. One a month is a mortality feedback.CCG follow Dr. Foster through mortality alerts.

Candour: Not disclosing to carers/relatives generally. Concerned that this would impact negatively on culture.

National programme: Concern re: pushing it more, will want job plan/paid for time they are using. At the moment approximately one third very supportive, one third try and one third disengaged. Weren't comprehensively linking into SI data/recoding. Not formally required. Now being required. Open to external review/sampling review. Issues of evidencing the depth/breadth of discussions not being recorded on proforma. Particularly when obvious no cause for concern. Would be happy to upload to a national data set some standard questions. Higher rate of issues box being ticked rather than avoidable death. Doesn't think a reliable/consensus based preventable death consensus workable. Very opinion based.

Conclusions: Large programme, good Consultant involvement, some positive learning but no formal structured approach for all trainees. Honest appraisal regarding levels of enthusiasm and how sustainable that might be particularly in terms of all deaths.

Case study 2-Small Acute Trust

Case study interview record

Noted features from survey/proforma: Post graduate director of medical education manages meetings, actions get followed up in writing by either AMD or in some cases MD. Electronic proforma.

Individual: Associate Medical Director.

Notes:

Background: Strong history at Trust. Historical governance work identified Trust as an outlier for mortality. Work was undertaken to review mortality with him as MD at the time and this process of review identified unexpected deaths that led to criminal action.

Process: From that point on, for historical reasons, they have always reviewed every death at the Trust. Was done using a Royal College of Pathologists proforma. On the basis of the initial review around 10-20 percent have more in depth reviews where possible problems have been identified.

Common problems include fluid balance, surgical complications, delays in clerking, misdiagnosis, poor death certificate sign off. He would then write to individual clinicians as necessary and followed up serious concerns.

Findings of these case reviews are presented at the Grand Round, mostly attended by 30-40 Consultants.

They also conduct thematic reviews, for example in response to recent NCEPOD reviews for example most recently reviewed the care of those with Subarachnoid Haemorrhage. Some topics are chosen for sub groups reviews e.g. aspiration pneumonia, LCP.

A six monthly report of findings, used to go directly to the Board, but now goes to clinical directors and quality and safety operations board. A report of that meeting which contains some MM information then goes to the Board, representing a dilution in the Boards review.

Those cases for which death could have been prevented are expected to be followed up by the MD.

Data collection: Use an optical mark reader to allow automation but this is very restrictive as they can't make changes to the form readily. But data report just 6 monthly.

Reviewers: Deaths are reviewed by Consultants through a rota-mandatory. He provides their training for how to approach reviewing cases but recognises that still results in significant variation.

Sharing learning: The findings of the reviews go to Post Graduate education team and feed directly into topic selection for junior doctors.

Multi-disciplinary involvement: One nurse Consultant reviews cases and attends the Grand Round.

Other: No Trust wide M&M meeting. Individual specialities do have MM meetings. SI findings are followed up if discovered in the reviews but not part of formal policy/process.

Conclusions: Excellent link into education-directly linked to topics for education. Review of all deaths and good involvement of all Consultants, but no clear quality control and follow up of findings-operating more informally. Variable quality of review depending on the Consultant.

Case study 3-Small Acute Trust

Case study interview record

Noted features from survey/proforma: Sharing of learning with teaching programme, commissioner involvement, action tracking.

Individual: Consultant and Nurse leads for RCRR programme.

Background: The Trust was identified as one of 14 mortality outliers.

Process: Originally used the IHI trigger tool to pick cases for review amongst medical deaths. Found this useful for identifying significant failure, but felt that its lack of narrative focus didn't provide enough depth.

No longer use trigger tool-for a period reviewed every single death as a case based review. Was a requirement following the Keogh review but the Trust had been doing that for 6 months anyway. Originally doing specialties and 25 percent medical deaths (80 a month). Now back to doing 20 medical deaths a month chosen at random by bereavement team. Used a Kaiser Permanante Form for the Keogh review work-reviewed 300-400 deaths.

The work of the mortality reviews is not used outside of the mortality meetings and is primarily Consultant dominated. Considering bringing in the registrars to the process.

For more consistent/serious concerns they would use a more in depth organic process rather than just the case based reviews.

External Review: Team from another Trust had attended and identified some differences in review findings for a limited sample. However no formal programme of assessment.

Data: Was originally using an NHSII web based data form-now using their own Access database. 600-700 deaths now on the database. Produce quarterly reports and additional reports looking at specific issues. Find 3-4% preventable death rate-in keeping with Hogan study figures.

PRISM 2: Site for PRISM 2 study. Positive experience of their reviewers-more objective, quicker and consistent. The form being used is very specific and structured. Marked improvement in quality of reviewers in comparison to internal process.   However, feel this standard could be replicated elsewhere with local training-he doesn't feel their expertise is so great that it could only be delivered by a central team.

Preventability of death: They do asses this with Hogan scale. Those that are categorised as preventable are subjected to further review internally. Feels that even with training and a strong proforma, it remains fundamentally a subjective judgement call in many circumstances.

CCG involvement: CCG wanted quarterly reports on mortality audits. What was found, what was done, levels of improvement. No help/no in depth scrutiny and no particular interest in the case based review programme and how it works.

Reviewers: Every Consultant has to take part, it is part of their job plan but no specific Pas-feels this would be needed eventually. Variation in quality. Feels ITU Anaesthetists are effective but harsh in

their judgements. Tries to imbue reviewers not to be hypercritical-what would reasonable expectations of care be? Recognises the importance of involving specialities and will seek extra advice for some cases. Also feels taking part leads to changes over time ("hawks become more dovish, doves become more hawkish")

Candour with relatives: No process for informing relatives of findings from mortality reviews. Considers it as a form of audit and feels it would be extremely complicated. Concerned because when the press coverage of the Keogh review was prominent, one relative specifically asked whether their relatives death was assess as preventable. On that occasion their care had not been reviewed but important to note interest. Parallel SUI processes should involve disclosure.

Service improvement: Findings from mortality work as a whole have led to major service changes. For example, the creation of a new medical admissions unit. Big improvements in sepsis and cardiac mortality from introducing bundles of care. Bundle use increased from 16 to 96 percent. In one case the performance of a clinician was queried with findings from a number of mortality reviews used. But there is no formal guidance on how performance issues would be dealt with if discovered through reviews-likely directed through AI process.

Funding: Feels the Trust would divert funding to a formal programme but difficult to quantify.

Conclusions: Useful example given history. Important learning point in relation to relative asking for feedback from mortality review. Good reflection on variability of reviewers but optimistic about potential for improvement. Major service change examples but difficult to determine what was as a direct result of case based review given the high level of scrutiny mortality as a whole was under at the Trust. Not being used effectively in terms of training/learning with wider medical staff.

Case study 4-Large Acute Teaching Trust

Case study interview record

Noted features from survey/proforma: Reviewing every death. Electronic proforma. Action tracker. Widely attended M&M meeting.

Individual: Medical Consultant, Governance lead for Acute Medicine, Member of Trust wide Patient Safety Panel.

Notes:

Background: Working in the field of M&M for 15 years. Not all deaths across the Trust are reviewed-just all the deaths in Medicine (Liver unit, care of the elderly and A&E deaths also not considered by his programme)

Process: Acute medicine Registrars are assigned to a monthly rota and they have to review every death (with above noted exclusions) that month through electronic records and ward notes. They then meet with him and they discuss the Registrars preliminary findings, thereby providing a degree of moderation.

Registrars look at all the Acute Medicine specialities including their own. His advice/guidance to them is that they consider whether if this individual was their relative, would they be happy with that level of care.

Informed by personal experience of his mum having SBO but being misdiagnosed as having a UTI. In his experience, each month there are 2-3 cases where care could have been much better, 5-6 with room for improvement and majority overall good care. Around 30 deaths a month are reviewed.

The first Thursday of every month all the cases (including ones without concerns) are presented to the Acute medicine leads (consultants and registrars-timing clashes with Foundation Trainees). The meeting provides those involved directly in the care an opportunity to contribute to review of the case and he completes the form on the basis of this final stage.

Excel spread sheet record.

Consensus or follow up actions from cases-including as to whether SI procedure needs to be used.

Common concerns are delays in diagnosis, poor communication.

Proforma used was developed by a Kings Nurse as part of a PhD.

He also attends the Executive mortality meeting which is very broad, also covering SHMI. Twice a year.

Interaction with SI: Cases review programme pick up a third more SIs than would have ordinarily been reported. Where there are concerns about individuals/performance this can be pursued as part of the SI process and it is therefore not a focus of the M&M programme. The emphasis remains on leaning and improvement. This is not captured in any written policy.

Areas for improvement: Would like Foundation trainees to attend M&M meeting. Training programme leads are not accommodating necessary changes in timetable. Generally attendance from senior staff could also be improved.

Suggestions: Feels M&M work should be tied into revalidation and be used to accrue CPD points.

Other points: Can't comment with authority how the approach in Medicine is representative of different approaches in the Trust. Doesn't feel nurses have the necessary skills/experience/knowledge to conduct the work authoritatively. Disclosure to families occurs through the AI process-nothing additional as part of the M&M process. Proforma RAG rating relates to SI framework.

Conclusions: Relatively clear, robust process within Medicine but limited in scope. Excellentinvolvement of trainee doctors. Lacking multi-disciplinary involvement. Moderation provided through single lead and meeting based final conclusions. Poor dissemination of findings beyond senior team (foundation trainees currently completed excluded). Good description of feeding into AI process. Simple data recording via excel.

Case study 5-Medium Acute Trust

Case study interview record

Noted features from survey/proforma: Electronic data proforma (automated)

Individual: Consultant and Associate Medical Director for Safety & Quality, also member of Trust wide Patient Safety Panel.

Notes:

Process: No Trust wide M&M meetings-just specialty meetings. M&M work is specialty based as a whole, but SI work is Trust wide and M&M work can feed into this through Clinical Directors meeting if individual CDs raise cases. Has limited insight into the detailed work done in the divisions in terms of M&M.

No formal process for who conducts the case notes and how case notes are selected-different in every specialty.

However, every death is also reviewed by him or a senior nurse colleague and findings used to provide feedback to M&M meetings-but in an informal way.

Some specialities also ask him to review a case and feedback. Provides a steer for whether cases should be SI in cases where it is less obvious. But undertakes this in partnership with the Patient Safety Group.

No commonly used template in use across the M&M meetings. The template provided is for the work they undertake centrally. Their form is based on the IHI tool with some narrative areas added over time.

Hogan score used and monitored-if scored more than 3 referred back for declaration as use of SI.

Conclusions: Lack of formal structures and processes. Limited suitability for replication. No clear approach to sharing learning. M&M work largely specialty based.

Case Study 6-Large Acute Teaching Trust

Case study interview record

Noted features from survey/proforma: Central data collection (particularly in light of the size of the Trust).

Individual: Head of Medical Directors' Services, Head of Clinical Risk and Compliance, Senior Manager Clinical Compliance.

Notes:

There is an enormous emphasis placed on mortality data at the Trust thought the use of a proprietary data monitoring software (that is now also used by other Trusts and managed as a separate not for profit entity at the Trust). This tracks mortality in a very detailed and very timely manner.

Mortality is reviewed on a daily basis and a daily mortality email identifying every death at the Trust is sent out to all senior staff including the Executive Medical Director. The Clinical Quality Monitoring group leads the review of mortality at Trust level and is lead by the Executive Medical Director and attended by the Chief nurse, Chief Operating officer and Executive Director of Delivery.

Mortality review process: Though not initially presented as being a major or significant part of their mortality work, the Trust do in fact have a clear process of mortality reviews. They have a system of 'Medical Examiners' who have reportedly done the national medical examiner training package but are Consultants that are also Trust employees.

The examiners cannot review cases within their own specialty. There is a chief medical examiner. They will review all the cases scored as a 1 or 2. If there are any disagreements about classification between the medical examiner and patients consultant the medical examiner would review and decide. Every death is covered by this process. 10 medical examiners and they have been running the process for 18 months now. Not part of the formal ME pilots. They think it has reduced referrals to the Coroner. Aim to review each case within 2 working days of death and they have a process for feeding back to bereaved.

No review has been done of the reliability/quality of the scores being assigned by the MEs.

CCG involvement: Agreed a process for reviewing deaths of patients admitted for elective surgery. Completed by the Consultants-70-80% completion rate. Findings are used internally and reviewed on a monthly basis. A small number identify issues and they have triggered a couple of more specific reviews. Findings also reviewed by the wider clinical quality group.

Specialities: Each is expected to have a mortality review process facilitated by their Audit or Clinical Service lead but limited oversight of what these different processes are. Trauma and Orthopaedics have a presentation meeting approach. Surgery do consider whether a death was preventable or not.

Planned next steps: The Trust would like to introduce a standardised mortality review proforma that would then be adapted by specialities. They tried this before but it didn't get the support of the specialities who thought it would mean a process/form that was too generic.

Education/learning: No clear link between mortality reviews (for example the ME process) and education and learning at Trust level. Good example of Trust capacity to approach learning in contrast-with e-prescribing they monitor and meet with trainees that are attempting to prescribe unsafely and also meet with individuals with highly effective prescribing and provide them with a certificate.

IT system: As mentioned, sophisticated mortality monitoring software being used by 60 Trusts now. Costed in a way that allows growth and development. Each Trust has to obtain Caldicott guardian sign off. Would be open to considering an expansion to include mortality review data but would likely require Trusts to sign up to entire package.

Conclusions: Interesting to note a hugely sophisticated high level interest in mortality alongside what is effectively a mortality review programme but with the former garnering much more focus and interest than the latter. Good demonstration of the potential for locally developed IT programmes. Whilst operating a form of ME process and reviewing every death, limited evidence of how it is being used as quality improvement. Also worth noting failed attempts to introduce an element of centralisation to the specialty based mortality work.

Case Study 7-Acute Specialist Trust

Case study interview record

Noted features from survey/proforma: CQUIN target, online data collection tool.

Individual: Deputy Medical Director

Notes:

Background: Tertiary specialist Trust, 160 bed hospital, around 200 deaths a year. The mortality review work was started over 3 years ago as part of a general review of their quality improvement processes and had evolved over time since then. The nature of the Trust means they are not included in the SHMI processes and so they felt a particular need to try and review mortality in another way.

Process: Every death is subject to a Stage 1 Screening that is carried out by the doctor that completes the death certificate. This contains a number of trigger points that require that a death undergoes the fuller Stage 2 step. These were determined by the Director of Nursing and relating to common problems in care and related steps e.g. deterioration, within 24 hours of admission, abnormal lab results. Similar too but not the same as the GTT. Around 50% of the deaths meet one or more criteria for Stage 2 review.

Originally, a Consultant from another specialty was asked to complete Stage 2. But, over time it was felt that due to a lack of specialist knowledge leading to uncertainty and the need to ask others, that the Consultant responsible for the patient (or sometimes their registrar) should complete stage 2.

However, alongside this they also have a sample process where 10% of cases are double reviewed by the Clinical Director.

There are additional separate review processes in place for other particular deaths (for example within 30 days of chemotherapy or post transplant)

The results of the reviews are considered at a quarterly meeting attended by all the clinical directors, the medical director and deputy medical director, nursing director, audit leads. There is variable engagement amongst the clinicians when completing the free text boxes that enable them to better understand their conclusions. But most of them are engaged positively now.

All the forms are then collected and made available to the quarterly review group. Clinical directors are expected to have a more detailed oversight of the deaths in their area, but at the quarterly meeting they review every death. They try to triangulate with more detailed forms (e.g. for the 30 day chemotherapy group form) if available. If no clear conclusion then can be brought back to second meeting to allow more discussion with clinical director in area concerned. They will feed into incident reporting process if they feel it warrants it. They have 2-3 a quarter that are classified as possibly or probably preventable.

Wider governance: DMD does monthly report on numbers of deaths and triggers, and then does three monthly more detailed report to Board which will also comment on any findings/concerns being found through the mortality reviews.

Duty of candour: No separate process established in terms of disclosure to relatives, but thinks it would be very unlikely that a death ultimately agreed as preventable would not also be an incident and their incident process usually involves contact with relatives and disclosure of any investigation findings.

Training: There is no training/quality control process undertaken for those conducting reviews.

Preventability classification: They use probably and possibly preventable. Their audit processes usually find that the independent Clinical Directors are less likely to see death as preventable than the Consultant in charge of the patients care. Usually it is very unusual for significant disagreement. But this is very complex. Expressed concern that a general move to make this a target with national attention would lead to the loss of support from clinicians.

Data collection: Data are not automatically reviewed in detail (e.g. how many infrequent reviews per quarter) as they have never found this helpful as the numbers are so low and they review any concerns case by case.

Commissioners: Even though the CQUIN asks for them to be undertaking this work, the data does not go to the commissioners directly and isn't aware of any particular interest being paid into the findings (e.g. never been asked about their preventable death rate).

Appraisal/education: Conducting the reviews is automatically considered as part of their appraisal process for the Medical Consultants and the audit team will provide findings for appraisal. DMD presents annually to all staff on the findings of the mortality reviews. There are quarterly Trust wide mortality meetings where particular findings might be considered but no direct link with the process. Individual divisions have their own MM meetings and finds they cover their deaths in more detail with a greater educational focus. No formal direct links with the medical education programme but informally will also bring issues/problems to the attention of trainees herself when finding them in either mortality or incident reviews. Junior doctors can also attend the weekly incident review meetings.

Scalability: Would it work in larger place? Unable to say-experience is very limited to specialist Trust (worked here for last 20 years).

Conclusions: Clear, longstanding and apparently high quality process but at specialist trust. Governance structures would need to be stronger at a larger scale as some elements if informality. Data collection tool sophisticated in comparison to others, but being used to actually look at each case individually rather than as a statistical tool.

Case Study 8-Large Acute Trust

Case study interview record

Noted features from survey/proforma: Electronic proforma

Individual: Clinical Effectiveness Manager/Enhancing Quality and Recovery Programme Lead and IT lead

Notes:

Process: Described all deaths are liable for some sort of review. Triggers come from Dr foster. However difficult to ascertain the clear process for this and what the reviews constitute.

They did have a process whereby those doing the death certificate would use an electronic form to trigger unexpected deaths. But these created too many deaths and so caused a backlash so compliance became very poor.

Originally from Dr. Foster report highlighting high death rates. Highlighted incorrect coding-for example old age instead of pneumonia etc.

Original process-junior Dr completed yellow form. Green forms then completed. Then Consultants looked at them again and do blue and yellow. But at present completion rate is 25% at best with no work done to review the quality of data being entered.

ASNP Microsoft web form that is linked into PAS form. Has mandatory completion fields that mean it has to be attached to the PAS of a patient and they are dead on the certificate. Data reports can be drilled down to patient level data. Database took a couple of months WTE to complete but done over a calendar year. On the intranet not internet.

Conclusions: Initial interview subject limited insight, more detail obtained from IT lead. Delivery of programme seems to have stalled after encountering resistance.

Case Study 9-Large Acute Trust

Case study interview record

Noted features from survey/proforma: IT based data collection. Integrating specialty MMs with Trust wide.

Individual: Associate Medical Director

Notes:

Background: Large Trust with three sites. 100-120 deaths a month.

Started 18 months ago with a risk summit in the Trust. AMD appointed a few months later and MD wanted a detailed and standardised way to look at mortality. Began scoping what was being done across specialities. Found some regular work, but not everyone, and wide variety in quality of approach.

Led to development of a Trust wide process. Every specialty with inpatients asked to setup monthly mortality meetings as a starting point.

Started mortality review group chaired by MD or AMD. Specialty MMs were expected to feed into that. Departments are expected to go through their deaths-usually presented by registrars or FY2s to the Departmental staff. No central knowledge of attendance at these meetings but monthly M&Ms are required as part of Clinical Governance requirements for specialties. Often coincided with CG meetings but when not, expected to deliver. The material being received tended to be case based presentation files sent in which wasn't helpful for understanding bigger picture at Trust.

Process: Started implementation of a standard form. They were sent paper based to Divisional Quality meetings which then fed into the mortality review group. But in practice just sent on the forms. Decided to go electronic to improve on this.

Now using form on the hospital intranet. Linked to a list of specialty deaths that month. Not clear how list is built-manually or automatically from their PAS (can find out from IT). First part completed by patient affairs.

AFTER the mortality review meeting, the forms are completed. A lot of work was done to ensure PM findings were there to enable them to complete the form effectively.

Currently considering how to produce a divisional report and use it for audit. Feels that gives a stronger evidence base by having IT system.

Doesn't monitor the completion rate centrally but thinks about 50% completion. Feels low completion rate relates to new process and it not being embedded.

Feels anyone can complete it but that is because it is translating what is said in the meeting with multi-professional discussion.

Training: No training to fill in the form. Feels discussion is able to ensure forms are filled in accurately. Where there is disagreement and tend to support the majority view. But if death is

graded 2 or 3 would prefer a process to be available to people for a wider/senior process to confirm. Working on that at the moment.

Learning: No formal programme of taking them at Trust level to trainee doctors. At monthly governance meetings the quality lead looks at their mortality returns and then feed into the division quality approach.

Candour/incidents: Feels if Grade 3 would agree that it needs to be treated as duty of candour issue and should be disclosed. This would then be escalated by SI process then it will be disclosed. As mentioned, trying to formalise that process at the moment.

Standardisation: Would have welcomed this two years ago to be ready available when they decided they want to start a local process.

Conclusions: Very basic proforma, but attempting to develop a central database. Quality of data monitoring for mortality trends would be hampered by the simplicity of the proforma. Clear idea of some stages of the process which are unusually advanced, particularly in terms of linking specialities up to a central process though no work done yet to look at the quality (e.g. attendance at meetings, reliability of specialty decisions) or processes yet in place for other elements e.g. what happens when Graded 3 (but working on this).

Case Study 10-Regional RCRR programme

Case study interview record

Individual: Programme lead.

Notes:

Background: Programme led by the local Improvement Academy.

Initial scoping was in keeping with NCEPOD early findings-very very varied approach with elements of robust process and lots of different weaknesses and lack of awareness from Trust leads as to the different work being undertaken within their Trusts. A lot of work is just reviewed at face value at Trust level-not digging deeper into the quality of work being done at organisations.

Developed a review proforma and provide training in its use, primarily to Consultants to act as trainers at home Trusts. Nurse Consultants also involved. 100 trainers trained so far.

Proforma is based on work done by Professor Alan Hutchinson.

They prefer the term avoidability to preventable and feel it is less loaded.

Key distinguishing feature of their approach is to require commentary to justify judgement of the avoidability of the death and to also ask for explanations of why the care was good if it was. Specifically where possible ask for reference to objective criteria against which they are making their judgement.

Their proforma has evolved over time. Similarities in terms of grading to Black/Hogan approach.

They have not undertaken any review of the inter rater reliability at this stage.

About to undertake annonymised central data collection using an Access database version of the form. Including an element of free text data mining (more sophisticated than simple word graphs) as they feel strongly that the free text provides some of the highest quality information. Currently only one Trust about to share data.

There is no specific requirement or consistency as to how many cases a Trust should review and how they should be selected or the setting for review being undertaken. They are only attempting consensus on how to review the cases technically and providing training. Currently a focus on medicine but increase desire to expand to particular specialities.

Group meetings are held for participants, usually with Deputy medical Directors or equivalent. Aim for monthly meetings.

Participating Trusts do not pay a fee specifically to take part in this work but must be members of the IA which has an approximate cost of £20,000 pa. They are asked to provide one administrative support staff person to be available for the work.

Feels that generally in this area (for example NRLS) that there is a lack of a feedback cycle and positive messages. From the files they have reviewed centrally they have identified improvement

topics and these feed directly into the improvement arm work of the Academy and that is a key aim going forward.

Feedback on the classification and publication of preventable death figures is very very sceptical from across the programme group. Real concerns that it will create a negative atmosphere.

Conclusions: Very early stages of a shared programme. In terms of consensus approach it is limited to the form and it this stage there hasn't been any internal assessment as to how consistently it is being used. Very basic data sharing approach. However, good example of regional willingness to work together on these issues.

Case Study 11-National Reporting & Learning Service

Case study interview record

Individual: Various

Notes:

Background:

Collects data from different local risk management systems. Each Trust has to have its data management system mapped to match up with the NRLS. They use a common XML system. Initially this would take significant time, but can done in around one working day now with new systems. It took 2 years to connect all the Trusts originally. This means there is limited flexibility-NRLS cannot easily decide to collect a different set of data.

For implementing any new data collection there would need to be consultation do agree the data standard in line with the stricter controls on data collection across the NHS.

Data cleansing remains a significant task even with the common framework. 2.5 WTE staff do this work. Most of it is removing patient identifiable information from entries which get written into the free text boxes describing incidents.

They have a process of direct consultation with each Trust prior to publication, sharing their provisional data to identify any disagreements. They will usually be around the denominators for example the number of bed days, rather than over specific incidents.

All deaths and severe incidents are reviewed by the Clinicians working on NRLS at NHSE (see below). There are around 4,000-5,000 deaths a year reported. Otherwise, the incidents are not routinely looked at (over 1 million a year). Data are looked at as part of specific proactive programmes instead. Otherwise with current system amalgamating learning/lessons from data more routinely is very problematic.

Data sharing agreements have been reached with MHRA/NHSE/CQC/CCGS/LATS.

Independent data entry channels: Manage a series of online web forms for other direct reporting e.g. RCOA. If they receive one directly they flag with local relevant organisations. Produces separate data stream for specialist audience to review. It does create potential double entry of incidents. Decisions about additional E-forms are taken by programme leads. Strong advice was that given likely timescales of implementation that it would be much more useful for us to engage with version 2 of the database. Discussion with leads on its development identified this as a possibility, but this would represent a significant additional element to current business plan that would require additional resource. As with NRLS, NRLS will have web entry portal (planned for Primary care) which will be more sophisticated as they will also provide some quality improvement functionality.

Integration: NRLS 2 is expected to deliver an even greater degree of integration with local systems and replace the need for separate channels for STEIS so also providing greater integration across national systems. As such, it may be sensible to consider how it could incorporate a NRCRRF even in light of the challenges to this as mentioned above.

Vigilance function: Previously the NPSA had a statutory duty to learn from incidents and issue advice to the system. Now this sits with NHSE-but it just happens to be there as a result of the abolition of the NPSA. They now issue the safety alerts to the system based on reports from around 400/500 deaths/severe harm reports from the NHS every week. They are concerned with unrecognised risk in what they describe as a vigilance function. They identify patient safety problems that are novel or uncommon. Each report is reviewed by a senior nurse, usually with experience of both medicine and surgery. The vast majority (95%) are not considered in any way novel. 5% need further discussion. These are considered across wider team. For 1% they seek out specialist advice. The nurse team doing initial screening is the equivalent of one WTE nurse.

Conclusions: Longstanding, widely used database. Linked to local systems but loss of flexibility as a result and with the need for high degree of support for establishing. May represent a significant difference in scale with budget/ambition of RCRR database. Due to be rolled over into new iteration presenting limited opportunities for adding new programmes-but remains a possibility. Good comparator for central clinical oversight function-and from that team there was a view positively supporting the measurement and publication of a figure of preventable death,

Case study 12-National Hip Fracture Database

Case study interview record

Interviewed: Project Coordinator

Notes:

179 hospitals participate in the database. It was started in 2007 and initially funded by medical product companies. 10 of their larger Trusts were already running their own separate databases.

Professions determined 6 standards of care and Trusts started measuring their performance against that. Increasing numbers joined the shared database. A road show programme was run to encourage others with two coordinators. This got another 100 from approximately 70. Some refused. Then the best practice tariff made it mandatory.

The audit refused to accept incomplete data sets. Back and forth with Trusts to make them complete the minimum data set. This has improved so that now 100 percent of process and case mix fields being completed. 40 percent outcome fields over the long term completion rate.

Local champions-three to four dozen hospitals are very motivated and supporting others to take part. Wales/NI don't have best practice tariff but many are still completing.

Resource: Nurses given time/part of role for collecting data and lead clinician signs off. HQIP fund it and hosted by RCP. 2 pa a week each from senior clinicians with 2 co-ordinators and admin.

Software programme and data: Web based form. Password protected with controlled access. Electronic webform. 56 data points. Can also upload from CSV file format if compatible software. About 30 hospitals. Electronic form started 2007. Free of charge to Trusts.

Unsure of the costings. NHSCIC developed the proforma but they changed to other provider as NHSCIC became too controlling. They wanted it to just be a platform without all the extra learning potential.

Data are available 4 hours after upload.

Current developers are small firm made up of people who left NHSCIC. Speaks very highly of them. (Note: we tried to both email and call them several times to include as case study but no response). Database runs smoothly and they provide IT support. Many technical queries are actually just security settings sometimes prevent logins which they can rectify themselves without involving developers.

Uses artemis encryption which enables them to view their data if requested by the Trust.

Runs exception/sense check report i.e. theatre date compared to admission date.

Tariff: 445 pounds + per patient to complete through best practice tariff. Programme produces a list of everyone getting that. Two weeks are given to update every quarter to make sure everything is up to date. These data are then matched with GP data. This is then sent to the CCG. Currently they only

see patient level data per hospital with best practice amount. Now it's closer to £1000 in England. Advised CCGs to speak with organisations and the Caldicott Guardian to get access to trust level data if any issues. 98 percent match up with HES data though, so reliable.

Issues: Data taken on Trust. ASA is a big element of case mix and can easily be manipulated as it is very subjective. They had two hospitals that were pulled because lots of cases were not being given an ASA. Unknown fields are sometimes left too often.

Conclusions: Programme has developed over a number of years with true full participation both mandated and attached to significant funding. Good indicator of team seize required and costings for software could give useful benchmark. Work of the programme generally uncontroversial and established.

Case study 12-National Institute for Cardiovascular Outcomes Research

Case study interview record

Individuals: Various

Notes:

NICOR team is a division of the University/Academic Health Science Network. MINAP Started in 1998-it started as a small scale initiative started by an individual Consultant beginning with STEMI outcomes. It was given some funding from the Society. Started on LOTUS notes on a disc and some Trusts still use Lotus Notes today.

The National Service Framework made in mandatory in 2000-2010. But it took 3 years after mandatory for everyone to come onboard and there had been variable participation before this. Unable to quantify the participation journey.

The programme now includes 6 audits and 4 registries including MINAP (the major audit at every Acute Trust. They all have a steering group and a data set group with users (e.g. representatives from Acute Trusts).

All elements of all the programmes are run in house without third party engineers/software providers. The current programme is now run on Lotus notes or a web collection portal with a plan to move entirely to the web portal.

Data sharing: Individual Trusts see their own data and annonymised comparators. CQC receive Trust level data. Meets all the local and national data collection requirements. Through choose and book patients can also see the outcomes for a particular Consultant. Trust level data are sent to the Trust CE/MD and audit lead. The Society also has access to the data through the participation on the Steering Group.

Data collection: Advised the most effective approach is to consider what outcomes you are interested in and work back from there but practical implications may mean a compromise has to be struck in relation to what can readily be collected. Consider data validation links-for example ONS data on deaths.

Most Trusts are entering data case by case for MINAP. Either in the web portal or lotus notes. About 15% have use software to convert the data from their own data collection programmes to upload on mass, but there are often problems with this. Around 7-8 different companies provide this service.

Monthly data submission for intervention centres (32 centres). MINAP do a monthly data alert

Could consider an innovative data mining approach to deciding on fields-analyse everything from the PRISM studies to determine what items come up frequently.

Team: Each audit (6 audits and 4 registries) has 0.5 WTE project manager, 0.5 WTE developer, 0.5 WTE analyst but feel that is under resourced. But ideal team would be 3 full time for all audits combined and then 2-3 senior staff per one. But variable workloads. Clinical advice from senior

clinicians is done in an ad hoc way at present but going forward it will be 1 pa a week for a clinical director for each audit (paid). They answer technical and simple clinical enquiries and pass on more complex enquiries to Clinical Director.

Data field changes: 2 yearly changes for MINAP. General two year review for the others. Important to have a 6 month overlap period when changing the data. Advised if starting a new programme more frequently than two yearly with a slow growth approach.

Data reliability: They use external audit in one small audit of every hospital with the small congenital heart surgery audit. Cost is prohibitive in other circumstances. So they use entry and re-entry occasionally. But generally taken on Trust emphasising regularly that governance for this is the responsibility of the Trust and they frequently remind them and ask for sign off and confirmation.

Data quality: Rules and guidance on the data entry boxes with inherent warnings on values outside of normal ranges increase data quality. They still have data mistakes for example wrong valve for manufacturer. Don't currently clean data and are considering this. Good example of where flexibility would enable the form to be improved to minimise errors.

Time: Recognise the burden on staff their work creates and know in many cases people are doing this in addition to their workload, out of hours. We need to be aware of adding another audit to Trusts.

Conclusions: Extensive programme of data collection using different approaches due to new and historical programmes. Helpful guide in terms of team size and ongoing budget for programmes as a whole as all the work is done in house.

Case study 13-Patient representative organisation

Case study interview record

Individual: Chair and CEO

Notes:

Strongly supportive of a mortality review programme.

They advocated very strongly for a full and clear requirement for disclosure of negative findings to next of kin (NOK). Considering RCRR as audit without a need for disclosure would be unacceptable and perceived as deliberate evasiveness even if cases were reviewed anonymously.

They understood concerns regarding delayed information being given out and how there would be a degree of uncertainty about findings, but felt this was outweighed by the right of NOK to know what had happened.

They suggested that in the case of a death being considered preventable NOK could be contacted (in writing or via phone) and advised that a routine review had been conducted and offer to share the findings. This would allow some people who did not want to 'open a can of worms' to not engage with the process. They understood any such review may not be concrete in the view it reaches but felt it should still be disclosed if more likely than not that the death was preventable.

They felt that if don't in a more widespread way that the general public might be accustomed to it and it may actually be a system that provides reassurance to people. They felt some people may have had some suspicion that care was not ideal but wouldn't be confident to raise it. This would give them peace of mind depending on whether every death was reviewed.

They agreed information about it could be provided to be the bereaved so as not to people a complete surprise. They were concerned that people disclosing information would need to have the necessary training and have in place support processes for those involved.

They did not have any active case studies of those contacted proactively after a case note review after a relative had died but they may have one in their database.

Conclusion: Strongly supportive of disclosure, but providing people with opportunity to not what to know more. Important to consider training/support for staff in this element of the programme.

APPENDIX 3- QUALITATIVE AND QUANTITATIVE ANALYSIS

Contents

Quantitative analysis

In order to more objectively demonstrate the wide degree of variance in the approach taken to the mortality proformas in use, a quantitative analysis has been undertaken.

38 non specialty specific proformas were reviewed and the presence of various data points was counted. The following graphs display the percentages of proformas with the various data points. Totals may be greater than 100 percent due to rounding.

This table and graph highlight the consistency levels of approach across the different data points that are shown in the graphs that follow. It shows clearly the inconsistency rather and consistency is the dominant finding with only one of the data points analysed included in more than two thirds of proformas.

A feature of up to a third of proformas	A feature of more than a third and up to two thirds of proformas	A feature of more than two thirds of proformas
Less than 5 diagnosis options NCEPOD scale of quality of care Hogan scale of death preventability Less than 5 problems with care options Both Hogan & NCEPOD scale Day of admission MRSA/C Difficile related data points 5 or more diagnosis options Identifying good practice No problems with care options Source of admission Time of admission Mode of admission SI Link No death preventability score Wider governance link	Having 5 more problems with care options Having data points related to palliative care Co morbidities on admission 5 or more standards of care options No standards of care options Other death preventability score Having data points related to death certification	No diagnosis options/data points

Summary

Series1, Both
Series1, No
Series1, Sources or more
Series1, 5 or more options, 66
Series1, No ... 84
Series1, No... identification
Series1, governance link, 32
Series1, Wider ... standards, 39
... score, 47
... score, 32

Patient journey data points

Series1, Mode of admission, 26
Series1, Source of admission, 24
Series1, Time of admission, 24
Series1, Day of admission, 13
Series1, Co morbities on admission noted, 45

Percentage of proformas with patient journey data points

Problems with care data points

Series1, 5 or more problems with care options, 66

Series1, No problems with care options, 24

Series1, Less than 5 problems with care options, 11

Percentage of proformas providing options to identify specific problems with care

Standards of care met data points

Series1, 5 or more standards, 39

Series1, No standards, 45

Series1, Less than 5 standards, 16
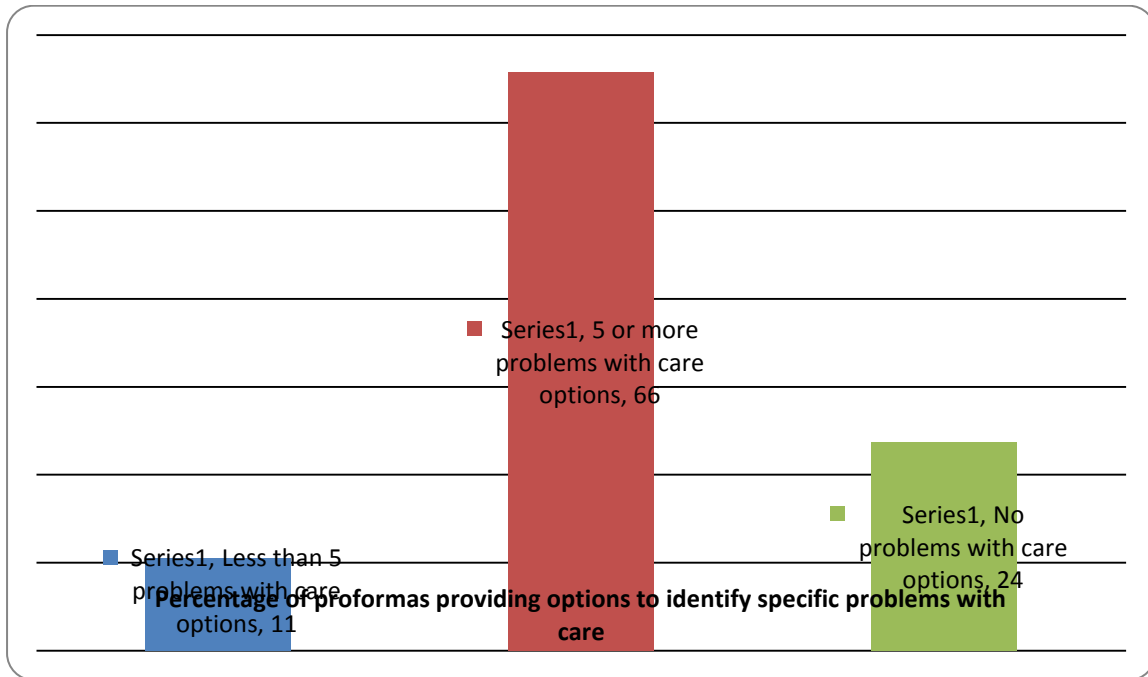
Percentage of proformas with standards of care met data points

Diagnosis data points

Series1, No
diagnosis , 84

Series1, Palliation
items, 63

Percentage of proformas with diagnosis data points, palliative care data points and
Series1, MRSA/C
Diff items, 12
Series1 ,Less than 5
diagnosis, 0
Series1, 5 or more
diagnosis, 16
MRSA/C Difficile data points
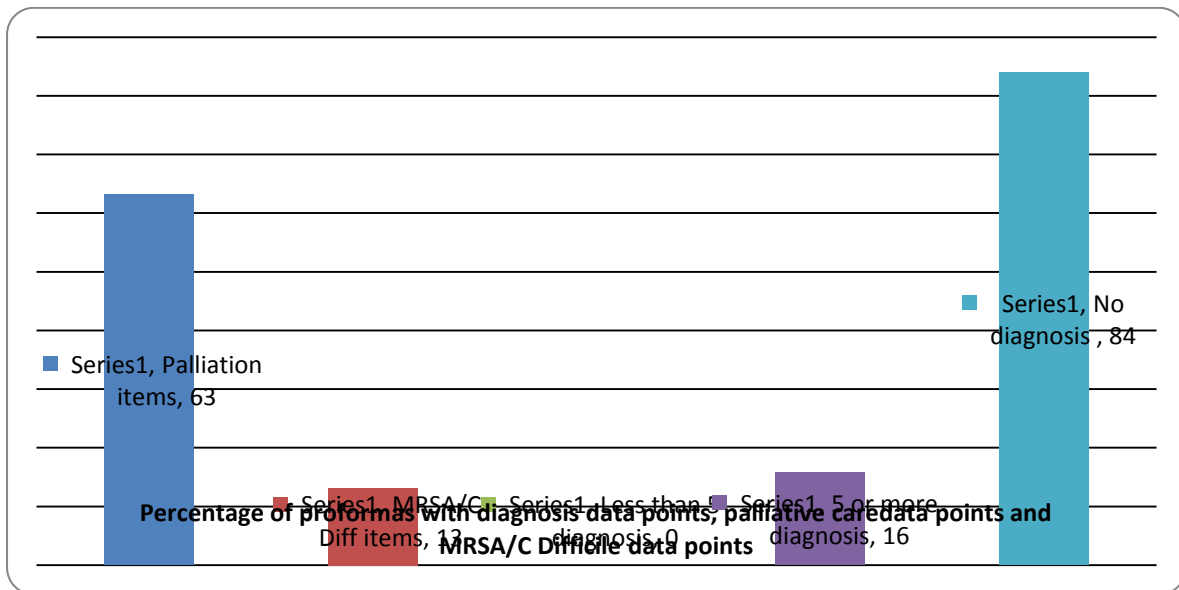
Death preventability data points

Series1, Other
death
preventability
score, 47
Series1, No death
preventability
score, 32

Series1, Both
Hogan & NCEPOD,
11
Series1, Hogan
Scale, 8
Series1, NCEPOD
scale, 3
Percentage of proformas with death preventability scores and their type
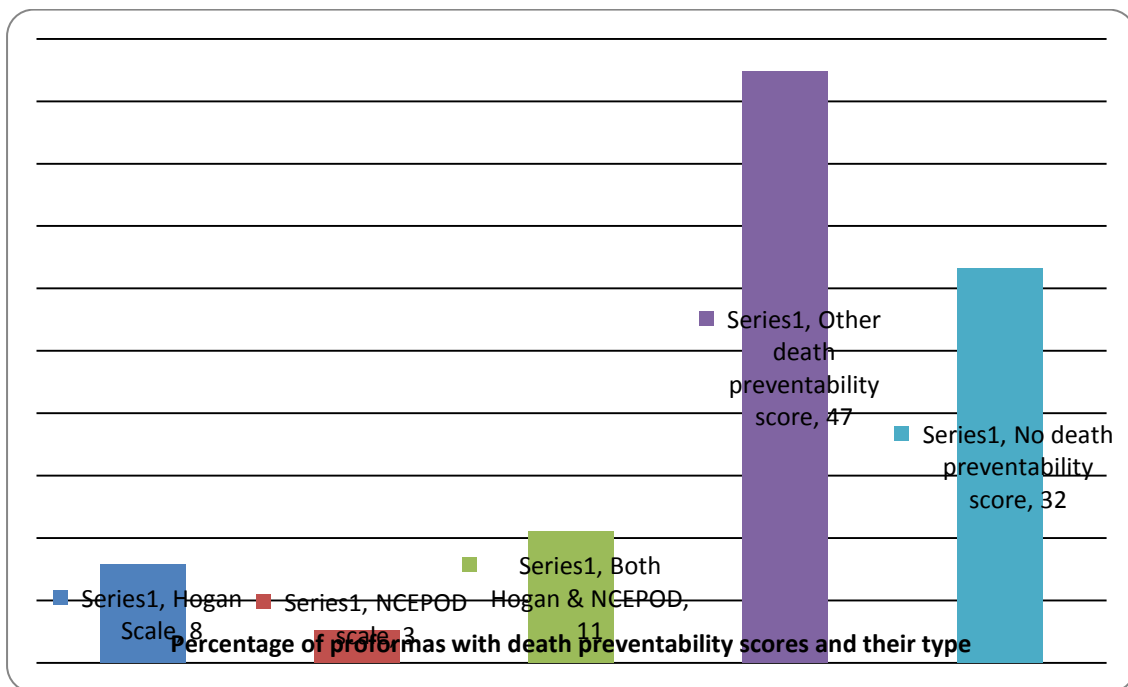
Links to other hospital processes & identifying good practice

Series1, Link to death certification , 55

Series1, Wider governance link, 32

Series1, SUI link, 26

Series1, Identyfying Good practice, 16

Percentage of proformas with data points linking to other processes & identyfing good practice
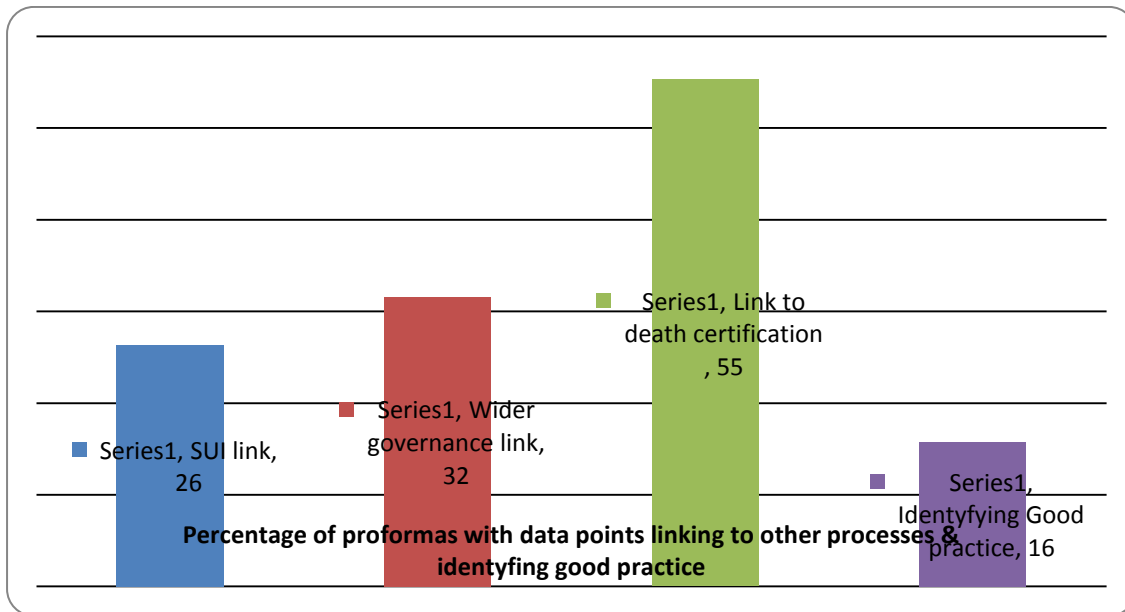
Qualitative analysis

This document provides a qualitative analysis of mortality review proformas provided by Trusts as part of the NCEPOD survey. It presents various components with different examples taken from different proformas alongside commentary.

To support understanding of how the proformas are commonly formulated we have categorised the components into the following domains:

A. **DEMOGRAPHIC DATA**

B. **PATIENT JOURNEY DATA**

C. **PATIENT EVENT DATA**

D. **OVERALL GRADINGS**

E. **GOVERNANCE**

For each section we have identified the variety of different components that fulfil it. As is commented on later, there is enormous variation alongside a small number of proformas that are common to a small number of Trusts. Variation is by far more common than consistency when reviewing as a whole.

It is important to note, that where different examples are given, this is not to say that every proforma has some data points from within that domain. Generally however, proformas can be divided into very detailed (several pages), average(2 pages) or minimal (single page) quite distinctly.

A. **DEMOGRAPHIC DATA**

Capturing demographic data is common to all proformas. Differences are whether pre produced patient label is used or whether this information is separately entered.
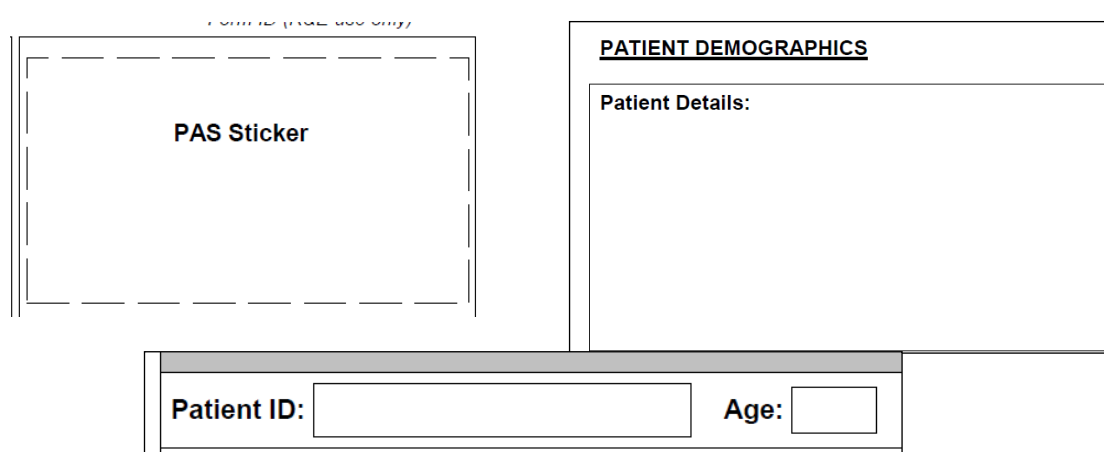
In terms of a universal proforma any national programme would need to determine what level of patient demographic detail was required-from the full details PAS sticker used in some cases to others where only an ID code and age are included.

Some Trusts also capture more detailed information about pre admission co morbidities and health status, cognition, medications being taken and the

Comorbidities
Acute myocardial infarction
Congestive cardiac failure
Peripheral vascular disease
Dementia
Pulmonary disease
Connective tissue disease
Peptic ulcer disease
Liver disease
Diabetes mellitus
Diabetes with complications
Paraplegia
Cerebrovascular disease
Cancer
Advanced cancer (metastatic)
Neurological disorder
HIV
High BMI
Neglect
Smoker
Alcohol

AMT score ☐ Yes ☐ No Please state score

Number of medications on admission ☐☐ MUST score ☐☐

Waterlow Pressure Area Score: ☐ <10 ☐ 10+ ☐ 15+ ☐ 20+

Were there any other significant co-existing factors? specify if any of the following (specify) or state none:
Cardiovascular, Respiratory, Diabetes, Neurological/psychiatric, Liver disease, Obesity, vascular disease

Disabilites; (please select all that apply)

☐ Wheelchair user

☐ Walking 1 aid

☐ Walking =/> 2 aids

☐ Walking Zimmer Frame or trolley

☐ Blind/partially sighted

presence of pressure sores.

B. PATIENT JOURNEY DATA

Patient journey data are also a consistently captured feature. A general minimum includes admission dates, dates of death, mode of admission (e.g. elective or emergency) and admitted from (e.g. care home, own home).

Patient referred from ☐ Own home ☐ Nursing home ☐ Residential home ☐ Community Hospital

Uncommonly, some Trusts identify whether, if a patient is living in their own home, that they have care services. Or indeed, whether they are homeless

Lives; (please select one only)

☐ independently alone

☐ own home with carer

☐ residential home

☐ nursing home

☐ homeless

This is likely aimed at identifying trends in groups of patients to identify high risk groups e.g. those admitted as an emergency, those admitted from care homes. However, these two broad definitions, though widely used in the NHS are simplistic and value may be obtained through further breaking down whether admissions were traditional A&E attendance or direct referrals to on call services (e.g. medicine or surgery). Care pathways for these patients can vary enormously.

Though this is not commonly included, it may be useful to also include time and day of admission as patterns may also be identified for those admitted out of hours/at weekends. One Trust captures this as both admission and day of death data point.

Time of admission (24 hr clock) ☐☐ : ☐☐

Day of admission ☐ Mon ☐ Tues ☐ Weds ☐ Thurs ☐ Fri ☐ Sat ☐ Sun

Time of discharge/death ☐☐ : ☐☐

Day of discharge/death ☐ Mon ☐ Tues ☐ Weds ☐ Thurs ☐ Fri ☐ Sat ☐ Sun

In an even further level of detail, one proforma captures whether it may be Bank Holiday.

It may be a more sophisticated data collection approach may allow these kinds of data points to be generated automatically.

Was the patient in hospital over a weekend?
(Friday 1900 - Monday 0800)   ☐ Yes   ☐ No   ☐ Bank Holiday

Another minority features is to track which/ask how many patients a ward has been on (likely because there is an understanding that frequent transfers by indicate a poorer quality of care). Another addition includes whether they were an outlier.

How many wards was the patient on? ☐☐

```
Patient journey:
Date:                    Ward:
Date:                    Ward:
Date:                    Ward:
Was patient an outlier at any point? Y/N   If
Y to which speciality ...............................
```

Some Trusts also include a free text box to describe patient journey (though this is generally given as an overall narrative of care).

Admission Story - Please write clearly within the box - *this information is for reference only and will not be stored electronically*

A further common area of classification in relation to patient journey asks whether the death of the patient was expected on admission.

C. PATIENT EVENT DATA

Patient event data covers everything potentially significant that 'happened' to a patient prior to death. There is enormous variation at Trust level as to what is specifically monitored through the proformas. This presents considerable challenge for any nationalisation of the proforma in terms of identifying what Trusts consider a 'must' for them compared to others and reaching a compromise position. It is apparent some Trusts have drawn from the IHI Global Trigger Tool but it is usually modified in some way and incorporated within a different proforma.

It is helpful to further divide this category as follows:

1. Items asking about the clinical status of the patient and specific events (distinguished from broader pre existing morbidities and generic timeline of care) during their time in hospital

2. Items asking whether certain aspects of clinical care were delivered more directly drawn

3. Diagnosis and the basis for these

4. Specific adverse incidents

There will be some differences of opinion as to whether some 'events' are adverse incidents or simply the course of illness and whether some events are standards related (for example return to theatre could be included in 1 or 4). We have attempted a general categorisation to assist understanding of the approach to the proformas, not as a definitive categorisation.

1.   Clinical status

More commonly included are

-MRSA colonisation/infection (rarely distinguishing the two despite the very significant clinical difference)

-C Difficile (often just a yes or no rather than trying to distinguish between active infection and latency)

-Recent clinical events including endoscopy, chemotherapy,

-Surgery and/or invasive procedures with varying detail in terms of the timing of the procedure, the seniority of clinical staff and details of anaesthesia

-Admission and readmission to HDU/ITU

-The use of palliative care pathways (and related coding questions)

-The completion of DNAR

-Return to theatre

-Falls

-Transfusion

-Laboratory findings usually in keeping with IHI Global Trigger Tool (High INR, High/low K/Na, Hb drop, hypoglycaemia, raised Troponin)

-High MEWS scores

2. Care standards related events

-The timings of Consultant review (usually asking whether this was done within 24 hours but also assessing time of last review and time and frequency of medical reviews generally) and frequency of entries into the medical notes

-The presence of management plans, monitoring plans, timely review of investigation results

-Time of review after any deterioration

-Recording of medication allergies

-Timing and frequency of observations and nursing staff response

-VTE assessment, diagnosis and management

-Acute Kidney Injury diagnosis and management

-Sepsis diagnosis and management

3.   Diagnosis

This is usually presented in one of three ways. A simple free text box, a free text box with key diagnosis promotes (see Group 1) and finally a very wide ranging set of prompts (See Group 2).

Group 1

-Sepsis (and see above re: management)

-Acute Kidney Injury (and see above re: management)

-DVT/PE (and see above re: management)

-Cardiac Arrest (not typically associated with management assessment)

Group 2

Heart Failure, MI, Stroke, Intracranial Bleed, GI Bleed, Acute Renal Failure, Chronic Renal Failure, Pneumonia, Aspiration Pneumonia, Ruptured Aneurysm, Multi-organ Failure, Endocarditis, Respiratory failure, Bowel Obstruction, Dementia, Fracture, Perforation, Sepsis, Cancer, Ischaemic Heart Disease, Liver Failure, COPD, Pulmonary Embolism

With the extensive list approach it is sometime presented to allow for initial and secondary and primary and secondary cause of death. There is often questions regarding how the diagnosis is confirmed, which is either free text though regularly using the following prompts:

Confirmation of main diagnosis
select all that apply
O Not time before death
O Known case
O Clinical only
O by ultrasound
O by endoscopy
O by Xray/CT
O by ECG
O by lab test
O by biopsy
Other _ _ _ _ _ _ _ _ _ _ _ _

4. Specific adverse incidents

As mentioned previously, there is some overlap between adverse incidents and points regarding care standards. For example, if there is a prompt regarding whether antibiotic have been given, if the answer is no this is potentially recording an adverse incident. However, this section will highlight the examples of where proformas ask reviewers whether specific negative events have happened. Again, this is further distinguished from indicators of negative events not necessarily related to care standards. For example, the IHI related trigger tool prompts about raised K+ or low Glucose-but their presence does not necessarily indicate poor care.

A first set of examples are prompts asking whether 'never events' have occurred:

☐ Transplantation of ABO or HLA incompatible organs
☐ Misplaced naso- or oro-gastric tubes
☐ Wrong gas administered
☐ Failure to monitor and respond to oxygen saturation (in pt undergoing sedation or anaesthesia)
☐ Intravascular air embolism introduced IV
☐ Serious harm due to misidentification of patients
☐ Severe scalding of patients in washing or bathing

- [ ] Wrong site surgery
- [ ] Wrong implant /prosthesis
- [ ] Retained foreign object post-op
- [ ] Wrongly prepared high-risk injectable medication
- [ ] Maladministration of strong potassium solution
- [ ] Wrong route administration of chemotherapy
- [ ] Wrong route administration of oral/enteral treatment
- [ ] IV administration of epidural medication
- [ ] Maladministration of insulin
- [ ] Overdose of midazolam during conscious sedation
- [ ] Opioid overdose of an opioid naive patient
- [ ] Inappropriate administration of daily oral met
- [ ] Suicide using non-collapsible rails
- [ ] Escape of a transferred prisoner
- [ ] Falls from unrestricted windows
- [ ] Entrapment in bedrails

More commonly proformas ask whether specific types of failure have occurred, for example:

Contributory factors:

- [ ] Documentation
- [ ] Unanticipated complication in procedure
- [ ] Delay in diagnosis or diagnosis not suspected
- [ ] Delay in procedure
- [ ] Delay in clinical review / actions
- [ ] Delay in transfer within hospital
- [ ] Delay in transfer between hospitals
- [ ] Communication issues
- [ ] Drug error – prescription
- [ ] Drug error – administration
- [ ] Failure to rescue deteriorating patient
- [ ] Avoidable infection
- [ ] Problems with established protocol
- [ ] Training issues
- [ ] Resource issues (staffing / bed availability)

	Yes	No	
Delay in diagnosis	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Delay in Investigations	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Infection Control	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Critical care required but not available	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Clinical ownership of the patient unclear	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Clinical management plan unclear	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:
Monitoring inadequate	☐	☐	Did Issue contribute to patient's death? ☐ Yes ☐ No ☐ Maybe Details:

Identify contributory factors:

- [ ] Documentation
- [ ] Unanticipated complication in procedure
- [ ] Delay diagnosis or diagnosis not suspected
- [ ] Delay in procedure
- [ ] Delay in clinical review/actions
- [ ] Delay in transfer within hospital
- [ ] Delay in transfer between hospitals
- [ ] Communication issues
- [ ] Drug error - prescription
- [ ] Drug error - administration
- [ ] Inadequate actions from Patientrack system
- [ ] Avoidable infection
- [ ] Problems following established protocol
- [ ] Training issues
- [ ] Inadequate senior leadership
- [ ] Organizational issues
- [ ] Resource issues (staffing/bed availability)

D. OVERALL GRADINGS

Perhaps of the greatest interest for the purposes of this work is the different approaches to giving an overall rating to quality of care-the element of existing proformas most closely related to a judgement as to whether death was preventable. Whilst this is a question asked by some proformas, this is not commonplace. More commonly proformas ask whether factors related to the care affected the outcome, whether care was satisfactory or generally rate the quality of care.

Was the medical management satisfactory?	Was the surgical management satisfactory?
O Yes O No O Not applicable	O Yes O No O Not applicable

Which statement best describes the management of this case?
An area of concern is where the reviewer believes that area of care should have been better.
An area for consideration is where the reviewer wishes to draw the clinician's attention to areas of care that he/she believes could have been improved, but recognises that it may be an area of debate.

There were:

a. No areas of concern or for consideration in the management of this patient   O

b. Areas for consideration but they made no difference to the eventual outcome   O

c. Areas of concern but they made no difference to the eventual outcome   O

d. Areas of concern which may have contributed to this patient's death   O

e. Areas of concern which CAUSED the death of this patient who would have been expected to survive O

---

1) The care provided was less than adequate; and different management would reasonably be expected to have altered the outcome. ☐

2) The care provided was less than adequate; and different management may have altered the outcome. ☐

3) The care provided was less than adequate; and different management would not reasonably be expected to have altered the outcome. ☐

4) Adequate or above standard care provided ☐

Q45) Please tick whichever one description best matches:-

1) Example of good practice ☐

2) Adequate / standard practice ☐

3) Aspects of clinical care could have been better ☐

4) Aspects of organisational care could have been better ☐

5) Aspects of clinical and organisational care could have been better ☐

	Inevitable		Expected		Potentially Avoidable		Not Potentially Preventable

Inevitable – due to the seriousness of the patient's condition at the time of admission
Expected – for example if the patient is in hospital for end of life care
Potentially avoidable – and a result of poor quality care in that situation
Not potentially preventable by the hospital – and a result of aspects beyond the control of a hospital (for example if a patient dies in A&E before admission

Designation

_____

Signature

A. No issues raised ☐
Outcome would have been the same regardless of actions

C. Significant improvement of processes required ☐

B. No effect on outcome but process improvement possible ☐

D. Better process may have altered outcome ☐

Section 15 - Overall Assessment of Care for Whole Admission (Please tick the appropriate option)

15.1 Good Practice - a standard of care you would expect from yourself, your trainees and your institution

15.2 Room for Improvement – aspects of **clinical** care that could have been better

15.3 Room for improvement – aspects of **organisational** care that could have been better

15.4 Room for improvement – aspects of **clinical & organisational** care that could have been better

15.5 Less than satisfactory – several aspects of **clinical and/or organisational care** that were well below a standard of care you would expect from yourself, your trainees and your institution.

Section 16 Avoidability - In your opinion was this death:

16.6   Definitely unavoidable? Y/N

16.7   Probably unavoidable? Y/N

Please justify your conclusions below:

16.8   Possibly avoidable? Y/N
16.9   Probably avoidable? Y/N
16.10   Definitely avoidable? Y/N

Mortality Review Grade (choose one) – to be completed at mortality meeting. Note – based on group discussion, only using documentation		
Good care -G		
No substandard care-NS		
Substandard care not affecting outcome – SC1		
Substandard care may have affected outcome – SC2		
Substandard care likely to have affected outcome – SC3		
Does the case need a more formal investigation?		

9. Standard of Care:

- Expected death, occurred despite taking appropriate preventative measures ☐

- Unexpected death, which was not reasonably preventable with care provided ☐

- Preventable death where there were interventions not taken that could of prevented it ☐

- Unexpected death caused by medical intervention. ☐

Standard of documentation was: on a scale of 1 to 5, **1 = poor, 5 = excellent** ☐

Classification score	
Grade 0 – no suboptimal care	
Grade 1 – suboptimal care but different management would not have prevented the death	
Grade 2 – suboptimal care, different care might have made a difference (possibly avoidable death)	
Grade 3 – suboptimal care, different care would reasonably have been expected to make a difference (probably avoidable death)	

Hogan Scale					
1	Definitely not preventable				
2	Slight evidence for preventability				
3	Possibly preventable less than 50-50				
4	Probably preventable greater than 50-50				
5	Strong evidence for preventability				
6	Definitely preventable				
NCEPOD					
1	Good practice				
2	Room for improvement in clinical care				
3	Room for improvement in organisation care				
4	Room for improvement in clinical and organisation care				
5	Less than satisfactory				

Was this death preventable? (circle)

1 Definitely not preventable
2 Slight evidence of preventability
3 Possibly preventable. Less than 50-50
4 Probably preventable, more than 50-50
5 Strong evidence for preventability
6 Definitely preventable

If death was preventable (5 or 6) *estimate* **how much the patient's life was shortened**

_____years   _____months

1☐   **Standard care**

2☐   **Substandard care, but would not have affected outcome**

3☐   **Substandard care, might have affected outcome,**

4☐   **Substandard care, would reasonably be expected to have affected outcome**

5. In your opinion; was the patient's death avoidable in any way? If so, please explain why in the box below - be frank and open.		

Which statement best describes the management of this case?

An area of concern is where the reviewer believes that area of care should have been better.
An area for consideration is where the reviewer wishes to draw the clinician's attention to areas of care that he/she believes could have been improved, but recognises that it may be an area of debate.

There were:-

a. No areas of concern or for consideration in the management of this patient ☐

b. Areas for consideration but they made no difference to the eventual outcome ☐

c. Areas of concern but they made no difference to the eventual outcome ☐

d. Areas of concern which may have contributed to this patient's death ☐

e. Areas of concern which CAUSED the death of this patient who would have been expected to survive ☐

Were there any quality issues identified in the care of this patient?	Yes ☐	No ☐
Did any of these issues contribute to, or have an impact on outcome?	Yes ☐	No ☐

Impact of issues on outcome:

☐ No impact
☐ Green
☐ Amber
☐ Red

b)	Was the death expected or unexpected? Expected ☐ Unexpected ☐ If unexpected was the patient on an appropriate end of life care pathway? Yes ☐ No ☐
c)	If you have answered "**unexpected**" to part 2b), please give further details below and consider was the death **explainable** given the patient's underlying condition(s)?

Were there any issues of care in the treatment of this patient? (identify below)	☐ yes	☐ no
Did any of these issues contribute to, or have an impact on outcome?	☐ yes	☐ no
Was the death avoidable?	☐ yes	☐ no

Classification

☐ 1 - Definitely not preventable

☐ 2 - Slight evidence for preventability

☐ 3 - Possibly preventable but not very likely, less than 50-50 but close call

☐ 4 - Probably preventable, more than 50-50 but close call

☐ 5 - Strong evidence for preventability

☐ 6 - Definitely preventable

Conclusion	
For all deaths, complaints and untoward incidents:	
Were any care quality concerns raised?	Yes/ No
Suboptimal care: but different management would have made NO DIFFERENCE to the outcome. **(Death unavoidable)**	Yes/ No
Suboptimal care: different management MIGHT have changed the outcome. **(Avoidable death possible)**	Yes/ No
Suboptimal care: different management WOULD PROBABLY have changed the outcome. **(Avoidable death probable)**	Yes/ No
Are there departmental learning's? If yes please list in action plan.	Yes/ No

PART 5 - *Not likely or anticipated death*

Q4.	On reviewing the death, in your opinion was there eveidence of (please tick)	
	Any delays in diagnosis, investigations, delivery of care or treatment	
	Poor communication	
	Failure to recognise or take appropriate action on alerts	

Suboptimal care, but different management would have made no difference to the outcome		
Suboptimal care - different care MIGHT have made a difference **(possibly avoidable death)**		
Suboptimal care WOULD REASONABLY BE EXPECTED to have made a difference **(probably avoidable death)**		

4. Were there any problems in the care* of this patient? *(see below for definition)*		☐ YES	☐ NO
5. Did any of these problems contribute to, or have an impact on outcome?		☐ YES	☐ NO
6. If the patient died, might the death have been preventable?		☐ YES	☐ NO

Review of the case Yes or No
1 Delay in diagnosis
2 Delay in delivering care
3 Poor communications
4 Was death explainable?
5 Was death anticipated?
6 Was death avoidable?
7 Evidence of Adverse events

Overall Case Summary - Circle 1 NCEPOD outcome AND 1 HOGAN outcome				
NCEPOD			**HOGAN**	
Good Practice	1	Definitely not preventable.		1
Room for Improvement – Clinical Care	2	Slight evidence for preventability.		2
Room for Improvement – Organisational Care	3	Possibly preventable but not very likely, less than 50–50 but close call.		3
Room for Improvement – Clinical and Organisational Care	4	Probably preventable, more than 50-50 but close call.		4
Less than Satisfactory	5	Strong evidence for preventability.		5
Insufficient Data	9	Definitely preventable.		6

Assessment	
☐ Expected	☐ Unexpected and Unavoidable
☐ Potentially Avoidable	☐ Suboptimal Care

NCEPOD CLASSIFICATION OF CARE			
BEFORE CLASSIFYING CARE IF YOU NEED TO SPEAK TO A FELLOW COLLEAGUE ABOUT THIS PATIENT PLEASE DO SO AND RECORD THIS IN THE COMMENTS SECTION			
☐	A	Good Practice	A standard that you accept for yourself, your trainees and your institution
☐	B	Room for Improvement	Aspects of **clinical** care that could have been better
☐	C	Room for Improvement	Aspects of **organisational** care that could have been better
☐	D	Room for Improvement	Aspects of both **clinical and organisational** care that could have been better
☐	E	Less than Satisfactory	Several aspects of **clinical and/or organisational** care that were well below satisfactory *PLEASE REPORT A CLINICAL ADVERSE EVENT*

Was the death preventable? Tick **one** box as appropriate:			
1) Definitely not preventable	☐	2) Slight evidence of preventability?	☐
3) Possibly preventable, but not very likely, less than 50-50 but close call	☐	4) Probably preventable, more than 50-50 but close call	☐
5) Strong evidence for preventability	☐	6) Definitely preventable	☐

No areas of concern in the management of this patient
Grade 1 Suboptimal care, but different management would have made no difference to outcome
Grade 2 Suboptimal care and different management may have made a difference (possibly avoidable death)
Grade 3 Suboptimal care would reasonably be expected to have made a difference (probably avoidable death)
If grade 2 or 3, in what way do you think the patient's death was avoidable?

Impact of issues on outcome :

☐ No concerns, no impact

☐ Suboptimal care, no impact

☐ Possible avoidable death

☐ Probable avoidable death

Likelihood of outcome ↓ (Please circle)	
1	Death was a likely outcome & all appropriate management was undertaken
2	Death was a likely outcome & all appropriate management was **NOT** undertaken
3	Death was an unlikely outcome & all appropriate management was undertaken
4	Death was an unlikely outcome & all appropriate management **NOT** was undertaken

Summary (for all groups)		
Did we recognise what the issue was?	Yes	No
Was there evidence of communication? (with staff, relatives and patient)	Yes	No
Was the best care given?	Yes	No
Did the pt die from an issue unrelated to the admitting diagnosis e.g. VTE / fall?	Yes	No
Any lessons / comments including any immediate actions taken?	Yes	No

E. Governance

A number of proformas make reference to action that has/will be taken in relation to taking forward the findings of the mortality review.

Most commonly, this relates to whether an adverse incident has been identified as part of the process. Less common but still seen frequently, proformas can prompt particular individuals/departments that may be notified of any findings.

Outcome		
This case requires escalation and declared as a Serious Incident	☐ Yes	☐ No
This case requires discussion and review at the MDT specialty level M&M meeting	☐ Yes	☐ No
This case requires discussion and review at Clinical Policy Group	☐ Yes	☐ No
Any issues for Primary Care/Community Team?	☐ Yes	☐ No

Page 2 of 2

North Cumbria

Mortality Review Action Tracker

Speciality:---

Date: ---

    1.   Review recommendations from last month's meeting
    2.   New cases presented
          a.   Case #1
          b.   Case #2
          c.   Case #3
          d.   Case #4
          e.   Case #5
    3.   Peer Reviews (Please indicate deaths you have reviewed which occurred under the care of another team)

Problem / Issue (Avoidable causative or contributory factors)	Solution / Recommendations / Learning	Person Responsible	Due Date	Completed

---

FOLLOWING DISCUSSION AT HMRG MEETING

Learning points identified: ▭

                            ▭

                            ▭

Actions identified: ▭   Lead for action: ▭

                           ▭   Lead for action: ▭

                           ▭   Lead for action: ▭

Outcome of primary review: No further action   ☐

                            Need further information   ☐

Impact of issues on outcome:	Has an Adverse Incident been raised?	
☐ No impact ☐ **Green** ☐ **Amber** ☐ **Red**	☐ Yes - Already reported ☐ Yes - As a result of this review ☐ No ☐ SAI investigation underway	
Actions:	**Implemented by whom:**	**Implemented by when:**
Findings of mortality review reported to: *(Please tick all that apply):*		
☐ Clinical team ☐ Another clinical team ☐ Risk & Governance Meeting ☐ Other Management meeting	☐ Risk office ☐ Mortality Monitoring Committee ☐ PCT/GP	

Addressed to :

☐ Clinical team

☐ Integrated Clinical Lead

☐ Divisional Governance Meeting

☐ Trust Quality Board

☐ Other management meeting

☐ Patient Safety & Risk Manager

☐ PCT/GP

Actions to take forward

Summary report to relevant group for consideration of further actions ☐ Yes   ☐ No

Who to take forward/action

Indicator 5c Mortality Survey

Undertaken by NCEPOD on behalf of NHS England

Dr Neil Smith - Clinical Researcher and Deputy CEO

Dr Hannah Shotton - Clinical Researcher

Dr Marisa Mason - Chief Executive

Summary

These survey data have demonstrated that there is a great deal of excellent work being undertaken across England in the area of mortality reviews. From the high number of responses received in the survey and additional telephone conversations with respondents it is also clear that there is a real enthusiasm for mortality reviews and some Trusts seem to have what appears to be a robust and useful system in place for their Trust, which may provide a good starting point for future work.

The data below suggest there is merit in pursuing the overall aims of the indicator 5c work but going forward it will be incredibly important to maintain the engagement and enthusiasm of the professions. The data show that mortality reviews are mainly used for education and quality improvement rather than as a performance indicator, so this needs to be considered carefully as 5c progresses as it would be a shame to lose that.

It can be seen from the data that there are many different approaches to how mortality reviews are conducted, insofar as who attends, how frequently they are undertaken and how cases are selected and scored; and this can vary within a Trust. On a specialty level it is entirely appropriate to have differences, one size will never fit all and we would be naive to suggest it, but some standardisation of the following would allow improved benchmarking, aggregation, and systematic learning:

1. A core of data which form the basis of every review form
2. How cases should be selected whilst Trusts work towards reviewing all deaths
3. Allocation of time for mortality reviews in job plans - it works well where there is Trust management support in terms of time and administrative help
4. How the learning is stored and shared
5. A standard score to assess quality of care - NCEPOD
6. A standard scale to determine whether the death was avoidable - Hogan

1. Background

Indicator 5c 'Hospital deaths attributable to problems in care' of the NHS Outcomes Framework is being developed, aimed at identifying the number of avoidable deaths occurring in hospitals in England and supporting hospitals to systematically learn from the care they are providing. The plan is to use case note review to facilitate learning and improvement at both an organisational and national level by both identifying the specific 'problems' in care that contribute to avoidable deaths, thereby stimulating learning and by

nationally measuring the burden of hospital mortality attributable to 'problems' in care and enabling benchmarking and tracking of improvements. Early discussions highlighted areas in the proposed method that might be improved to ensure engagement of all health professionals contributing to the process.

NHS England commissioned NCEPOD to undertake a scoping exercise to determine what is already being done in this area. It is recognised that there are likely to be to be existing models of mortality review which could be adapted to produce a standardised process and core dataset.

2. Method

NCEPOD has 25 years' experience of undertaking confidential surveys and has also reported extensively on the use of mortality meetings in hospitals. In every hospital in England NCEPOD has a named NCEPOD Local Reporter and this network was used to complete and disseminate two surveys:

1. A specialty/department level survey to be completed by as many specialties/departments/divisions in each Trust that have variation in mortality review process

2. A hospital-wide survey looking at hospital/Trust level approach to mortality review

In addition to these surveys, completed on-line using Survey Monkey, all the Medical and Surgical Royal Colleges and Specialist Associations were emailed, to ask if they produced guidelines for their specialties on how to undertake mortality reviews.

3. Results

- 199 Trusts were contacted from which a response was expected.
- 155 responses from 123 Trusts completed the survey a return rate of 78%.

3.1 Type of hospital completing the hospital-wide survey
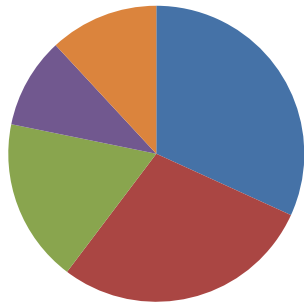
- District general hospital: ≤ 500 beds
- District general hospital: > 500 beds
- University teaching hospital
- Specialist hospital
- Other

■ A response was received from a wide range of hospitals of varying sizes. This means the results should be representative of current practice across the hospitals surveyed. However, it does mean that some of the data had to be handled carefully to account for those hospitals that have a low mortality rate which would find mortality reviews a more manageable process. Also, where the process of mortality reviews was the same for all hospitals within a Trust, the survey was answered once only for the Trust.

■ Trusts responding had on average 515 in patient beds across all hospitals within their Trust: range - 4 to 2680.

■ Over the year April 2012-March 2013, across all hospitals, Trusts had an average of 67,207 admissions: range - 4 to 441,989.

3.2 Specialty/department completing the specialty/department survey
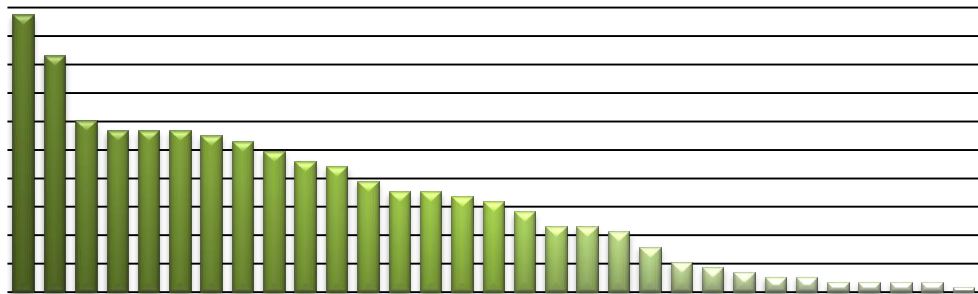
■ 569 specialty/department surveys were completed from 31 specialties across 97 Trusts.

Where the same questions were asked in both surveys they have been presented together, colour coded as **green for specialty/department** and **purple for hospital-wide** data.

4. Mortality rates

- 99.2% of hospitals monitored mortality rates - 127/128; not answered in 27

4.1 The following methods are used by responding hospitals to monitor mortality rates

n=127
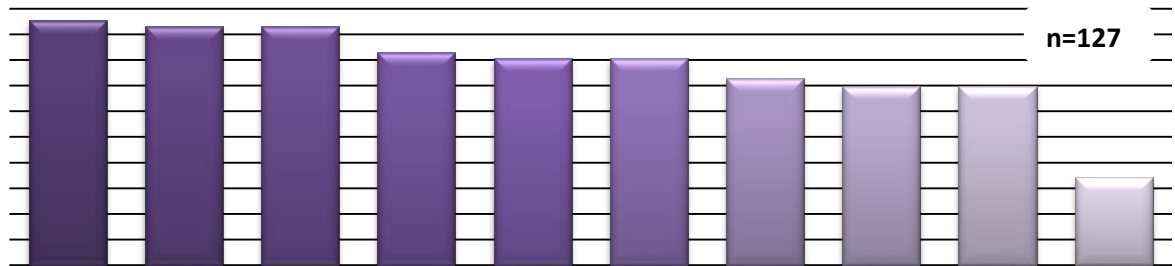
4.2. At a hospital-wide level, the following are used as triggers for case note review

n=90
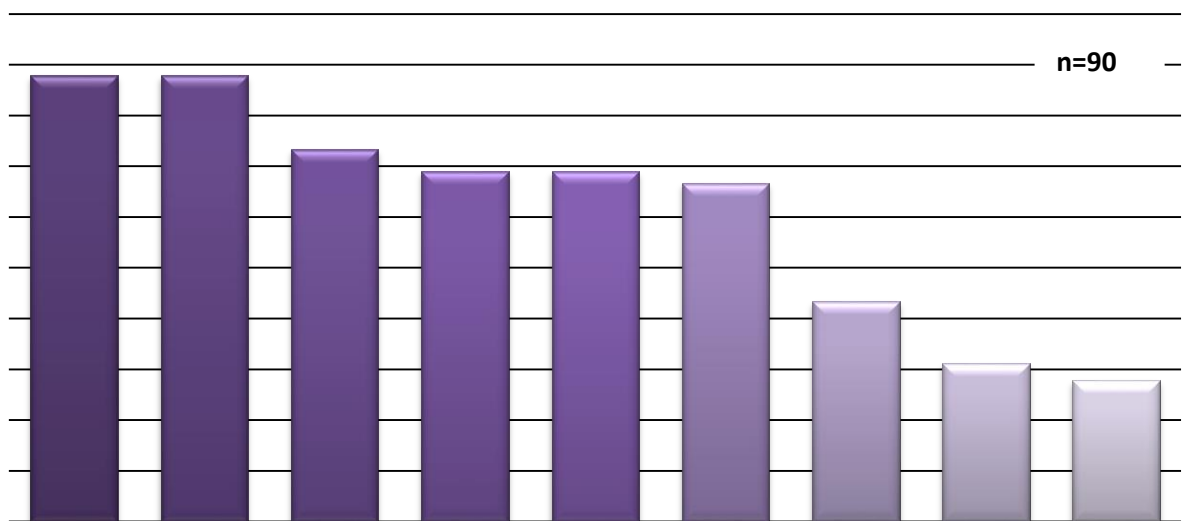
5. Mortality meetings

- There was a hospital-wide mortality meeting in two-thirds (59%) of the hospitals surveyed. And a higher than expected percentage (52%) of hospitals reviewed deaths following discharge.

5.1. Hospital-wide mortality meetings are undertaken
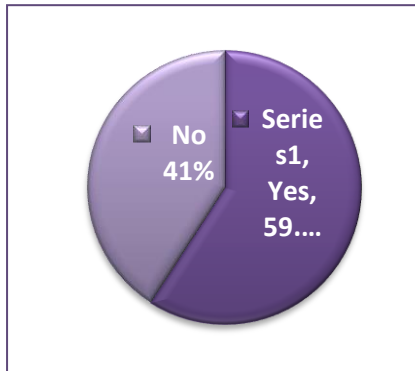
5.2. Deaths which occur after hospital discharge are reviewed
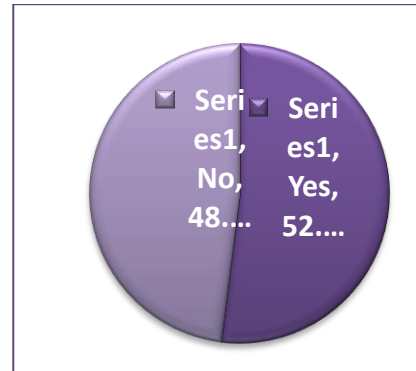
- Free text comments related to this question highlighted that the cases selected for hospital-wide mortality review varied enormously, from random samples making the largest contribution (42%), to unexpected deaths, HSMR alerts and complaints. However, in the majority of cases it was clear from the free text comments that it was the Medical Director's role to oversee these meetings.

5.3. Are ALL deaths being reviewed

	Within the specialty/department		Hospital-wide	
	n	%	n	%
Yes	439	77.3	54	42.2
No	129	22.7	74	57.8
Total	568		128	
Not answered	1		27	
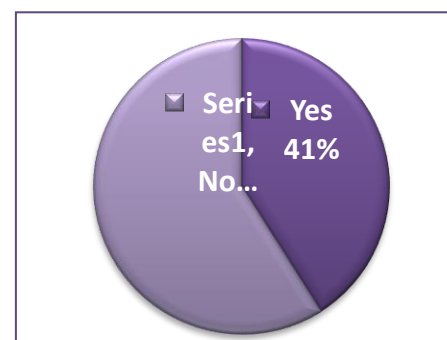
- The responses to these data were checked to ensure that all answering YES, were not just the specialties with a low mortality rate, making it easier for them to achieve this. The responses showed that all specialist hospitals, half of small DGHs, a fifth of large DGHs, and a third of UTHs stated that they reviewed all hospital deaths.

- In the general comments for this section it was clear that many hospitals are working towards it, although many who say they do plan to review all deaths do not achieve it due to access to data or a general backlog.

5.4. If all deaths, by specialty, are not reviewed, cases are selected in the following ways

n=108

86

38
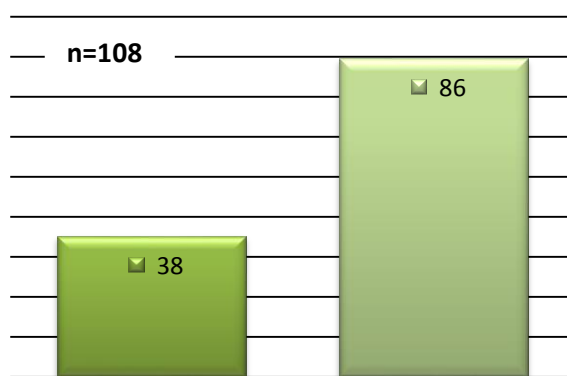
- Those doing something 'other', demonstrated again that there was no clear method being adopted, and the selections within specialties are based on factors that suited the specialty – e.g. 20% of deaths, deaths within 30 days of an endoscopy, chemotherapy or using cases from the renal register.

5.5. Frequency of mortality meetings

By specialty/department (n= 549)

10

29

185

325
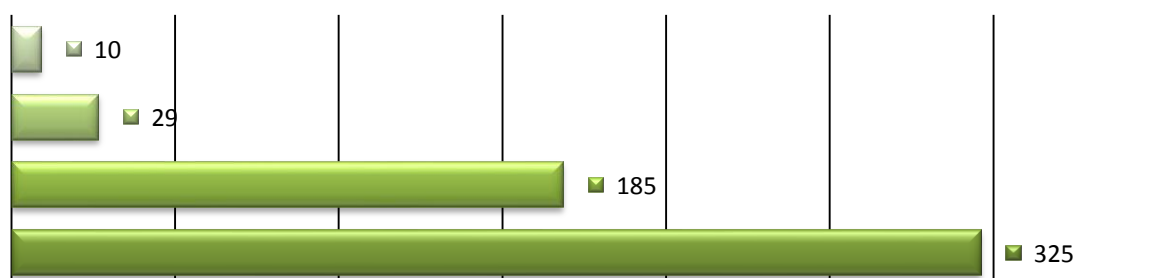
By hospital-wide mortality review (n=82)
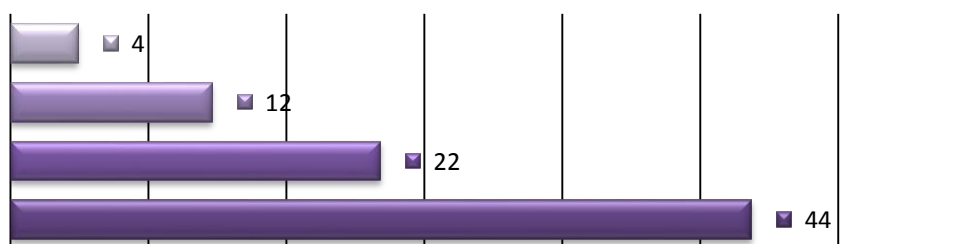
- Mortality meetings are most commonly undertaken monthly and this seems reasonable, both for individual specialties and hospital-wide. From the 'other' answers, the free text showed that after monthly the most common frequency was every two to three months. For specialties/hospitals with a low number of deaths, this would be achievable. In specialties/hospitals with higher numbers of deaths, meetings need to be frequent enough to stay on top of caseload.

5.6. Time between death and case review, at a specialty/department mortality meeting
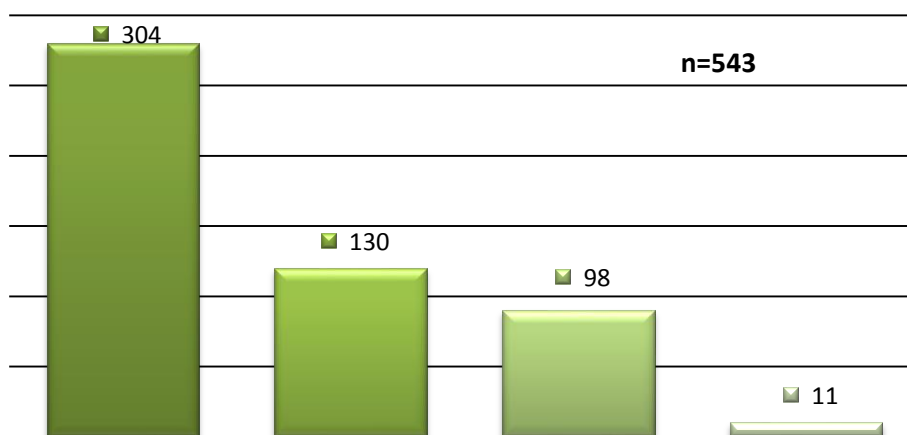
	n	%
Yes	342	61.6
No	213	38.4
Total	555	
Not answered	14	

- It is worth noting that comments on this section referred to the fact that attendance is often mandatory but clinicians do not always attend as they cannot be released from their general duties. Data in the free text comments highlighted that lack of consultant input deters junior staff from attending as they do not see it as important. Many

hospitals have allocated time for mortality review in job plans and from discussions we have had this does seem to be very important.

5.8. A register of attendance is kept

	Within the specialty/departments		Hospital-wide % not calculated – nos. too small
	n	%	n
Yes	491	88.0	79
No	67	12.0	3
Total	558		82
Not answered	11		73

5.9. Attendance is linked to revalidation/appraisal

	Within the specialty/departments	
	n	%
Yes	269	48.3
No	288	51.7
Total	557	
Not answered	11	

Series 1, No, 51.7%, 52%
Series 1, Yes, 48.3%, 48%
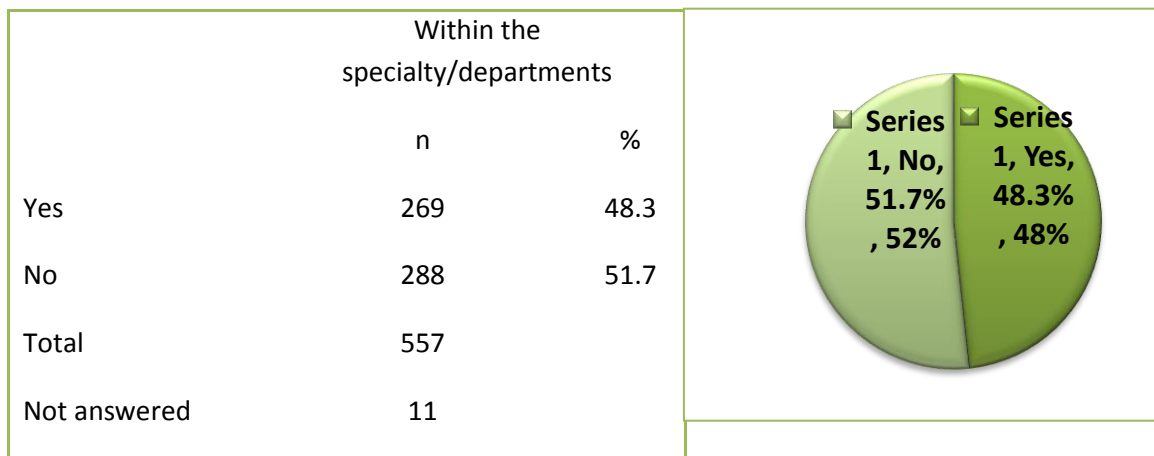
5.10. Grade of clinical staff are expected to attend specialty specific mortality review meetings - answers may be multiple

n=561
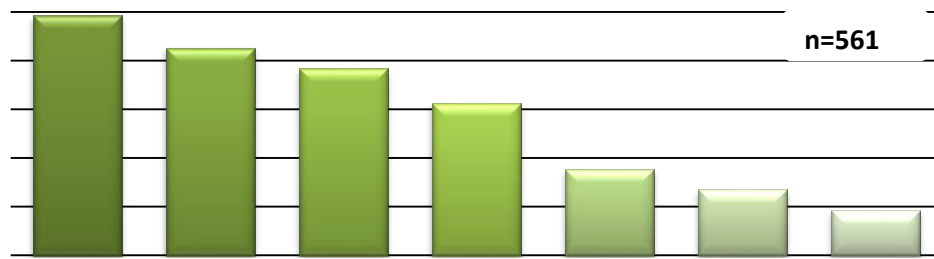
- In 221/552 cases it was reported that non-clinical staff attended the specialty specific mortality reviews. These roles were often managerial or clinical audit staff, some clinical risk staff and occasionally coders, which is a very positive move.

5.11. Staff who attend hospital-wide mortality meetings - answers may be multiple

n=80
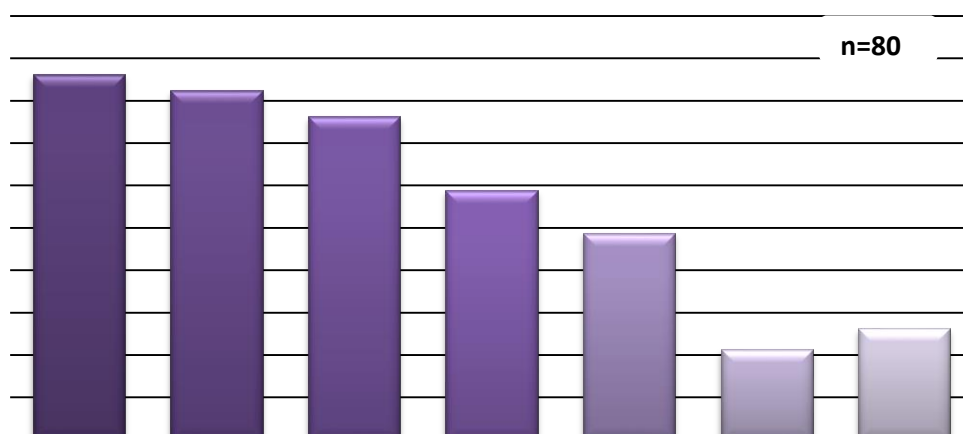
5.12. The hospital-wide survey reported that the following types of cases are most commonly reviewed at hospital-wide mortality meetings
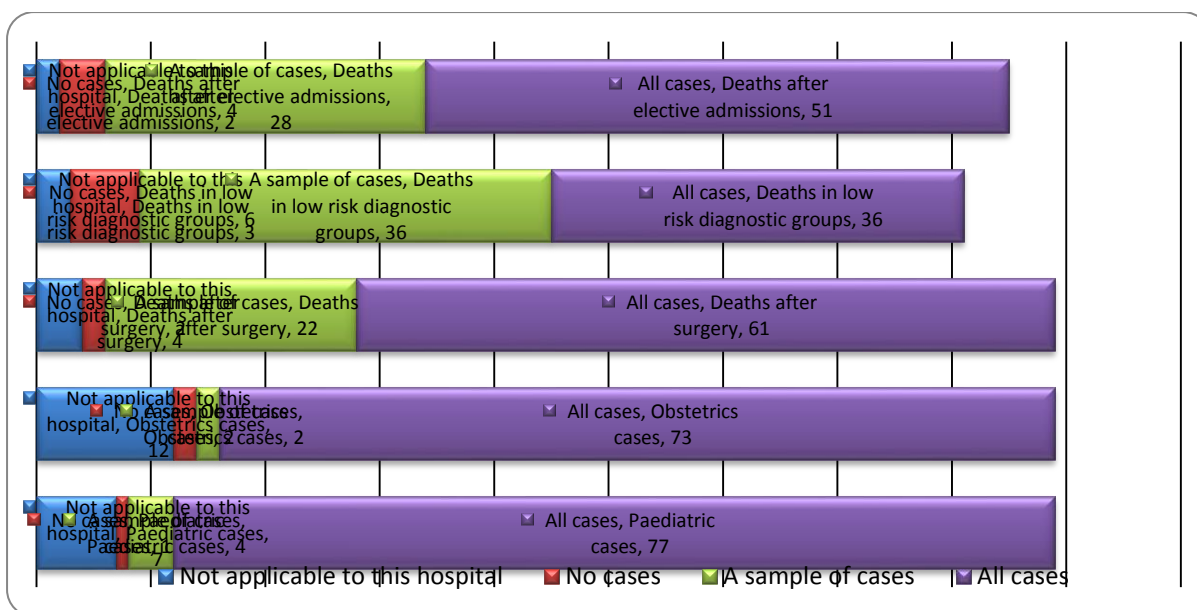
6. Personnel involved in mortality reviews

*6.1. Those who retrospectively reviews cases – multiple answers were not allowed*

	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Responsible consultant	181	32.1	63	50.8

Another consultant (same specialty)	197	34.9	77	62.1
Another consultant (different specialty)	14	2.5	55	44.4
Foundation trainees	6	1.1	13	10.5
Specialist trainees	86	15.2	32	25.8
Specialist nurse or matron	7	1.2	38	30.6
Not specifically defined	38	6.7	9	7.3
Other	35	6.2	26	21.0
Total	564		124	
Not answered	5		31	
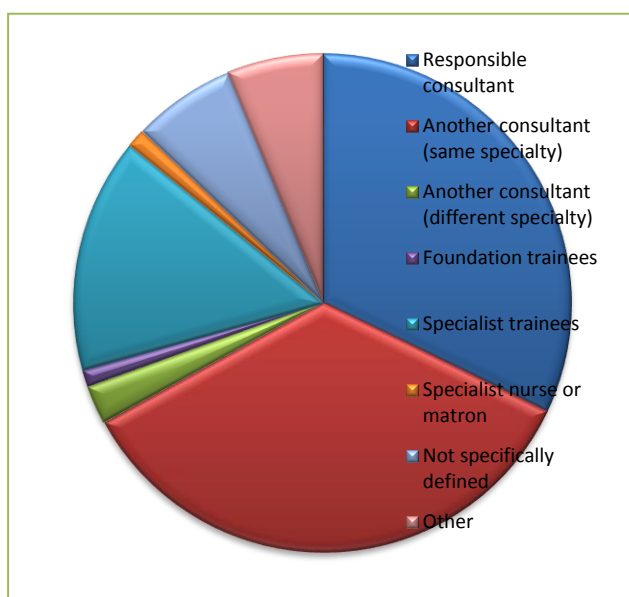
Specialty/department *Within hospital-wide meetings*
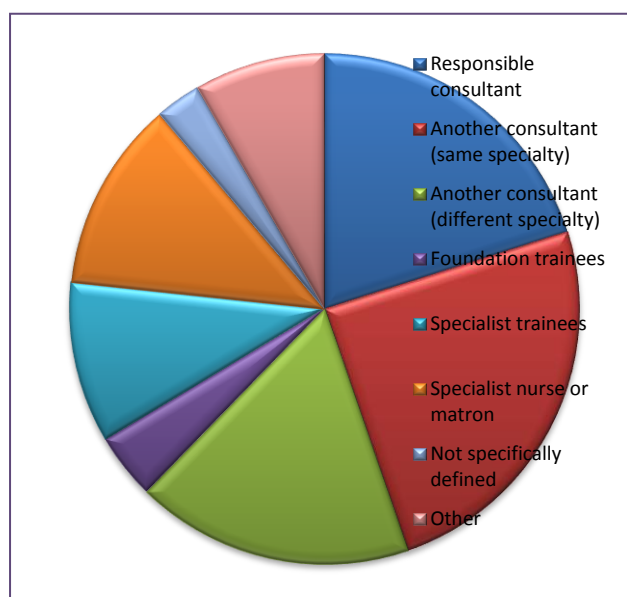
6.2. Cases are reviewed by more than one person

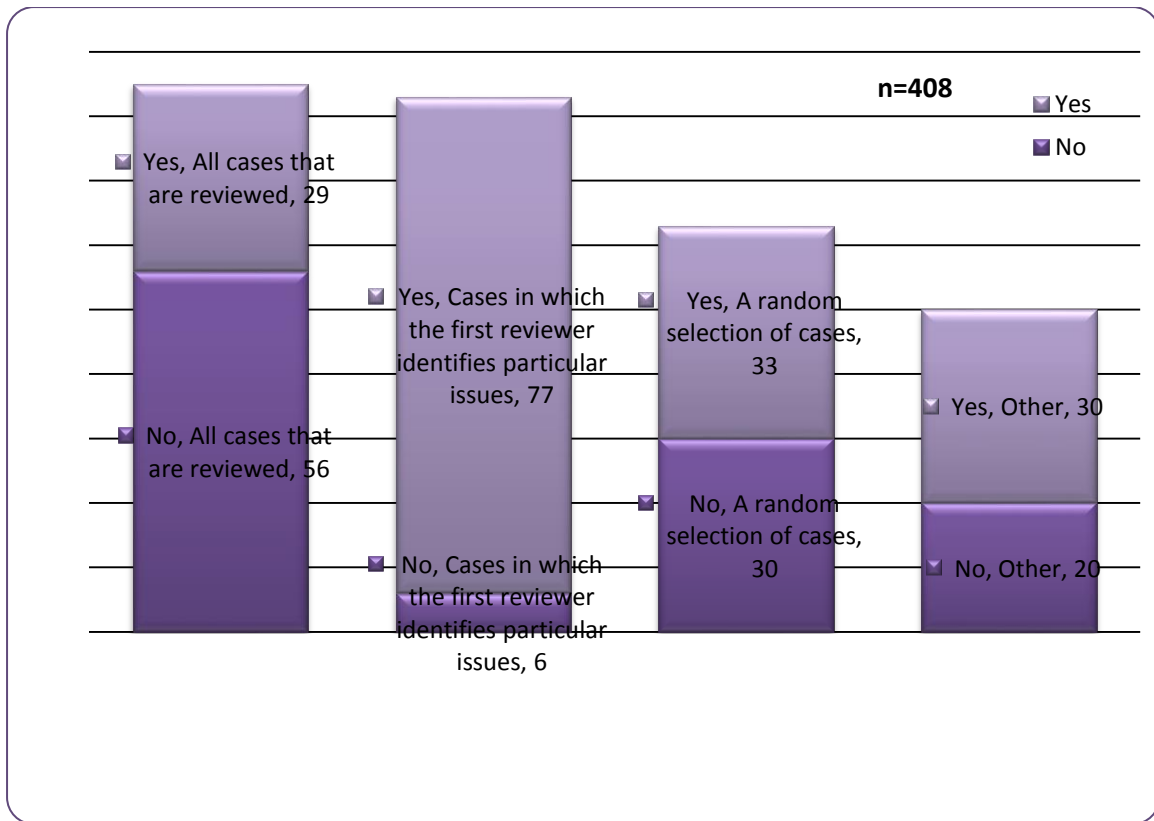|	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	395	71.0	112	90.3
No	116	29.0	12	9.7

Total	556	124
Not answered	13	31

- Often these are done in an open forum, as part of an M&M meeting

6.3. Specialty/department mortality review: Factors that determine which cases are reviewed by more than one person


n=408 ☑ Yes ☑ No

- Yes, All cases that are reviewed, 215
- No, All cases that are reviewed, 129
- Yes, Cases in which the first reviewer identifies particular issues, 213
- No, Cases in which the first reviewer identifies particular issues, 46
- Yes, A random selection of cases, 45
- No, A random selection of cases, 143
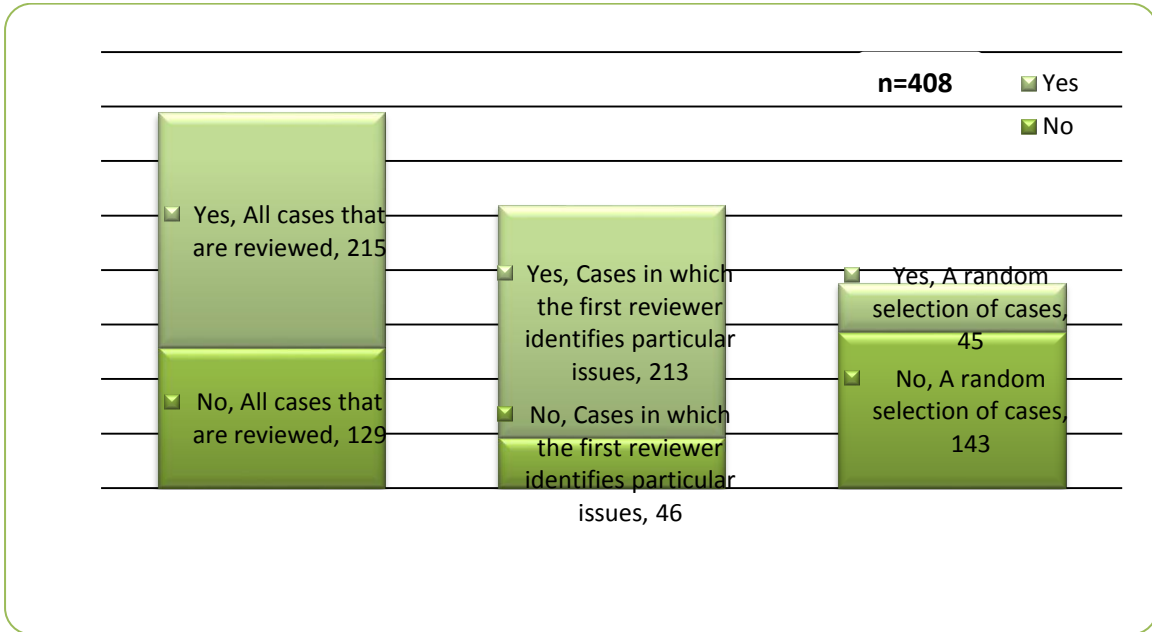
Hospital-wide mortality review: cases selected for review: Factors that determine which cases are reviewed by more than one person

n=408

Yes, All cases that are reviewed, 29

No, All cases that are reviewed, 56

Yes, Cases in which the first reviewer identifies particular issues, 77

No, Cases in which the first reviewer identifies particular issues, 6

Yes, A random selection of cases, 33

No, A random selection of cases, 30

Yes, Other, 30

No, Other, 20

Yes
No

7. The process of case review

7.1. There is a standardised proforma for case note review

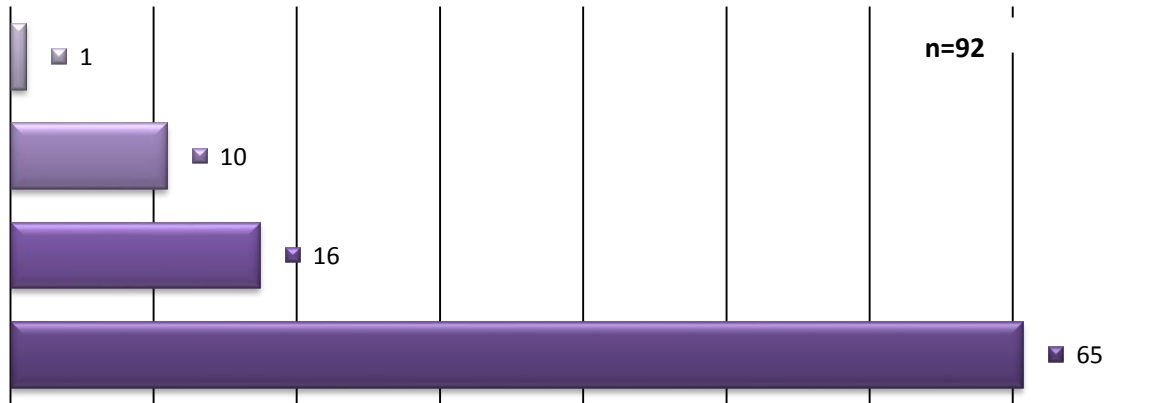|	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	240	42.8	81	65.9
No	321	57.2	42	34.1
Total	561		123	
Not answered	8		32	

Series1, Yes, 43%
No, 57...

No 34%   Yes 66%
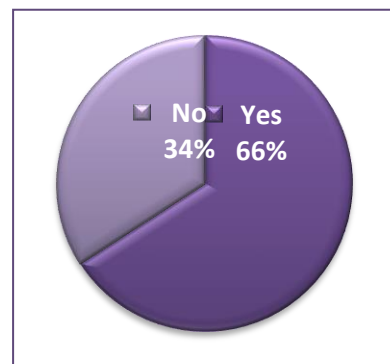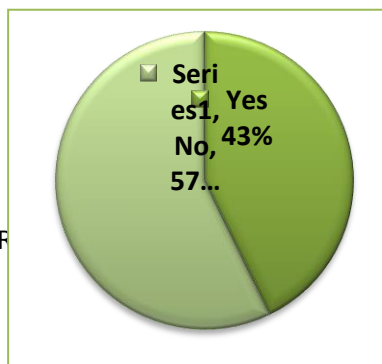
- 52 examples of hospital and specialty wide mortality review proformas were emailed to NCEPOD as part of this survey. It was very obvious by reviewing them manually that there is no standard layout. They ranged in size from one side of A4 to eight sides of A4. However, they do have some common features which could be used as the core for future standardisation, the majority included the following:

  - Patient details

  - Cause of death and whether it aligns with coding

  - Review of the clinical management – either factual details e.g. drug error, number of consultant reviews, or a more open questioning system asking whether aspects of care influenced outcome

  - An overall assessment of care/score

  - Lessons learned

  - Action plan

7.2. The type of assessment undertaken, where a standard proforma is used

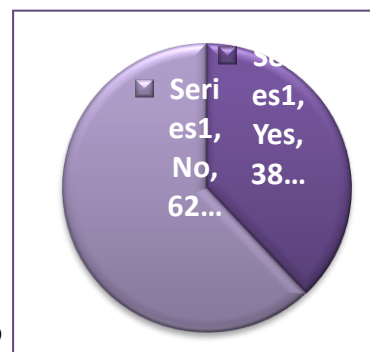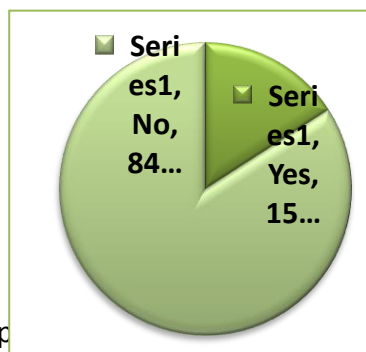***For specialty/department case review***
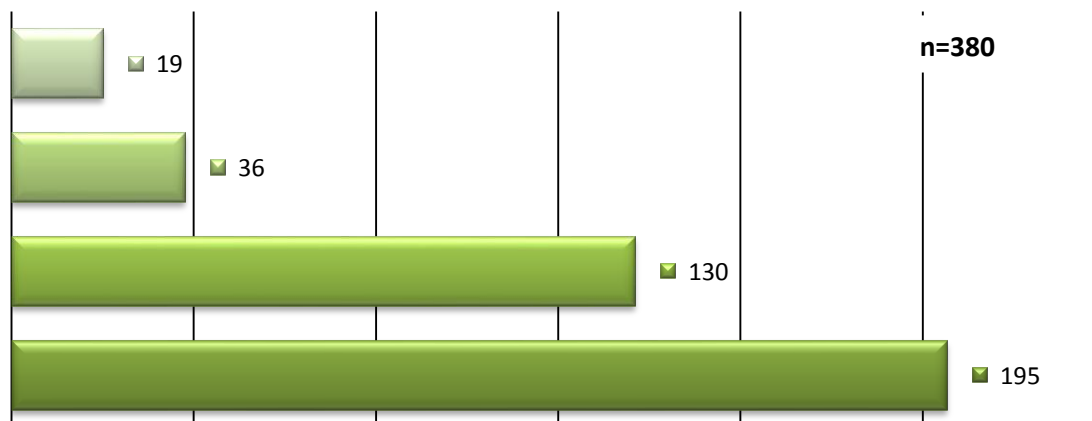
For hospital-wide case review

n=92

| 1 |
| 10 |
| 16 |
| 65 |

7.3. Deaths identified as preventable are scored

	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	89	15.9	38	38.0
No	472	84.1	62	62.0
Total	561		100	
Not answered	8		55	

Series1, No, 84… Series1, Yes, 15…

Series1, No, 62… Series1, Yes, 38…

- Where scores were p   e was no   nd they were more frequently adopted at a hospital-wide level. Many have been set locally and some are specialty specific. To grade overall quality of care the NCEPOD grading system was commonly used, followed by the Hogan Scale of preventability.

- These data were reviewed by specialty and it was found that obstetrics and gynaecology and maternity services were most likely to use a score, other specialties such as pain management and diabetes reported that they did not use a score. Similarly, it was the specialty hospitals that most frequently reported that they would use a score.

7.4. There is a standardised presentation format (e.g. SBAR) for mortality meetings?

	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	189	33.9	32	26.7
No	369	66.1	88	73.3
Total	558		120	
Not answered	11		35	
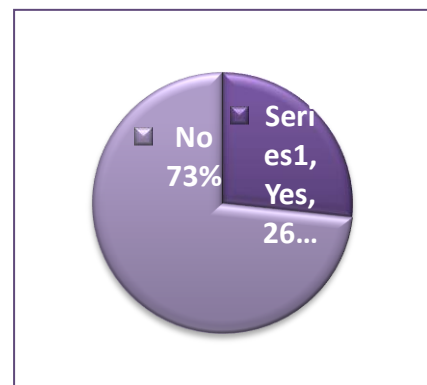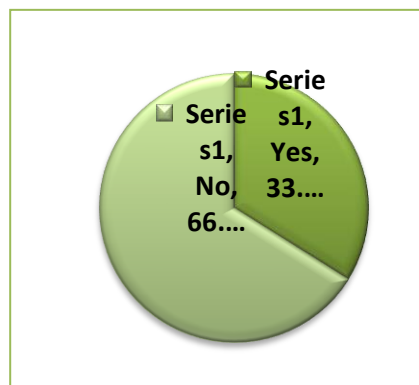
- These data were reviewed by specialty and there was found to be little obvious difference across the specialties.

8. Recording of mortality review data

8.1. Data/notes from mortality meetings are recorded

	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	506	91.3	82	67.2
No	48	8.7	40	32.8
Total	551		122	
Not answered	15		33	

- There seems to be generally good recording of notes/minutes, which are then filed, not always electronically, questioning accessibility to the learning.

### 8.2. Data from mortality meetings are captured electronically

	Within the specialty/departments	Hospital-wide

	n	%	n	%
Yes	318	57.5	78	63.9
No	235	42.5	44	36.1
Total	553		122	
Not answered	16		33	

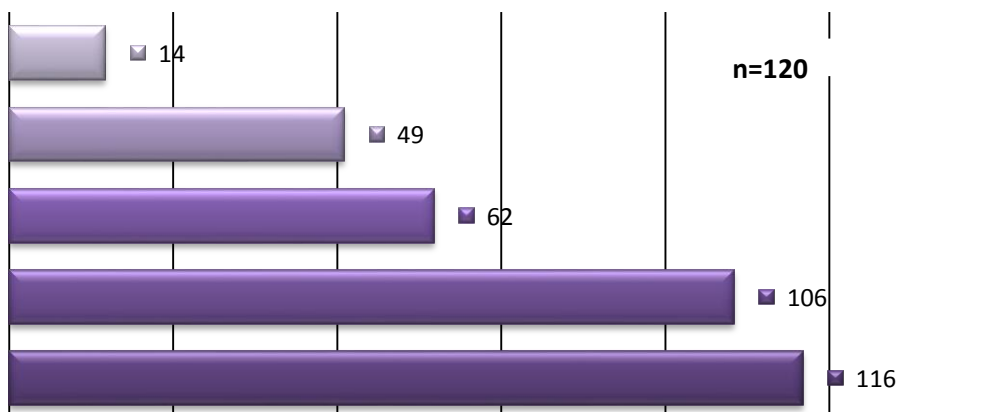## 9. Use/dissemination of mortality review data

9.1. Information from mortality meetings is used in the following ways
Specialty/department

28
122
277
496
515
n=559

Hospital-level

14
49
62
106
116
n=120
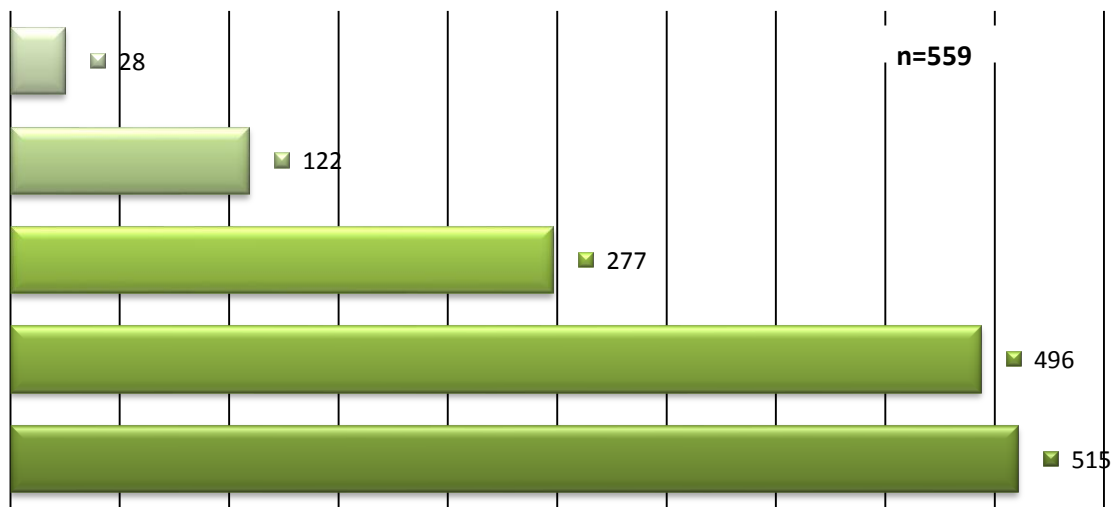
- It was encouraging to see that mortality reviews are used for education and quality improvement ahead of performance monitoring, both on a hospital-wide level and a

specialty/department level. What will be important for the future of Indicator 5c is that this objective remains a priority. It is this open learning that encourages health care professionals to engage in mortality review.

▪ Outputs from mortality reviews were commonly cited as informing specific audits, and leading to new ideas for audits.

9.2. Sharing of the learning from mortality meetings outside the specialty/department

▪ 513 people answered for the specialty/department data and 116 for a hospital-wide level. Many ways were highlighted including escalation to governance meetings, Grand Rounds, quarterly reports, emails, direct action to those involved, as would be expected. In contrast there were many comments stating that nothing was done with the outputs, or they were disseminated 'poorly'. The same responses were given for how action was followed-up in 111 responses at a hospital-wide level.

9.3. Findings of the mortality meetings collated at a hospital/Trust level

▪ 59.1% (314/531) of the specialty/department mortality reviews are collated at Trust level. Many of the free text comments referred to 'unsure' or 'don't know'. As these surveys were completed by the specialties involved it is an interesting finding, suggesting there is room for improvement in how learning is shared or disseminated in Trusts.

9.4. When an incident/care problem/avoidable death is identified in mortality review, do you routinely ensure it is reported to your local incident reporting system?

	Within the specialty/departments		Hospital-wide	
	N	%	n	%
Yes	444	82.1	93	78.8
No	97	17.9	25	21.2
Total	541		118	
Not answered	28		37	

▪ Occasionally, when they were not reported it was because there was a risk of duplication.

10. A national core standardised proforma for mortality review

10.1. Do you think a national core standardised proforma for mortality review (with options to add additional local content) would be a good idea?

	Within the specialty/departments		Hospital-wide	
	N	%	n	%
Yes	439	80.1	100	87.0
No	109	19.4	15	13.0
Total	548		115	
Not answered	21		40	
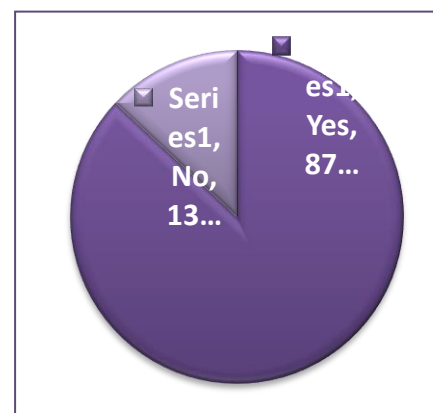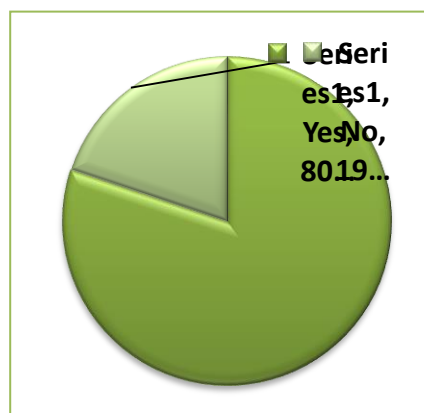
- These data were reviewed in more detail, again to see whether it was the hospitals with lower mortality which responded favourably. There was a lean towards specialty hospitals being the most keen, and large DGHs being the least keen, but overall the range of responses suggested that all types of trust would potentially use a standardised approach.

10.2. Do you have a contact in your hospital/Trust who would be willing to be contacted about further work in this area?

- 104 respondents have provided details of who to contact.

11. Colleges

All the Medical Royal Colleges and 29 Specialty Associations were contacted to find out whether they provided guidance for their own specialty on how to undertake mortality reviews. In general the answer was that they did not or there was no response, with the exception of the Royal College of Anaesthetists who produce the Clinical Standards for Safety and an M&M toolkit. The Royal College of Radiologists who produce guidance on attendance to mortality meetings in their 'personal reflection on discrepancies' document. Their 'Good Practice Guide' highlights what should be covered in an IR

morbidity/mortality audit, and they have a tool for [recording attendance at discrepancy meetings](#). The cardiac surgeons also produce some guidance on scoring surgical deaths and many of the colleges use national databases for their specialties to monitor mortality rather than case note review.

- More work is needed with these groups to support the development of specialty specific adaptations of a standardised mortality review proforma.

12. Conclusion and next steps

The data presented in this paper is high-level, to provide an insight into the current process of mortality review in hospitals. There are more analysis that could be extracted as the work progresses and much useful data in the free text, pin-pointing specific aspect of the process. Respondents would also be very keen to be involved in a wider project.

Overall there was a positive view that standardisation of case note review would be beneficial, but free text comments and telephone discussions raised some need for reassurance on the following issues:

1. The process and review proforma should be simple and not onerous
2. It should not be rigid, restrictive or overly prescriptive
3. It should be adaptable by different specialties
4. It should be beneficial
5. Changes should be pursued with a consultation of all stakeholders (including the Colleges and Specialty Associations).