Indicator 5c Mortality Survey

Undertaken by NCEPOD on behalf of NHS England

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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:

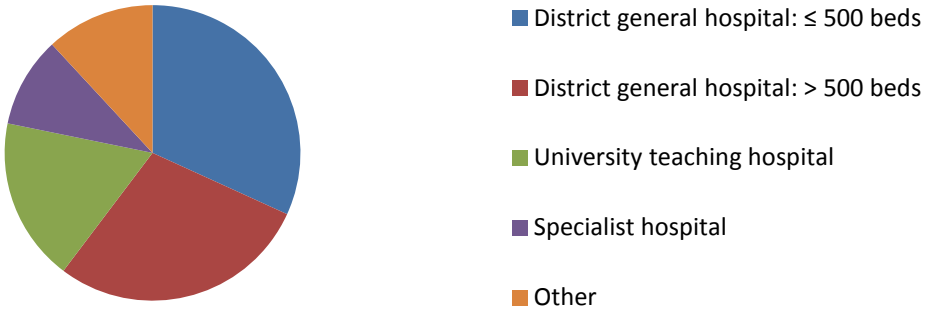
1. A specialty/department level survey to be completed by as many specialties/departments/divisions in each Trust that have variation in mortality review process
2. A hospital-wide survey looking at hospital/Trust level approach to mortality review

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

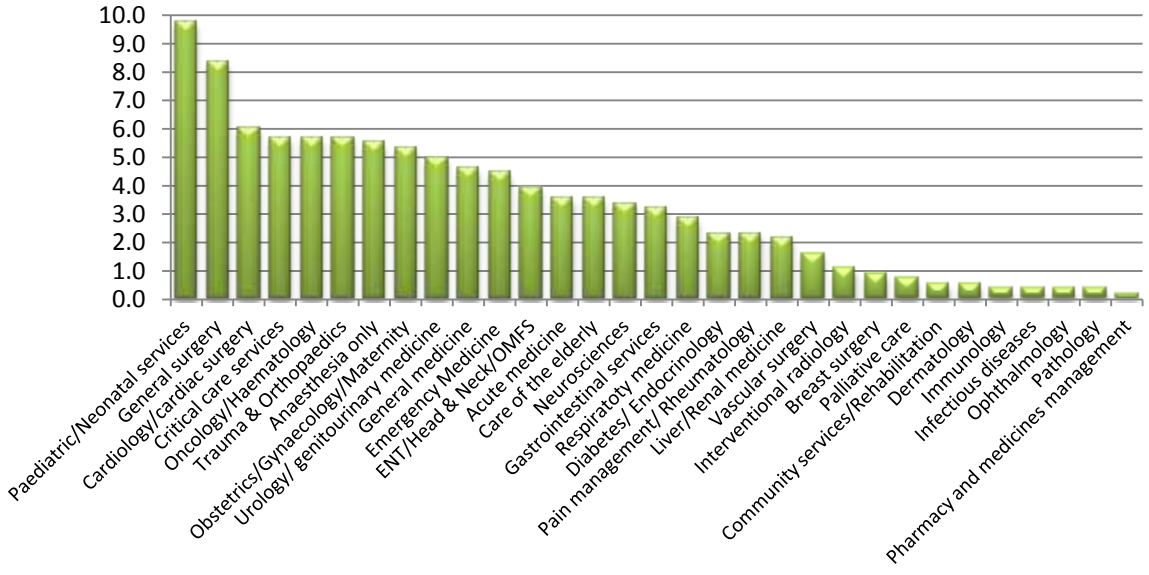


- A response was received from a wide range of hospitals of varying sizes. This means the results should be representative of current practice across the hospitals surveyed. However, it does mean that some of the data had to be handled carefully to account for those hospitals that have a low mortality 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



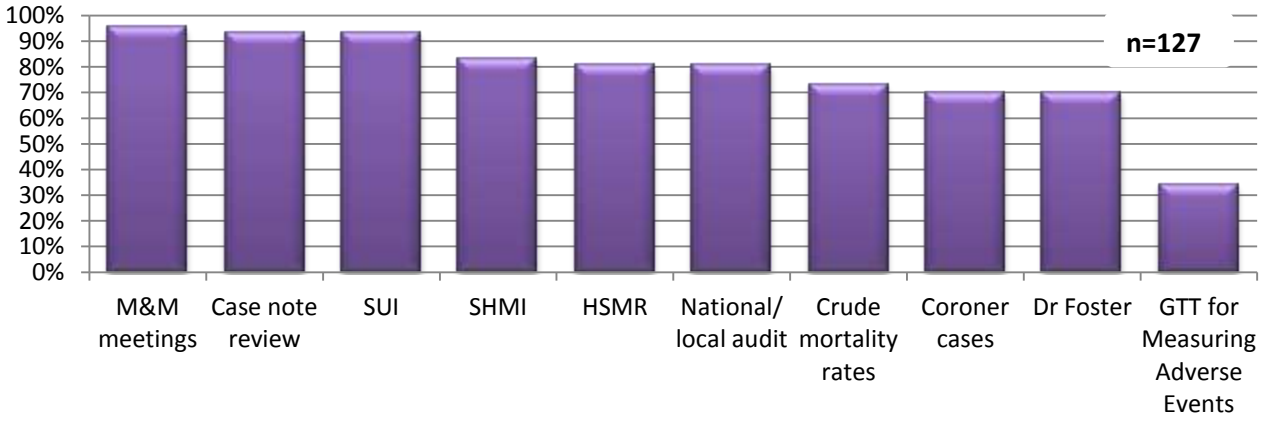
- 569 specialty/department surveys were completed from 31 specialties across 97 Trusts.

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.

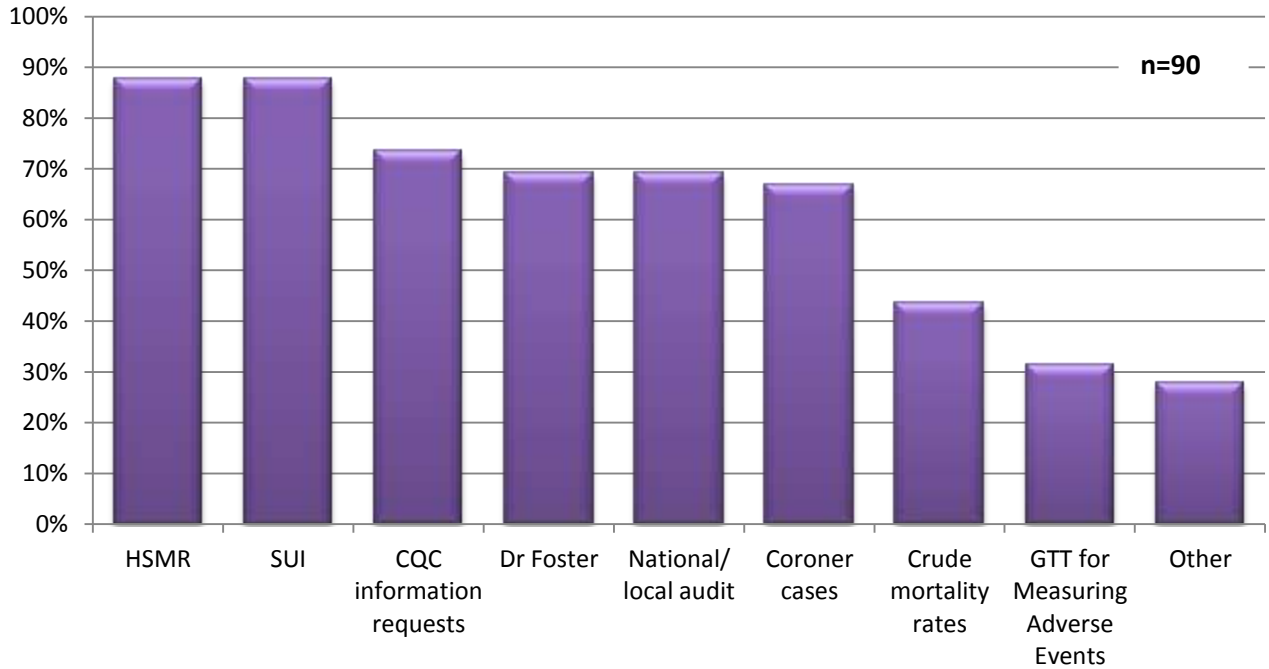
4. Mortality rates

- 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



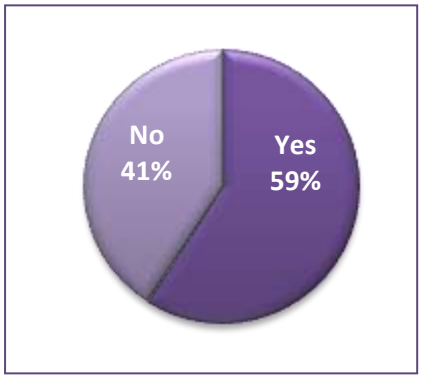
4.2. At a hospital-wide level, the following are used as triggers for case note review



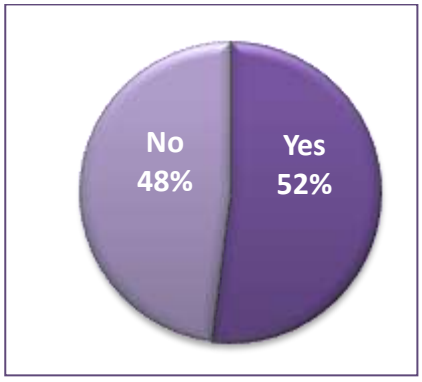
5. Mortality meetings

- 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



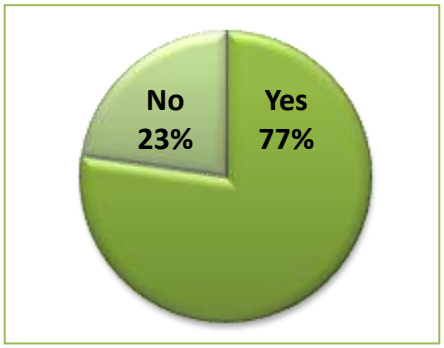
5.2. Deaths which occur after hospital discharge are reviewed

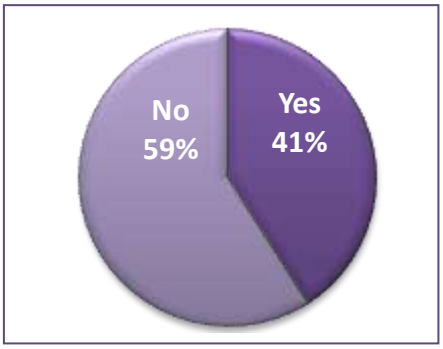


- Free text comments related to this question highlighted that the cases selected for hospital-wide mortality review varied enormously, from random samples making the largest contribution (42%), to unexpected deaths, HSMR alerts and complaints. However, in the majority of cases it was clear from the 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	



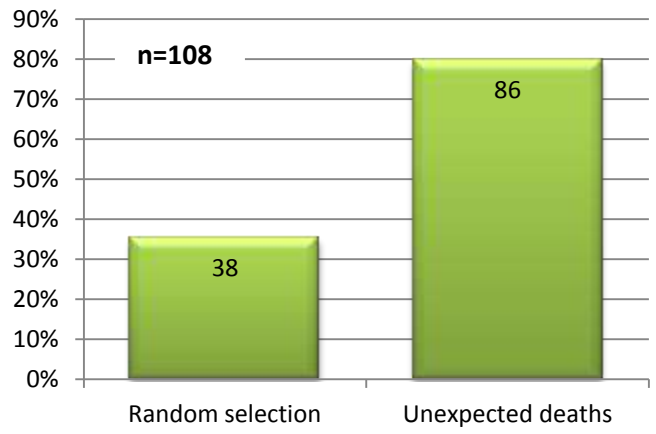


- The responses to these data were checked to ensure that all answering YES, were not just the specialties with a low mortality rate, making it easier for them to achieve this. The

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.

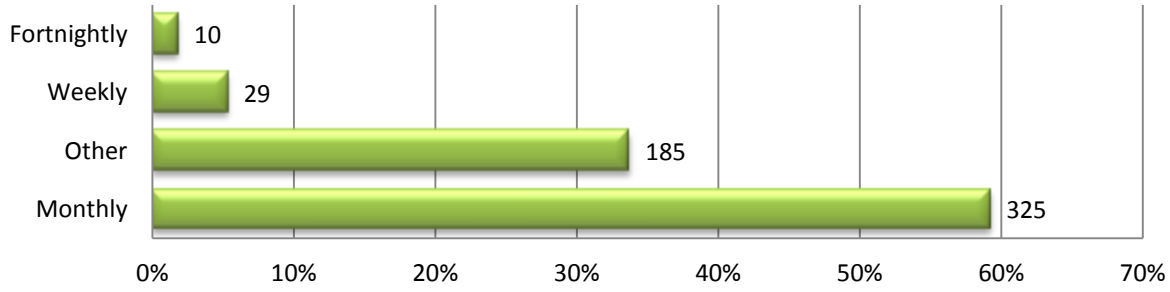
5.4. If all deaths, by specialty, are not reviewed, cases are selected in the following ways



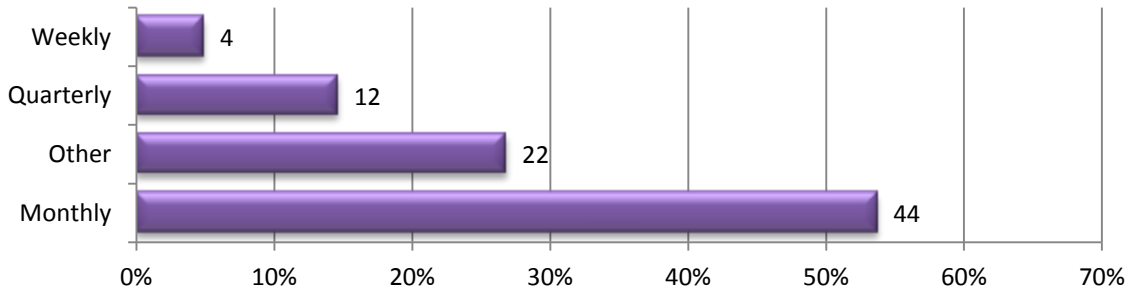
- Those doing something 'other', demonstrated again that there was no clear method being adopted, and the selections within specialties are based on factors that suited the specialty – e.g. 20% of deaths, deaths within 30 days of an endoscopy, chemotherapy or using cases from the renal register.

5.5. Frequency of mortality meetings

By specialty/department (n= 549)

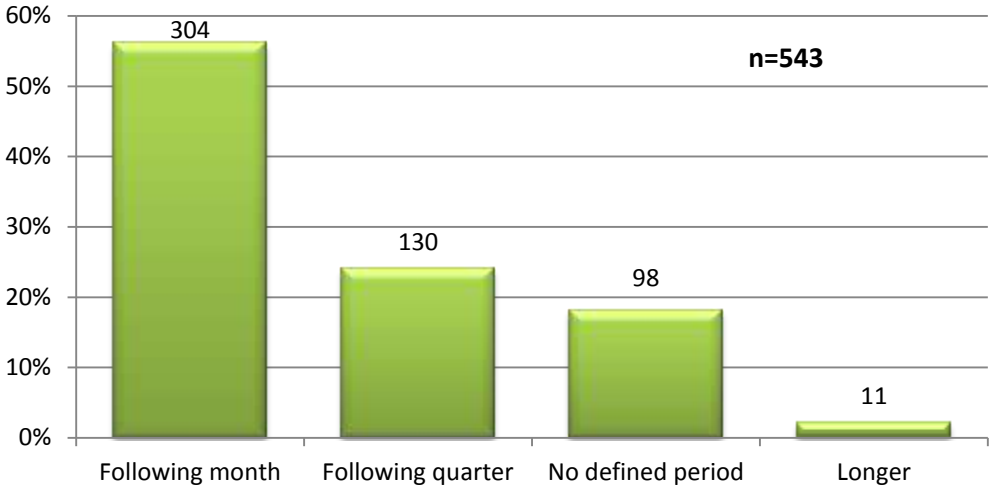


By hospital-wide mortality review (n=82)



- 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



5.7. Attendance at specialty/department mortality review meetings is mandatory

	Within the specialty/departments	
	n	%
Yes	342	61.6
No	213	38.4
Total	555	
Not answered	14	

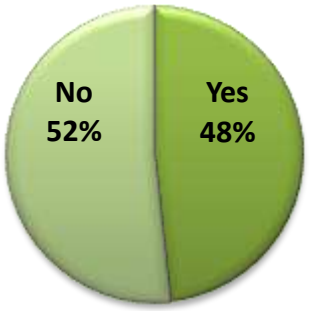
- It is worth noting that comments on this section referred to the fact that attendance is often mandatory but clinicians do not always attend as they cannot be released from their general duties. Data in the free text comments highlighted that lack of consultant input deters junior staff from attending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

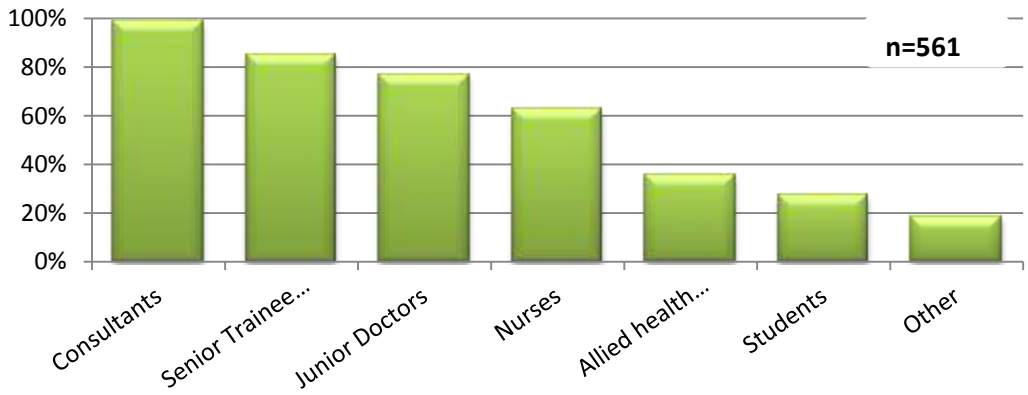
	Within the specialty/departments		Hospital-wide % not calculated – nos. too small
	n	%	n
Yes	491	88.0	79
No	67	12.0	3
Total	558		82
Not answered	11		73

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	

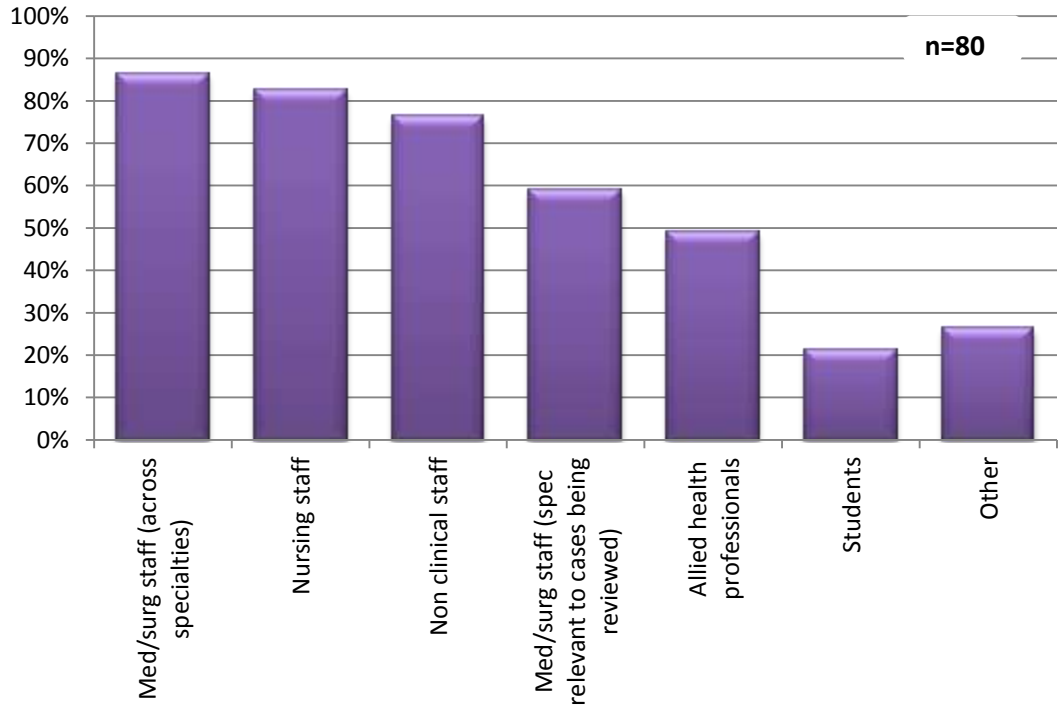


5.10. Grade of clinical staff are expected to attend specialty specific mortality review meetings - answers may be multiple



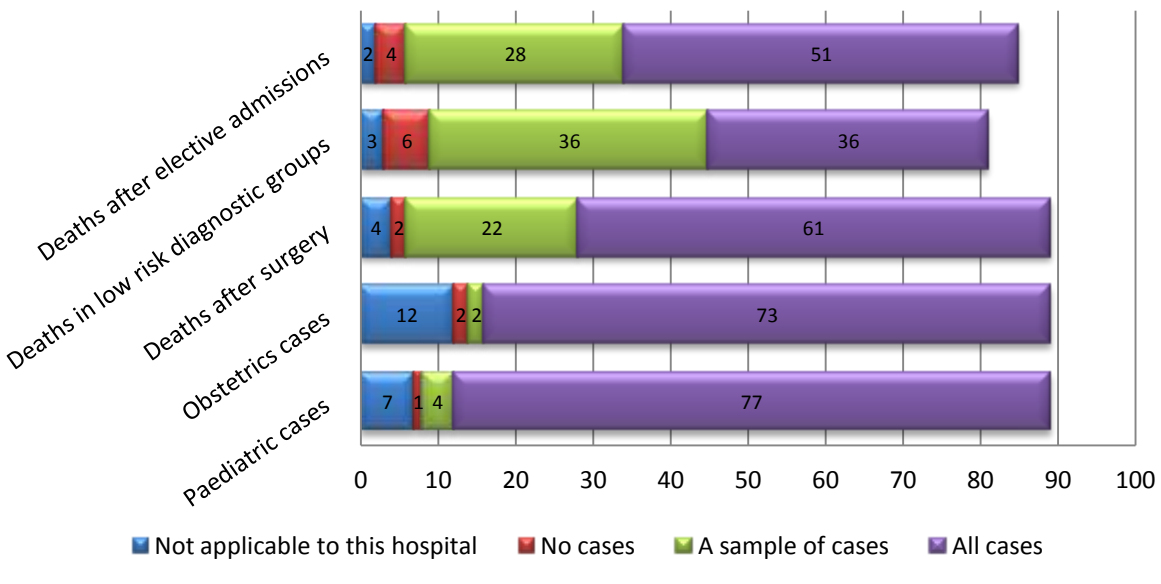
- In 221/552 cases it was reported that non-clinical staff attended the specialty specific mortality reviews. These roles were often managerial or clinical audit staff, some clinical risk staff and occasionally coders, which is a very positive move.

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



- At a hospital-wide level there are often Board members/Governors invited as well as CCG representatives and a Dr Foster representative in one.

5.12. The hospital-wide survey reported that the following types of cases are most commonly reviewed at hospital-wide mortality meetings

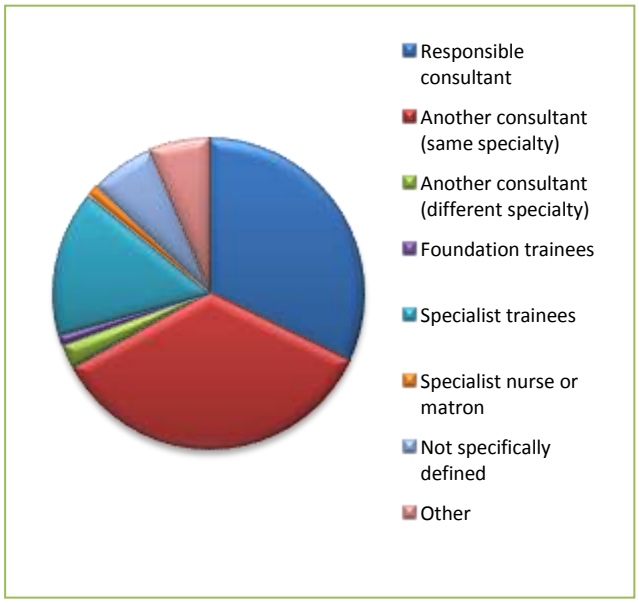


6. Personnel involved in mortality reviews

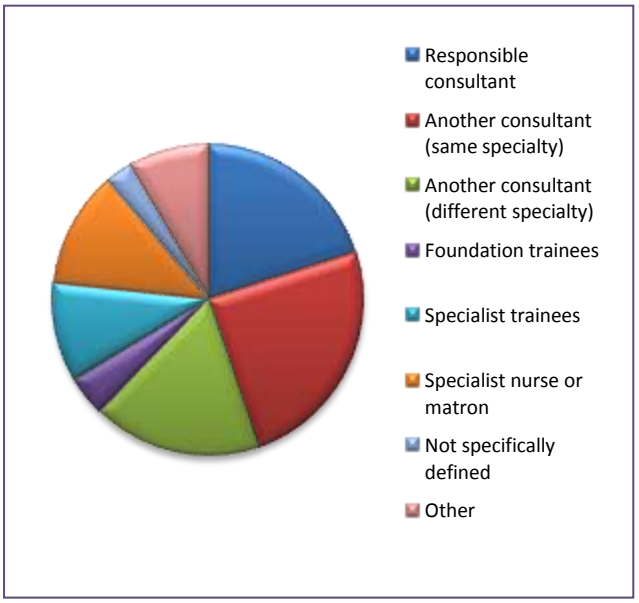
6.1. Those who retrospectively reviews cases – multiple answers were not allowed

	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

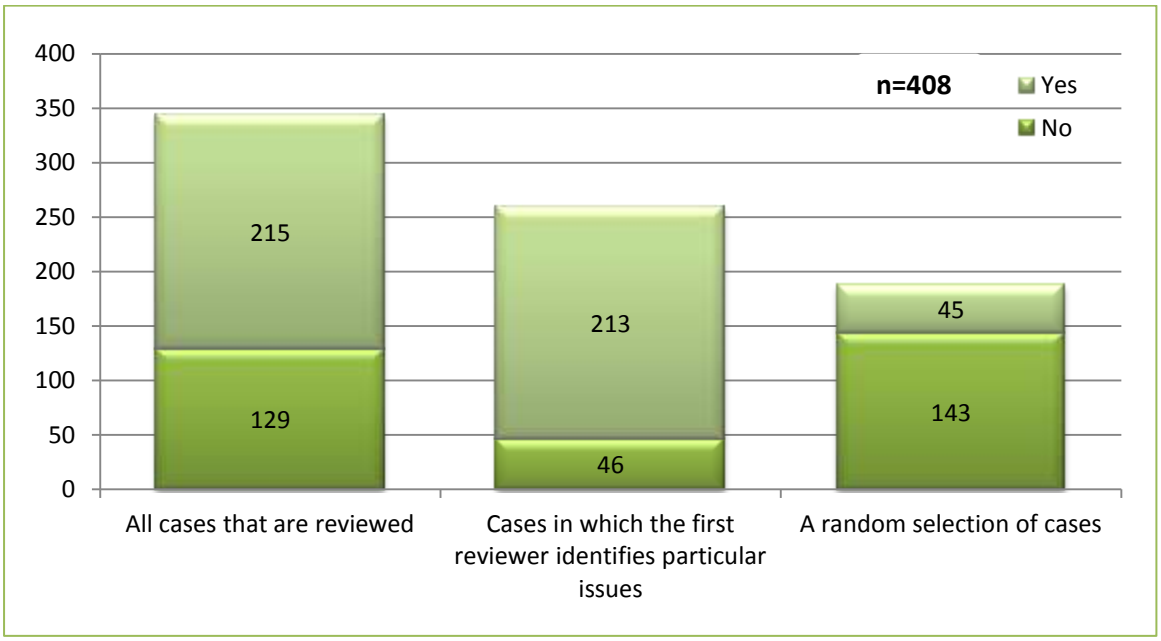


6.2. Cases are reviewed by more than one person

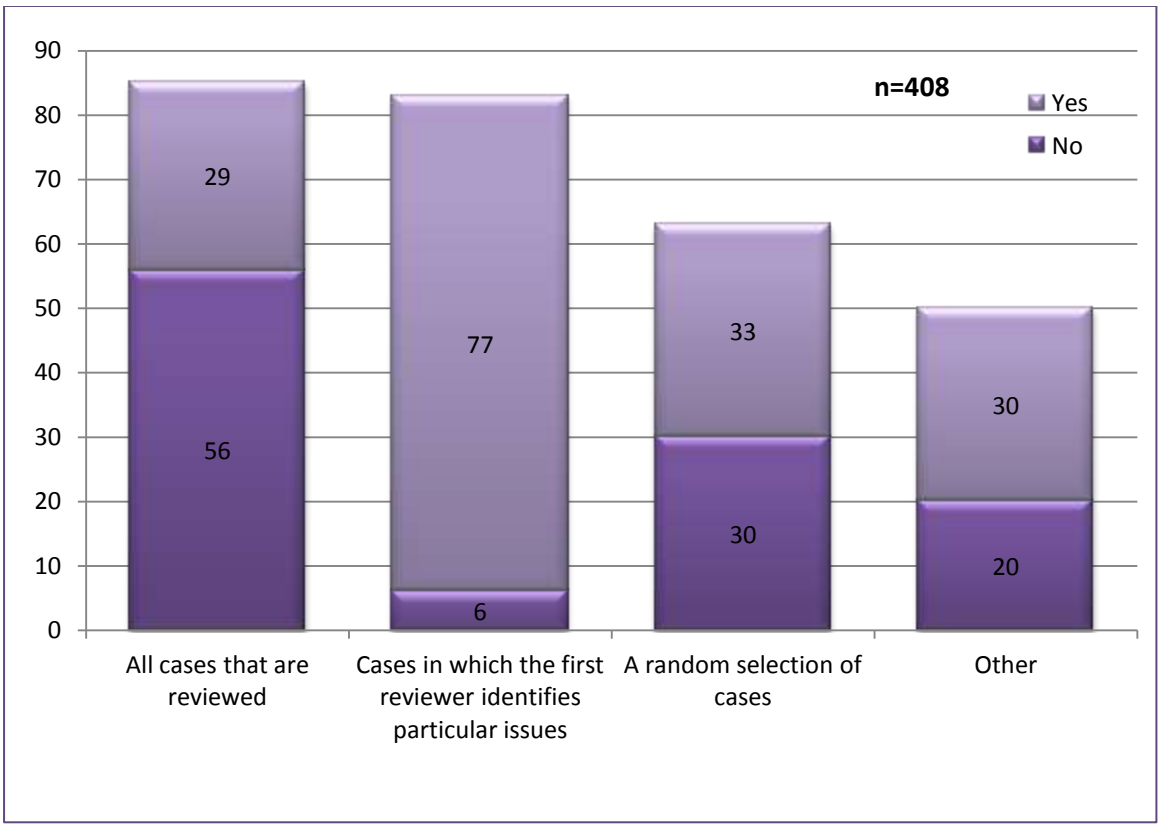
	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	395	71.0	112	90.3
No	116	29.0	12	9.7
Total	556		124	
Not answered	13		31	

- 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



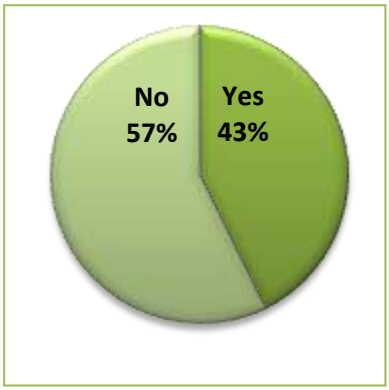
Hospital-wide mortality review: cases selected for review: Factors that determine which cases are reviewed by more than one person

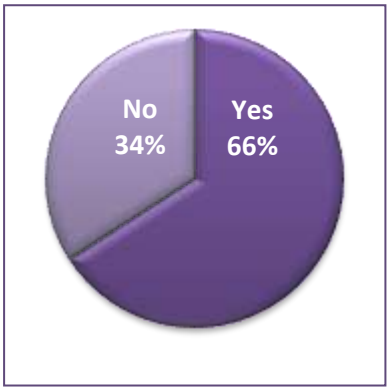


7. The process of case review

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	



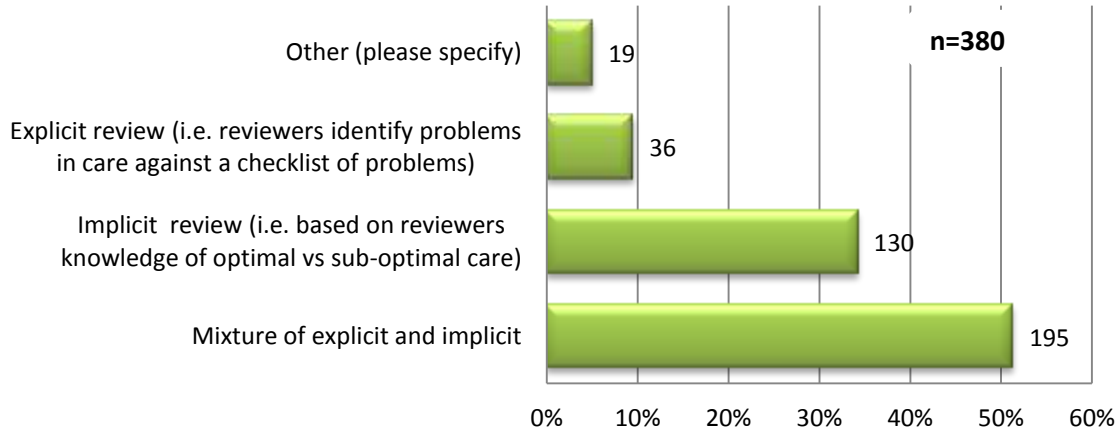


- 52 examples of hospital and specialty wide mortality review proformas were emailed to NCEPOD as part of this survey. It was very obvious by reviewing them manually that there is no standard layout. They ranged in size from one side of A4 to eight sides of A4. However, they do have some common features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

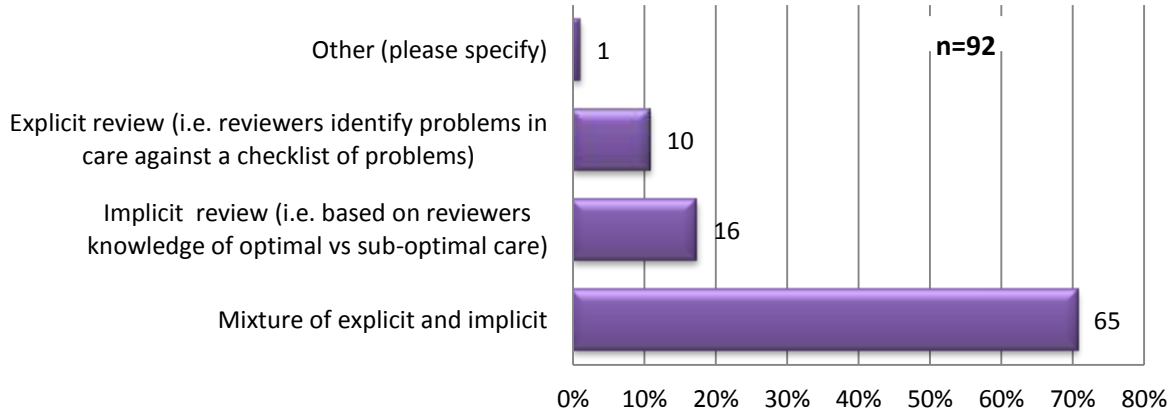
    - Patient details
    - Cause of death and whether it aligns with coding
    - Review of the clinical management – either factual details e.g. drug error, number of consultant reviews, or a more open questioning system asking whether aspects of care influenced outcome
    - An overall assessment of care/score
    - Lessons learned
    - Action plan

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

For specialty/department case review

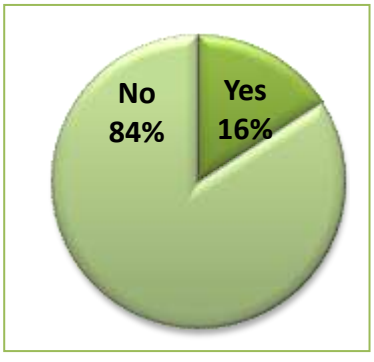


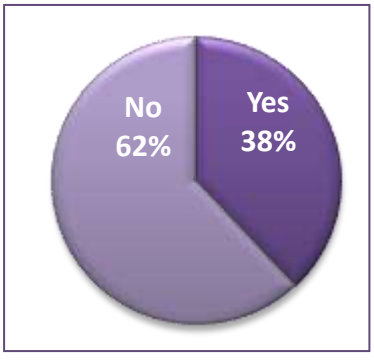
For hospital-wide case review



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	



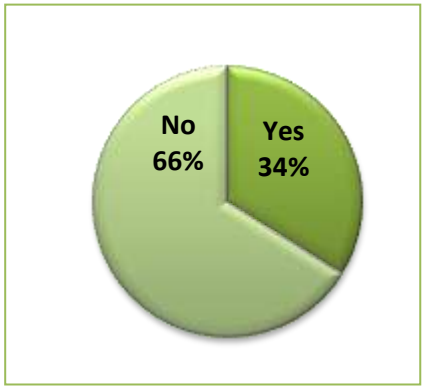


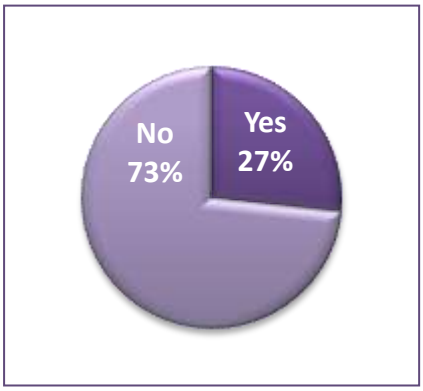
- Where scores were provided it showed that there was no majority use of any score, and they were more frequently adopted at a hospital-wide level. Many have been set locally and some are specialty specific. To grade overall quality of care the NCEPOD grading system was commonly used, followed by the 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.

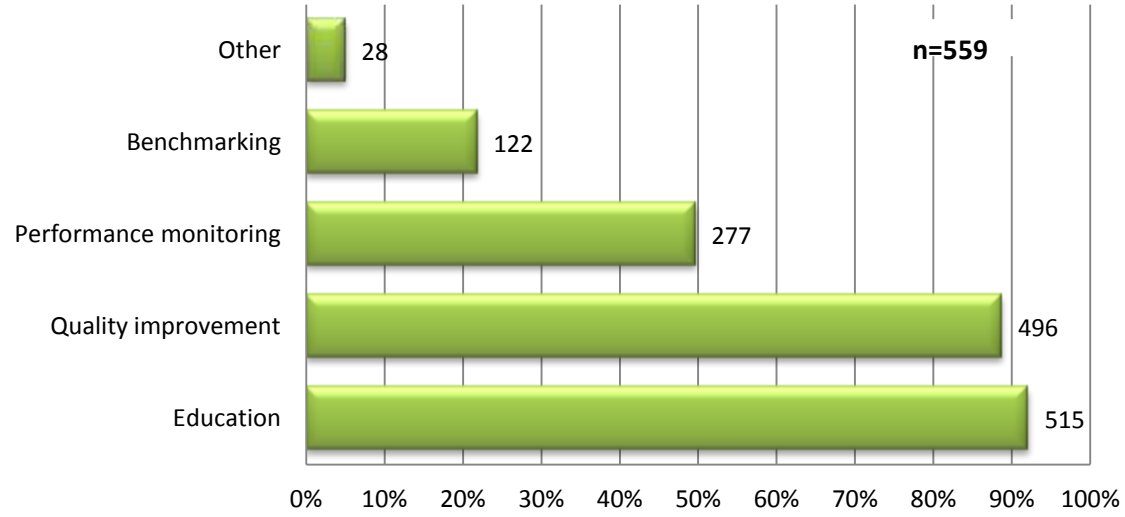
8.2. Data from mortality meetings are captured electronically

	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	

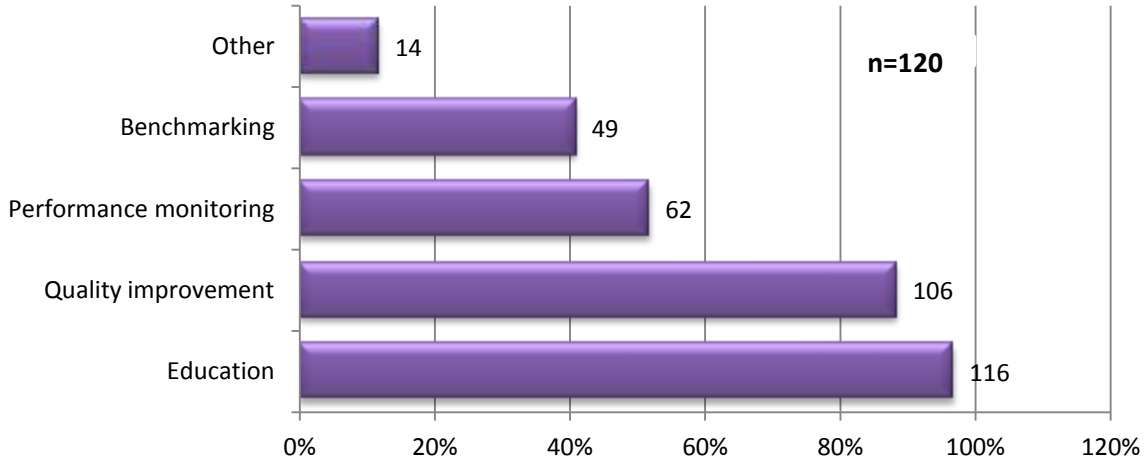
9. Use/dissemination of mortality review data

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

Specialty/department



Hospital-level



- 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?

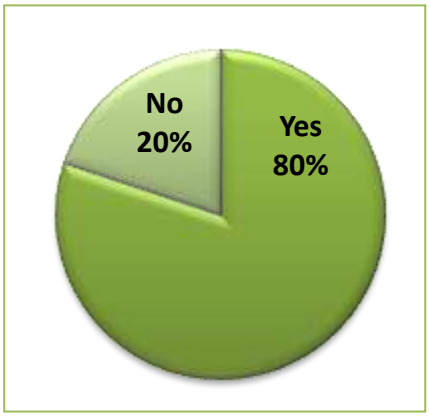
	Within the specialty/departments		Hospital-wide	
	n	%	n	%
Yes	444	82.1	93	78.8
No	97	17.9	25	21.2
Total	541		118	
Not answered	28		37	

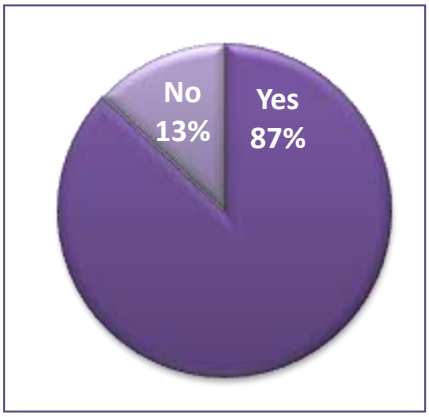
- Occasionally, when they were not reported it was because there was a risk of duplication.

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).