

Article 11. Capital planning, the coroner, and there is a transit van in your resuscitation room

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This article on management within the emergency department discusses capital planning, the workings of the coroner court and inquest, and the impact on the department of a major incident.



To understand this article fully you must read the extra information on the journal web site (www.emjonline.com)

The sudden arrival of 2 million for a department rebuild has caused a great flurry of management activity, just how much is outlined in the time out below.

The problem with the coroner has provoked significant responses and many of you recognise the problems that this brings. In another time out one of HM coroners gives his views on the accident and emergency (A&E) department and how closer working relationships might be a way forward.

Most emergency departments have internet access for staff that allows them to make use of email and remote resources, but what happens if this privilege is abused? A letter from the IT department at St Jude's makes disturbing reading. Someone has been using the department internet connection to access pornographic sites. How would you deal with unsuitable use of your department's information superhighway?

This is the penultimate article in this series and we finish with a very challenging exercise for you to consider. What would you do if a large van drove through your doors causing serious injury and then setting the department on fire? More details are given below and on the web site. The arrival of a Transit van gives a new dimension to the "in tray exercise".

CAPITAL PLANNING PROJECTS.

For those older readers who struggled for years to get the most basic of equipment and facilities the new wave of NHS capital spending will be a very welcome change. Many A&E departments have recently completed major capital projects. St Jude's is probably one of the last to receive a large capital allocation, however with major changes to the NHS and emergency care occurring at an ever increasing pace, it is probable that further money will be available to support change. Opportunities will arise to greatly improve the facilities we have to care for patients and to improve the patient and staff experience.

A large building project will cause significant disruption to the department and requires a great deal of management time. If moving house is one of the most stressful events in your private life then a departmental rebuild is surely top of the stress list in an A&E manager's life. In this article

we will look at the current guidance for capital planning, look in detail at the project management of the scheme, and explore change management. This project will use many of the nuts and bolts of management theory that have been discussed in this series and is a synthesis of the knowledge and skills that we have covered. As a first step form a small project group with representatives from all sections of staff. It would be ideal to include a representative of patients on this group.

CAPITAL PLANNING: THE THEORY

Large capital projects, such as building a new hospital, are subject to detailed guidance from the Department of Health.¹ It is unlikely that an A&E manager is going to become directly involved. However, you must ensure that you attend key decision making meetings to give advice on any changes that may affect the workings of the A&E department. Your knowledge of patient flows and the inter-relationships of various services could be crucial.

A visit to the capital planning web site is not an exciting experience and the capital planning process in your hospital may well be equally boring. However, if you are not involved you may find your resuscitation room has been turned into a streaming unit and that under a Private Finance Initiative (PFI) franchise, portering services have been withdrawn (PFI projects often involve the "contacting out" of support services such as portering). Capital planning mistakes can be costly and you may have to live with them for a long time. Attention to detail is vital.

The planning process

Objectives and case of need

The first stage in any large capital project is to define the objectives of the new building and what benefits this will bring. When bidding for new funds this is an important task and a great deal of time needs to be spent working up the arguments to convince the major purchasers, the Trust Board, and the Department of Health. The money for the St Jude's rebuild has been secured but it is essential to go through this process and list all the objectives of the project allowing you to consider the options that will deliver these objectives. It may be that the 2 million allocated is not enough to meet your needs and these shortfalls need to be established early in the planning process so that revised estimates can be prepared and extra funding secured.

Option appraisal

There will always be more than one solution that will deliver the desired objectives and a large

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Box 1 Steps in option appraisal**Step 1**

- Set up project group
- Define objectives
- Collect detailed information (for example, patient flows)
- Read building notes
- Visit other departments
- Brainstorm solutions
- Consult staff

Step 2

- Define constraints
- Stakeholder consultation
- Identify a few solutions to "work up"
- Define criteria to judge solutions
- Define "outline user specification"

Step 3

- Judge solutions against criteria
- Choose best solution against criteria
- Test solution
- Amend in the light of testing

Step 4

- Adopt solution
- Work up detailed project plan
- Review process

capital project needs a detailed option appraisal. This is a time consuming exercise but is key to the success of the project. Box 1 lists the steps of option appraisal. Using option appraisal is a key skill for strategic management.² Use this project to work through an option appraisal process. Whenever you have a hard strategic decision to make, you can fall back on this tool to help you reach a decision.

In the option appraisal you are going to need a lot of specialist advice from the estates department. Draw some preliminary sketches, mapping out the numbers and relations of the various rooms. You should visit other departments, especially those with recent building projects. All the department staff need to be involved at this stage, when you have some ideas to present but nothing is fixed, as this will begin to encourage a sense of involvement and "ownership" of the project. Once you have an "outline user requirement", the estates department will draw up some more detailed plans to allow you and your staff to appraise the options.

Estates departments may try to cut the available space as this means extra cost. Reducing room sizes, cutting reception space, and non-provision of storage space are common ways that planners might adopt to reduce the cost. Staff rooms, changing facilities, storage for trolleys, wheelchairs, and medical records should all be included. There is never enough office space. It is at this stage you need to think of the best ways to plan for staff safety.

It is outwith the scope of this article to detail all the various requirements. Good advice on planning an A&E department can be found in the Health Building Note³ but is not up to date enough to provide enough space for the functions of a modern A&E department.

You need to discuss issues with all the departments whose work will be affected by the process (stakeholder consultation) especially where there is scope for shared facilities (ambulance service, plaster room, paediatric assessment, radiology, physiotherapy, acute medicine/clinical decision unit). Discussion of the project with the Trust Management Board is essential.

Once you have the general layout of the plan, there is a huge amount of detail in the planning of individual rooms. Patient privacy, overhead radiograph equipment in the resuscitation

Box 2 Steps from outline business case completion

- Overall design
- Room plans
- Phasing and temporary accommodation
- Service provision during building
- Timescales
- Full business case
- Detailed project plan with milestones
- Building
- Commissioning

room, the huge numbers of electrical sockets and computer terminals are the fine detail that will make or break the finished result.

This process should lead to a preferred option being adopted and this will then be worked up into an *outline business case* for approval by the Trust and Purchasers. A capital project has long term revenue consequences (the NHS requires a "return on capital" of about 6% per year). This will hopefully lead to an "approval in principle" and work on the next stage can begin.

Detailed plans, full business case

This is a stage where a lot of specialist advice will be required. It is important to remember that the specialists are there to help you achieve your vision but also be aware that they will have other constraints, especially on cost. You may find you have to do a lot of negotiation around many of the details but there will be times when you have to dig your heels in to ensure that some essential part of the build is not compromised because of cutting corners.

It is also a time for maximal staff involvement and delegating individual room design to small groups of staff is an excellent way of dealing with a lot of highly detailed specification work and checking room plans. This also gives staff a great sense of ownership of the scheme and a feeling that they are directly involved. Delegation requires that the staff are adequately supported and plans checked. Such work does take time and cannot be done in spare moments off the shop floor. Time will need to be set aside to allow projects to be completed adequately.

Once the final plans are decided a full business case will be written for final approval.

Project planning

You will have to give a great deal of thought on how to continue to provide the A&E service while building work takes place. The ideal is to move to a different location within the hospital but this is seldom possible. The usual solution is to undertake a phased project, moving from one area to another. This causes a whole catalogue of management problems and a suboptimal clinical environment. Extra staff may be required during this phase and patients need clear explanations and apologies for the work. Temporary signs will be needed. Attention to detail, advice, and consultation are essential. You should also consult the press officer to ensure the public are informed of the building work and the probable time scale of any changes to service.

By now a detailed project plan will be formed with time scales, actions, and milestones. The project start date is nearing and is now literally about to be "set in stone" (or more probably "set in reinforced concrete"). If the process has been well planned the building phase will only seem like a nightmare. If the planning has been poor then it will be a disaster! Fixing a date for opening by a royal visitor is one way of ensuring commissioning plans do not slip.

This is an exercise that is well worth practising!

ACCIDENT AND EMERGENCY AND THE CORONER

(This section has been written by Christopher Dorries, HM coroner, South Yorkshire (West).

Few hospital departments are more likely to come into direct contact with the coroner than A&E, requiring the A&E doctor to have a clear view of the legal implications of dying.

I will consider this topic under headings of “reporting death” and “the inquest.”

Reporting deaths

Under section 8(i) of the Coroner’s Act 1984, an inquest must be held when there is a body lying within the coroner’s district and there is reasonable cause to suspect that the death was violent or unnatural, was a sudden death of unknown cause, or has occurred in prison (whether prisoner, visitor, or staff). A violent or unnatural death [s.8(i)(a)] will usually be easy to spot although the chain of causation should be considered quite carefully as deaths arising from injuries received even many years before must still be reported. In general, however, if there is even a vague suspicion that the death may have an unnatural element, it is appropriate to inform the coroner so that proper inquiries can be made.

The most commonly missed unnatural deaths are those arising from an industrial disease. A change in legislation several years ago has cast the net fairly wide for those who were previously mine workers so any such death resulting from respiratory or a cardiac impairment is probably worth investigating. Indeed, missing the chance to do this may be disastrous for any later compensation claim by a widow.

Unnatural deaths

The most common error in reporting “unnatural deaths” is failure to report deaths where an occupational illness may have played a part.

The most common requirement for reporting from A&E will come under s.8(i)(b) where the death is clearly attributable to natural causes but the exact cause is unknown. The letter of the law requires an inquest but there is provision in s.19 of the Act for a postmortem examination to be undertaken with a view to ascertaining the (natural) cause and thus eliminate the need for an inquest.

There is a common misconception among doctors that they must be “sure” of the cause of death in order to issue a medical certificate. In fact the requirement is that the doctor is “satisfied to the best of his/her knowledge and belief”.

Deaths in prison [s.8(i)(c)] are comparatively rare but it is not generally recognised that the death of *any* person, prisoner or not, in such an establishment is reportable, as is the death of a prisoner who has been transferred to a hospital during sentence for treatment. The cause of death, natural or otherwise, is wholly irrelevant as the statute requires that any such fatality is the subject of an inquest before a jury. Broadly similar provisions apply to a death in police custody.

The requirements are not as rigorous for a death while detained under the Mental Health Act, but most coroners will want to know about such a death without delay.

Some coroners (the author included) have an agreement with their local hospitals that any death within 24 hours of admission is reported, although hospices or terminal care cases are commonly excluded. Presumably the original justification for this was lack of ability to make a reasonably accurate diagnosis within the first day but improved technology may have changed that in many cases. In some ways it may be advantageous for the A&E doctor to know that any death in the department has to be referred, but equally it might be argued that getting through to the coroner’s office on a busy Monday morning to report a known natural cause is a waste of time.

Box 3 When to report a death to the coroner

Statutory requirements

- Sudden death exact cause unknown
- Violent or unnatural causes
- Deaths in prison

Good practice

- Deaths in police custody
- Deaths in patients detained under the Mental Health Act
- Any death where there may be allegations of a failure in the standards of care
- Deaths within 24 hours of admission to hospital
- Deaths after operations or anaesthesia

On balance I favour the 24 hour rule (which is purely by agreement and entirely without statutory requirement) as it does tend to throw up a regular sprinkling of cases that turn out to be more complex but that might not have otherwise been reported. The journal would welcome reader’s views.

Inquests

A potential source of terror for A&E staff is a death that occurred because of failures or omissions in the department. This might be a missed diagnosis, lack of timely treatment, or even the occasional patient who has left the department without treatment or assessment. Even if allegations are unfounded the coroner will require a written report and probably oral evidence at an inquest. In reality there is a very small chance of a junior doctor having to attend a “difficult” inquest during their career but fear of the coroner’s court—presumably because it is such a public arena—may well change this perception beyond all reason. It is very likely that an A&E consultant will have to attend, either to give evidence or to support staff. In Sheffield with 120 000 A&E attendances each year, A&E doctors have to attend an inquest to give evidence five or six times a year.

Functions of an inquest

Section 11 of the Coroner’s Act 1984 requires the coroner to examine on oath all persons having knowledge as to the facts on the death and to certify in an Inquisition (that is, formal record) who the deceased was, and how, when and where the deceased came by his death.

The inquest is meant to be a fact finding exercise and is not a forum to apportion blame or guilt. However, sometimes blame will become readily apparent from the evidence even if never actually stated by the coroner.

Box 4 Functions of an inquest

- Who was the deceased?
- When did they die?
- How did they die?
- Where did they die?

It is essential to know the local coroner and understand both what is likely to be required and how the inquest itself may be run. There are more than 140 coroners in England and Wales ranging from full timers in the busy metropolitan areas who are in court for the greater proportion of each day (often with complex cases) right through to the rural part time coroner who may only see a couple of inquests each week. This disparity, coupled with extremely sparse and poorly written law, has permitted important discrepancies in practice to grow in different jurisdictions over (literally) hundreds of years. This means that one coroner’s court may well be quite different from the next. Any advice given here must also be read in that context.

The process of fact finding at an inquest (so called "inquisitorial") may be perceived by relatives as their first and only chance to level blame at those they hold responsible for the death. The management of these emotions requires a great deal of careful handling both by the coroner and the hospital. The coroner must be seen as independent and scrupulously fair if the inquest is not to be dismissed as a whitewash. If correctly managed, the inquest can be an exceptionally valuable tool. It might stop litigation in its tracks simply by establishing the true facts in a straight forward and concise manner that the relatives will actually understand.

Management and preparation for an inquest Dealing with the deceased's family/carers

How should the relatives and carers be treated once it becomes apparent that there is something unfortunate about the death? The ideal situation would be an early, truthful, and complete disclosure of information with bereavement support readily available. However, a detailed meeting with relatives in a case that is going to inquest is controversial. There must be some initial explanation, the hospital that simply clams up and refuses to acknowledge little more than the fact that the patient is dead will inevitably be viewed as covering up. Even if the whole truth is then revealed it is unlikely to be accepted as such. However, the author has also seen a situation where doctors have suggested that the death was caused by an error that subsequently turned out on closer examination not to have been the case at all. While this is hardly an excuse for giving less than the full picture to relatives at an early stage it does underline the fact that some careful thought is needed before that interview ever takes place. It is clear that any such interview should be conducted by the most senior clinicians responsible for the patient.

Some coroners will appreciate the fact that relatives have been given a detailed and sympathetic explanation by the consultant in advance of the inquest, perhaps even with reference to the coroner's postmortem report (see below). Other coroners would view this as usurping their authority. This is a subject where it is difficult to generalise. There is a danger of the consultant having their words misquoted back during the inquest by an angry relative. How to hold such a pre-inquest meeting and the information given will differ from case to case. You should know the attitude of the local coroner. If in doubt in any specific case, discuss how the coroner would view such a meeting.

Preparation for the inquest

It is absolutely essential to make a full and complete disclosure of the facts to the coroner from the outset. There is no room for partial information or an attitude of "well they didn't ask so I didn't tell them". The chief medical officer⁴ sets out that there is a need for clinicians to disclose all relevant information to the coroner and that all those who have information that could help coroners' inquiries should disclose it voluntarily and not only when requested. Both the General Medical Council and the United Kingdom Central Council (now the Nursing and Midwifery Council) have amended their professional guidance to reflect this practice.⁵

I believe that an early admission of a potential fault does much to diffuse a situation. However rigorous the inquiry may still need to be, the coroner is only human and is much more likely to have retained some sympathy.

The coroner will seek a written report from the relevant staff describing the sequence of events. Such a report must be prepared very carefully to ensure that it is both correct and full. An A&E consultant will review these statements and guide staff. Having committed anything to paper it is difficult to return at a later stage and explain that the first version was wrong. Equally a report (or oral evidence) that is less than the whole truth, or tries to smooth over the cracks, may quickly

become apparent. This will not show the witness in a good light and can undermine the court's confidence in other explanations that are in fact perfectly reasonable

Assuming that the coroner will release a copy of the postmortem report (and most now will) it is usually far better to have a proper understanding of the cause of death before putting pen to paper. In difficult cases it may also be important to have some legal advice. However, coroners are under increasing pressure to "manage cases"—that is, complete them expeditiously rather than just waiting for paperwork to arrive in the fullness of time. A speedy response to any request for the statement will therefore be appreciated. However, before sending a report it may be prudent to seek legal advice. Most Trusts now have legal advisors who can give speedy legal advice if this is thought to be required. If no legal advice is available then doctors may choose to inform their medical defence organisations. If there has to be a delay because it is taking time to fully investigate the problem it would be wise to acknowledge receipt of the request and explain the situation.

The court visit

Appearing in any court as a witness is a daunting experience, but some good planning and preparation can reduce potential difficulties. If a junior doctor is to appear in court their consultant should be there to support them, even if they are not giving evidence.

A witness unfamiliar with the coroner's court *must* make the effort to visit beforehand and watch another case to gain an idea of procedures. Advice from colleagues is unlikely to be sufficient on its own and may even be misleading if out of date or based on their own incorrect assumptions. *Coroner's courts: a guide to law and practice*⁶ contains a substantial section of practical advice on preparing for court.

Learning the notes off by heart is quite unnecessary but knowing where to find particular items will instil confidence. Make sure that you have original notes and radiographs or other records. Witnesses should re-read their statements carefully and spend time reflecting on what they want to say. Too often witnesses claim that they were never asked the right question when they have in fact had ample opportunity to make a telling point—if only they had had clearly in their mind exactly what the telling points were! It is also important for the witness to stick to the facts and not go beyond their own knowledge.

Court visit

Preparation and telling the truth is the key to giving convincing evidence in court

Through this whole process senior A&E staff need to actively manage the incident and the impact on staff, whether involved in the case or not. What may be a daunting time for an experienced consultant is likely to be frankly terrifying to a junior doctor or nurse. A chain is only as strong as the weakest link. A clear and helpful explanation of a difficult situation by one member of staff may be totally undermined by someone else who has their facts wrong, is in a complete panic and who perhaps even feels they have been let down by the Trust.

Preparation for after the inquest

Some thought must also be given to handling relatives at the end of the inquest. In some cases this might be a good time to approach them and offer a future meeting, it may be even appropriate to offer any deserved apology. However, emotions often run high at the end of an inquest (because it is commonly another point of realisation of the loss) so it may be wise to avoid a confrontation at that point and simply melt quietly away, ensuring that any necessary follow up is made soon after.

Death is good copy for a local newspaper or television station, particularly when it can be mentioned in the same sentence as the name of an A&E department. Poor handling of the media outside court can leave a dreadful impression with the public even if the case went very well. Take advice from your Trust's public relations officer.

Coroners also have the power to make a report about the circumstances of a death to an appropriate authority if this may prevent similar fatalities in the future. Although this is not strictly a power to make recommendations the coroner may be very well placed to put together everything that has emerged at the hearing. Senior managers in the department might give thought to questions in this context that the coroner might raise at the end of the inquest.

Summary

The whole point of an inquest is to ascertain the facts of a death, not to apportion blame. In some cases those facts will not have been recognised in their entirety by anyone, even the Trust, until all the evidence is heard. If handled correctly, by both the coroner and the hospital, as a non-adversarial but thorough fact finding exercise the inquest can be a deeply valuable audit and learning experience. If handled incorrectly, particularly with insufficient preparation, it can end up as a bruising encounter in a very public arena.

IN TRAY

Major incident

Major incidents can strike at anytime, as many readers will be able to testify, and St Jude's has just been hit, quite literally with such an incident. Below are the bare details of what has happened, a more full account of the event is available on the web site.

A transit van has been driven through the ambulance doors of the A&E department in a "ram raid" to steal controlled drugs. The van has crashed through the wall of the resuscitation room and fractured an oxygen line causing an explosion and a continuing fire. One member of staff is obviously dead, another two are seriously wounded and there are a number of injuries to staff and patients. The driver of the van is seriously injured but alive and his accomplice has run off in to the main body of the hospital.

St Jude's A&E is left with half of its clinical area unsafe, dead and dying staff and it is a major crime scene. How will St Jude's A&E department cope with this situation? How would your department cope in such circumstances?

IN TRAY

Tasks

- Major incident—how do you react when it is happening in your own department!
- Attend a fire lecture
- Review your own "internal disaster plans"
- How do you define leadership? What makes a good leader? Can these skills be taught?

INTERNET FILES

- Details of major incident
- Letter from IT about the inappropriate internet use
- St Jude's diary
- Letter from NHS about a leadership course

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Timetable of events of the major incident

21.00

Mr London is in the department. He has been staying late working on the winter plans. Philip Wales arrives to take over from Omar but before beginning work goes to discuss something with Mr London in the consultant's office.

21.04

Philip Wales and Mr London notice some head lights through the frosted glass.

There is a loud crash and a blue Transit van smashes through the doors hitting the two doctors. It skids on the floor and hits the wall of the resus area. The wall collapses and brings down part of the ceiling above.

21.05

Suddenly there is an explosion as one of the oxygen pipelines fractures and this brings down the rest of the ceiling in this part of the department.

21.06

Panic breaks out among the patients and there is the crying and shouting of both adults and children. Many try to escape from the back of the department in to the waiting area while others stand and watch.

One doctor is dead, another seriously injured. A staff nurse has been hit by a piece of pipeline that was thrown out by the explosion. It has pierced her lower abdomen and she is lying on the floor sobbing. She looks very pale.

Omar Bathi is relatively unscathed, he has a few minor cuts but knows in himself that he is well.

21.07

There is the sound of a siren as a police car pull up and two police officers run in to the department. They had been following the stolen van covertly expecting another pharmacy ram raid. One of the police officers radios for back up and calls for the fire brigade.

Omar Bathi reaches for a phone to call Dr York but the phone at the nurses' station isn't working. His wife collapses at his side and tells him that she has suddenly started getting rapid, strong contractions.

Disclaimer

Most of the characters and events in this series are fictional and any resemblance to any person or department is coincidental. Some of the events are based on real situations but names and details have been changed.

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