

Mortality meetings in geriatric medicine: strategies for improvement

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Abstract

A large proportion of patients who die in hospital will be under the care of geriatric medicine. Mortality reviews have traditionally used trigger tools to try and identify preventable deaths, but the majority of hospital deaths are not preventable and lapses in care are often very complex. Over a period of 14 months we performed four PDSA cycles to change the focus of mortality meetings within care of the elderly and stroke medicine at Cumberland Infirmary to look beyond preventable deaths. The aim was to maximise learning from mortality meetings to improve patient care.

We used collaborative working at a trust and departmental level, moving from trigger tool preparation to a narrative approach, and we set up strategies to focus and disseminate our learning. The mean number of cases discussed per meeting and the mean number of lessons identified per case discussed increased, as did the learning levels (trust, department, individual). Maintaining multidisciplinary input and consolidating lessons learnt was difficult because of clinical commitments and natural staff turnover.

Problem

Almost one in ten patients in teaching or general hospitals die within thirty days of admission.[1] This is higher for older age groups and patients admitted to medical and elderly care wards. Mortality reviews have several potential aims:

1. To identify and learn from avoidable deaths
2. As part of the hospital governance structure to identify any systemic problems with care
3. As a learning/teaching event for doctors and nurses
4. To monitor the quality of care, including symptom relief and communication in patients at the end of life.

Historically the emphasis has been on point 1, but with the advent of the Francis report there has been a shift of emphasis to point 4 as this is often a source of dissatisfaction for relatives and carers.

Cumberland Infirmary Carlisle (CIC) is part of North Cumbria University Hospitals NHS trust. The Trust was placed into special measures in July 2013 following Sir Bruce Keogh's review into hospitals with higher than average mortality rates. Mortality meetings within care of the elderly and stroke medicine at CIC were almost entirely attended by doctors, there was no standardised format, there was little formal preparation, case selection seemed sporadic, and few cases were discussed. The care of the elderly and stroke department's mortality meetings did not appear to be meeting their full potential in contributing to improving patient care. The focus of this project was to improve mortality meetings at CIC within elderly care and stroke medicine, with the overall aim of increasing departmental learning and therefore improve patient care.

Background

There is a huge literature on mortality reviews, but there is a considerable variation in how they are organised and conducted.[2] Mortality meetings are an important element in junior doctor training and should also be part of trust-wide governance strategy. Mortality meetings have traditionally concentrated on identifying and learning from avoidable deaths. One method is to use the Institute for Healthcare Improvement (IHI) global trigger tool [3] to help identify adverse events. However, this method has its disadvantages in that the traditional "triggers" focus on errors of "commission" (giving the wrong care) with less consideration for errors of "omission" (failure to give care) that can often be the main focus of concern for carers and relatives.[4]

Many older patients who die in hospital are in the final stages of chronic illness. Palliative care and symptom relief can be more important than attempts at curative care. One way to address the needs of dying patients in hospital is the Liverpool Care Pathway, but use of this has now been discontinued.[5] This now puts an extra responsibility on nurses and doctors trying to provide high quality, individual, symptomatic palliative care including good communication (with patients, relatives, carers and the wider healthcare team) without the use of a formal document or checklist. In this project we started using the IHI Global Trigger tool, we then evolved our method in order to increase joint collaboration, joint learning and improve our care of dying patients in addition to achieving traditional mortality meeting outcomes, by using a more narrative method.[6]

Baseline measurement

Mortality meetings in our department are held on a monthly basis. At baseline we used the IHI Global Trigger Tool to review some of the deaths from the previous month and these cases were then presented at the monthly mortality meeting. Each meeting lasted an hour, minutes were recorded and reviewed for the number of cases discussed, the lessons identified, the number of attendees, and the

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number of different disciplines of health care professional present.

Design

Following the baseline measurement several problems were identified. There was not enough time to discuss all the patients that died within the whole of the department the preceding month and some cases were not included. The cases included were often dictated by which case notes were readily available in the days leading up to the meeting, rather than those with the most "triggers" or most significant learning points. Some of the cases reviewed and presented had no triggers or learning points to identify and limited preparation and meeting time was being used indiscriminately.

Preparing each case took a long time, including reviewing the case, completing the trigger tool, and producing a presentation. Often the triggers were not indicative of significant harm. Omissions of care (eg poor communication with relatives) were more common than adverse events due to errors of care, such as hypoglycaemia due to too much insulin. The vast majority of patients discussed had completely unavoidable deaths, the patients were either terminally ill or frail with multiple co-morbidities in the context of an acute illnesses or disease progression. In these cases the main focus of management was: 1) communication with the patient, their relatives and carers; 2) symptom control; 3) early, in hours decisions about the focus of care and limitations of treatment with clear documentation. These were the issues that needed to be addressed.

The meeting was almost entirely attended by doctors and there was a lack of therapist, nursing, and pharmacist input. The learning points often had implications for the department and hospital as a whole, with no means of readily disseminating these beyond the limited attendees of a meeting.

Strategy

PDSA cycle 1 - Preparation and organisation: Following the baseline measurements the preparation for the meetings was changed. Ward clerks and secretaries were involved in pre-emptive case note collection. Junior doctors were encouraged to review notes and were provided with a three slide presentation template: 1) slide for the background; 2) slide for the history; 3) slide for learning/discussion points and triggers. The slides were put together into one single presentation before the meeting to ensure efficiency when moving from one case to the next. The group then decided on at least one learning point per case under the guidance of the chairman who recorded this in the minutes. The chairman also had responsibility to keep the meeting to time to encourage efficiency in the meeting and to avoid overrunning having a negative impact on attendance.

PDSA cycle 2 - End of life care: As the majority of the patients discussed were terminally ill and at the "end of life", a teaching seminar was held with our palliative care team. In this seminar we discussed management of patients at the end of life and agreed on four main principles which should be recorded in the notes: 1)

Medical plan, including symptom relief; 2) Escalation plan; 3) Communication with patient/family; 4) Communication with the team. Where appropriate we encouraged the use of an end of life care indicator sticker in patients' notes with an entry detailing the above points.

PDSA cycle 3 - Case selection: Because of the number of patients that needed to be reviewed, we liaised with a senior clinician in the Trust (from a different department) who reviews all Trust deaths. The trust reviewer started to regularly feedback pertinent cases for further discussion within the department. We used this information to focus our case selection by prioritising these cases within our mortality meetings.

PDSA cycle 4 - Multidisciplinary mortality meetings and disseminating learning: We invited multidisciplinary team members from the department to attend the monthly mortality meetings and set up a regular email reminder via one of the department's secretaries. The entire meeting minutes were reviewed retrospectively and the lessons identified were categorised by level, for example was the learning point relevant to an individual, a team, the department or the trust as a whole. The learning points identified were published in the department safety letter and escalated to the hospital clinical governance meeting as required.

Results

Data was collected from five mortality meetings pre intervention and nine meetings during and after the PDSA cycles (see table 1 and figure 1). The number of cases discussed per meeting gradually increased from a mean of 3.6 per meeting pre interventions to a mean of 6.7 cases per meeting during and beyond the four cycles of PDSA interventions. The number of lessons identified per meeting pre intervention was 5.6, rising to a mean of 17.0 per meeting from PDSA cycle 1 to completion of data collection.

The number of attendees to the meetings varied between five and 18, but after PDSA 4, more hospital disciplines were represented (eg nurses, therapists, pharmacists) leading to a wider variety of learning points and better dissemination.

See supplementary file: ds4851.docx - "Results: Table 1 and Figure 1"

Lessons and limitations

The strategies implemented to improve our mortality meetings and make them more relevant to the elderly care department were simple, straightforward, low cost and easily implemented. The aim was to make them more multidisciplinary, a better learning experience, to improve care particularly at the end of life and disseminate our learning experience for the benefit of other patients.

Initially our mortality meetings were poorly prepared and focused, with the use of traditional "triggers" that did not identify the majority of care concerns affecting our patient group (errors of omission

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rather than commission). Collaborating with an experienced clinician from outside the speciality, who was undertaking a trust wide mortality review successfully allowed us to bring focus to our mortality meetings. We were less successful at consistently increasing the number of attendees, especially because of clinical commitments, but we did manage to involve a wider variety of disciplines including pharmacy, therapists and nurses. Increasing the multidisciplinary nature of our meetings allowed broadened case discussion and learning points. We did find documentation gaps in "end of life" care, possibly exacerbated by the withdrawal of the Liverpool Care Pathway during this study. However, we did find there were significant improvements following the introduction of a simple checklist and after a joint teaching session with our palliative care team. There was some repetition in the lessons identified, the themes were highlighted in the department's safety letter and targeted in departmental teaching sessions.

The lessons identified could be used to inspire further quality improvement work. There will naturally be some difficulty in sustaining improvements in practice with the regular turnover of junior doctors in the department; this could be somewhat alleviated by good quality induction. There was positive change in the type of lessons learnt, they were relevant at more than one level – ie not just lessons for the ward team, but also for the whole department, and even for the hospital as a whole – see table 1.

Having thorough preparation for a mortality meeting must go hand in hand with a robust system for dealing with lessons identified in order to have a positive impact on patient care. We would encourage any department looking to begin to formalise and gain more from their mortality meetings to consider both from the outset; we started to develop these systems during the PDSA process and no doubt have room for further development.

Conclusion

Mortality meetings are an essential part of junior doctor training and hospital clinical governance. There is a tendency for these meetings to be poorly organised, poorly focused and poorly attended, especially by disciplines other than doctors. In this improvement project we were able to make our mortality meetings more multidisciplinary and a better learning experience for staff. The meetings were improved by collaborative working within our department and with the trusts mortality review process. We improved the learning potential of our department's mortality meetings by disseminating the lessons identified using a safety newsletter and targeted teaching and training. For the benefit of our patients it is important that we continue to maximise the lessons identified from our mortality meetings, but also ensure these are translated into lessons learnt.

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Declaration of interests

Nothing to declare.

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