

GOSPORT WAR MEMORIAL HOSPITAL INQUESTS

Tuesday 24 March 2009

The Law Courts
Winston Churchill Avenue
Portsmouth,
PO1 2DQ

B E F O R E:

Mr Anthony Bradley
Coroner for North Hampshire
Assistant Deputy Coroner for South East Hampshire

In the matter of Code A & 9 Ors

(DAY FIVE)

MR ALAN JENKINS QC, instructed by **, appeared on behalf of Dr Jane Barton.
MR JAMES TOWNSEND, Counsel, instructed by the Royal College of Nursing, appeared on behalf of a number of nurse witnesses.
MS BRIONY BALLARD, Counsel, instructed by **, appeared on behalf of the acute trust and the PCT.
MR TOM LEIPER, Counsel, instructed by Messrs Blake Laphorn, Solicitors, appeared on behalf of the families of Brian Cunningham, Michael Packman, Elsie Devine and Sheila Gregory.
MR PATRICK SADD, Counsel, (instructed from 23/03/09 by) appeared on behalf of the Wilson family.

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A

(In the absence of the jury)

THE CORONER: Good morning. Do sit down, please. Anything arising before we get going with Mr Black? Yes.

B

MS BALLARD: Sir, two matters. The first is, I hope, to be of some assistance in order to try and aid the jury's grasp of what is a fairly colossal amount of evidence that they are in receipt of. I have drafted together a list of witnesses to include their name, their qualifications, their relevant role and the deaths to which their evidence relates.

THE CORONER: Thank you.

C

MS BALLARD: What I am going to do is hand up a copy of that to you; I am still awaiting for it to be approved by my opposing counsel, but just to see whether that is the sort of thing that you would consider putting before the jury before we take any more instructions from the family members in particular as to the content of that document.

D

THE CORONER: Okay. What I was going to do was to sum up each deceased as opposed to the hotchpotch we have got now in the same way that you have done, and that I will actually sum up in that way so that the jury have a clear view of each deceased, hopefully if I get it right. I think that has to be the way to do it, rather than to expect them to just extract bits from the morass.

MS BALLARD: Certainly, sir, yes. So if I hand that up to see if that is of any assistance at all.

E

THE CORONER: Thank you very much. I will have a look at that in the break, if I may.

MS BALLARD: I am grateful. The other matter relates to the issue of how you intend to elicit the evidence of Professor Black. I am concerned with the indication that you gave yesterday that you intend to allow him to read out his conclusions.

F

THE CORONER: I have just spoken to him about that and the way he would want to do it is to give the background and the findings, then to leave you to ask any questions you have with regard to the investigation because, of course, all his information is dry information. It is information from the notes that were supplied, the hospital notes and the doctor's notes and nursing notes. So I think taking him any further into the background is not very helpful because, of course, it is all well documented and that is where his information comes from.

MS BALLARD: Sir, I was not intending to take him any further into the background.

G

THE CORONER: I do not think that is what I am saying. It is a question of how we get the information from him is the point you are raising.

MS BALLARD: The matter about which I have specific concern is that in two of his reports he makes specific reference to the word "negligence" in his conclusions, in relation to the deaths of Elsie Lavender and Ruby Lake.

H

THE CORONER: He will not do when he gives his evidence, will you?

A THE WITNESS: No, sir.

MS BALLARD: Then I need say nothing further. I am grateful.

THE CORONER: Nothing else?

B MR JENKINS: No thank you, sir.

THE CORONER: Then can we have the jury, please.

(In the presence of the jury)

C THE CORONER: Good morning. Ready to start? Got everything you need? Good. Then let us move to Professor Black, please.

PROFESSOR DAVID ANDREW BLACK, sworn
Questioned by THE CORONER

THE CORONER: Do sit down, please. All right then.

D THE WITNESS: Is there a table?

THE CORONER: No, that is it.

THE WITNESS: I will stand then.

E THE CORONER: Can you give us, please, your full names and your professional qualifications?

THE WITNESS: My name is David Andrew Black and my professional qualifications are: MB BCH from the University of Cambridge and FRCP from the Royal College of Physicians. I have an Honorary Chair in medical education from the Brighton and Sussex Medical School.

F THE CORONER: A very substantial list of publications which you have supplied us with, but your main area of expertise is what?

A I am trained as a consultant geriatrician. Geriatricians are the specialists in the UK who treat the disorders of older people, the often complex disorders, and understand both the natural history of those diseases and their functional changes. It is actually the largest sub-specialty in medicine in the UK and the vast majority of patients, certainly over 80 in hospital who are not under a surgeon will be under a geriatrician, although they may have different names like consultant physician.

G Q You are practising?

A I am still practising. I was appointed as a consultant 21 years ago. I have practised part-time for the last twelve years, six of those years because I was the Medical Director of the Trust I worked in, and the latter five years because I have spent the majority of the working week as a Post-graduate Dean responsible for the post-graduate medical education of 3000 doctors and dentists in the south-east of England.

H

A Q You were asked by the police authorities to look into 'Operation Rochester' and the ten deceased that we are dealing with in these inquests. The reports that you prepared, we have those, for the advocates, it really is a question of going through the evidence that becomes understandable for the jury. Various terms that you use that recur in your report, can you help us with those?

B A I think, yes, I will certainly explain the various diseases as we go along, but I feel there are two things that I regularly use. One is delirium and one is dementia that I think might be worth just touching on because they are in many of these cases. Delirium is also referred to as "an acute confusional state". So if I say "acute confusional state" I mean the same as "delirium", and it is exactly what it says, and that is that a patient, because of illness, becomes acutely confused. They are disorientated in time and space. They may have slurred speech or say things that are irrelevant. Sometimes they may get hyperactive and wander. Other times, they may just go quietly into a corner and say nothing. They will certainly not know the time of day. They might be very active at 3.00 in the morning and completely asleep during the afternoon. It is usually a response to serious illness, to drugs and often a multiple combination, but anyone can become acutely confused. However, it is much more common in older people. A very high proportion of older people admitted to hospital for any reason will become confused during their admission. Many of them will recover, but not all recover. It is also far more common in those who have an underlying impairment of cortical, of brain function and that is dementia. Dementia is just a term, means that you have an impairment, for a number of pathological reasons, of cortical function, and you gradually use mental abilities. Almost anything can be lost in almost any order. It is, of course, a huge spectrum, from someone who is just a little bit confused to someone who is very confused, but dementia is a chronic thing. It is irreversible, it is there all the time, but it will seem to fluctuate because people often get acute episodes on top of it. They may get a urinary tract infection and suddenly become very confused, but you treat it and they may go back to where they were before, or maybe not quite as back to where they were before. The commonest two diseases that cause a dementia-type picture is Alzheimer's and multiple infarct disease, little strokes in the brain. That is a very common cause and you see that in other illnesses. So the two can go together. It is far more common to get acute confusion if you have some underlying dementia, which will not stop you living at home normally, but the predisposition to get trouble is there.

F Q The reports that you prepared in these cases, they all come from the notes that were provided to you.

A Yes.

G Q You have no firsthand knowledge of any of the patients?

A No, I have not and, therefore, I suppose this may seem very one dimensional and dry, but that is all that I can work with, which is the notes, and to explain what I see in the notes and how I relate that to my clinical practice in the past.

G Q Any general points you want to take before we get going?

A I think just a general point that geriatric medicine is complex. It is complex because people have multiple diseases, and that is what makes it interesting if you are a geriatrician, but it is also what is the challenge. People often see just the problem: they cannot walk, they are confused, they are incontinent, but they are not looking at the fact that there are illnesses under that – some of which are treatable, some of which are not – which cause those end points. I think it is the complexity of it which will come out in

A these cases.

Q Okay. Can we have a look at Code A please?

A Yes. Well, Mr Pittock is a typical example of a complex problem. He had had very severe depression, going back, I believe, to 1959, having recurrent admissions to hospital, having serious medication, very heavy doses of psychiatric medication and recurrent episodes of ECT. Over the years, he has probably gradually deteriorated, again an up and down picture. He would get a bit better and then probably a bit worse again, but getting more agitated and then the psychiatrist thought there was also, they put “some impaired cognition,” so some early dementia, possibly as a result of all his illnesses, but in 1995 something seems to go, on top of this chronic problem for which he gets into residential care in 1993, so he is needing a lot of care two years before he dies, something goes wrong. There is more behaviour. He starts to lose weight, and that is often a mark of some other problem ongoing. Increasing frailty is noticed. He gets frustrated, more aggression, more grief, and he is also demonstrating mobility problems at this stage caused by the drugs. it is called: drug-induced Parkinsonism. It is not Parkinson’s disease, it is the signs similar to Parkinson’s, is caused by the drugs. Patients get stiff, they may get a tremor, they may start to have falls, so it is a sign of longstanding damage really caused by these drugs which were necessary for his problem. He gets admitted in November, the psychiatrist, he goes home, he gets readmitted, more aggressive, not mobilising, he is staying in bed, he is feeling suicidal and then he gets a chest infection at the hospital. Following that, he gets a further complication. He gets complications called pseudo obstruction. It is where the bowel stops working. It is like having a blockage though you do not have a blockage, and is caused by drugs, infections, antibiotics, all these things together, but the problem is that you become very unwell. You are not eating, he becomes drowsy. I think he, shortly after, starts to develop pressure sores. I do not think that is neglect. I think this happens often in people who have just so many illnesses it becomes very difficult to ---

E Q He is not mobile?

A He is not mobile. He is now in bed all the time in the hospital. So really he is getting beyond the care of a psychiatric ward by far. The geriatricians are asked to come and see him. They agree that actually now it is his physical status that is the real nursing need at this stage. We have got beyond, you know, the psychiatric problems are there, but he is immobile. He has pressure sores, he is catheterised. A consultant seems to see them and arranges for them to go to one of the wards at Gosport for what is said almost to be long-term care. When a – and he also says that the wife was aware of the poor prognosis. When I see that written in the notes by a consultant I think that that implies that they do not think that that patient is going to leave hospital and is going to die in hospital. It does not say anything about whether it will be a week or a month or six months, but I think it is an assessment that this is a very, very frail patient who is coming to the end of their life. Once he gets to Gosport – in the notes – there is documentation of anxiety and agitation, and, finally, by 5 and on 11 January, sorry, if I can just get my notes for a second, and on 11 January, he is started on regular Oral morphine. I think that that, from the evidence that I could find in the notes, was a very reasonable clinical decision. This is a man that the consultant has said is sadly coming to the end of his life. He has pressure sores which are usually very unpleasant. He is mentally seriously distressed and we are moving from a chance that you could ever cure this or get somebody well enough to leave hospital to a situation where this is about dealing with symptoms and helping their terminal illness because he is terminally ill. So I have no criticism at all of that. That is then started on a regular dose. As far as I can see from the notes, he receives, I think, 35 mg of Oramorph a day. I think there is five regular doses – five

A doses of 5 mg and 10 mg at night. Then on 15 January the oral morphine is stopped and he is started on a diamorphine pump. Again, I think that is often very reasonable; as people stop eating, it may be increasingly difficult to take the oral medication, and it may be just much more pleasant for the patients and for the relatives, and it allows an absolute guarantee of dose delivery. So I think when you are coming absolutely to the end of his life, and I have no doubt that he was, I think that that was a very reasonable thing to do. Where I have some difficulty, and I cannot explain it from the notes, is that he appears to have been on 35 mg of

B Oramorph a day. When you convert that to diamorphine it is conventionally, as in the British National Formulary, conventionally converted at a dose of 1:3. So would give, say, 12-15 mg of diamorphine, but there was a formulary called The Wessex Protocol at that time around which might have suggested 2, so perhaps the 2:1 ratio, so 17-20 mg. Equally, people do get tolerant to drugs as it is given and so you often do need to increase the dose of strong opiates in order, simply, to maintain the same level of proper symptom control. Conventionally, you would increase that by about 50% each time, though there might be

C a reason why you increased it by more than that.

Q Just clarifying what you are saying.

A Yes.

Q That the starting dose for **Code A** is more than you would have expected?

D A I am going to say that I think the starting dose of diamorphine in the syringe driver is more than I would have conventionally expected and was not able to find a reason for that in the notes. There may have been a reason, but I was not able to find a reason for that in the notes. He was then started on 80 mg a day of the diamorphine on the 15th, which was increased to, if I have got it right, 120 on the 18th, and he finally passes away on the – sorry, I will have to check the final date of that.

Q 24th.

E A On the 24th. So he had obviously been on those doses of the diamorphine for several days, so this is not about a case of, you know, the side effects of diamorphine are obviously excess sedation and stopping breathing. Obviously he lived for some days after the diamorphine was started on the syringe driver. As far as we can tell from the notes, he had very good palliation of his symptoms.

F Q The question that was in my mind was really how would you assess the level of analgesia or sedation that is appropriate?

A I think the first thing: you have to be clear what symptoms you are treating. Though diamorphine is a pain killer, you are not just using to it treat pain; you are using it to treat conventionally the agitation, the distress, maybe breathlessness, all the symptoms that might go with somebody who is dying when there is nothing more you can do. It is an extremely good drug for doing that and very, very widely used in the United Kingdom. You have to decide what the symptoms are that you are treating and then you should try and titrate the

G dose to deal with those symptoms. You want to get it to a dose where if there is pain they are pain free, but you do not want them to be unconscious because they may still want time with their relatives, or whatever. Does that make sense?

THE CORONER: But that is a balancing exercise, is it not?

H A It is a balancing act, it is indeed. That is why the conventional approach is to perhaps go a bit low for their first 24 hours, although he had already seemed to have been fairly stable on 35 mg on the pump because he had been on it for four days prior to the switch to the

A diamorphine pump. So there seems to be assumed, the notes are very thin so it is difficult, but you assume he was relatively well controlled at that stage, then it is not entirely clear what changed to need the big jump in dose, at least I was not able to tell from the notes. I think that in terms of what I would have put on a death certificate, if that would be helpful, I think he probably died of a pressure sore, chest infection and drug induced Parkinsonism would be at number 1. At number 2 would be severe depression.

B Q What would the mechanism of death be in the event of it being a pressure sore?
A Usually infection.

Q Sepsis?
A Sepsis. Sepsis and malnutrition I think, poor nutrition. You lose protein and become very malnourished very quickly.

C Q I would have difficulty with a death certificate that said "pressure sores" ---
A As I said, I would be clear, I have said earlier: I am not suggesting neglect in any way when I use that term.

Q No. I think certainly my experience over the years is that it is the mechanism of death would be the sepsis.
A Yes.

D Q So if one were to certify this now you would be looking at 1(a) sepsis, 1(b) chest infection?
A Fine.

Q Does that sound right?
A Yes, and 1(c) drug-induced Parkinsonism. I think that caused his severe immobility.

E Q And "2"?
A That is severe depression.

Q Let me ask you this: from the notes that you have seen, would that be a pattern that is well recognised for his deterioration, or was there anything exceptional about it?

F A No. I did not see anything exceptional in this case. I think this is a pattern that you – it is not exceptional, no.

Q Okay. Anything you want to add with regard to Mr Pittock?
A No, I do not think so, no.

THE CORONER: Mr Leiper, is there anything you want to ask at this stage? Miss Ballard?

G MS BALLARD: Nothing arising.

MR LEIPER: No, thank you, sir.

THE CORONER: Mr Jenkins. The one point you have is the disagreement on staff dose. Do you want to pick that up at this stage?

H Questioned by MR JENKINS

A MR JENKINS: No. I just want, because, Professor, you have dealt with these very quickly, people were taking a note and they may not have recorded everything.

A Yes, sure.

B Q Just to summarise the process of Mr [Code A]'s deterioration. You have described him as "extremely ill, frail and dependent" on his admission to Gosport War Memorial Hospital and you say he was – I am reading from page 19 paragraph 7.1 – when you say:

"At that point he was at the end point of a chronic disease process of depression and drug-related side effects that had gone back for very many years".

A I agree with that.

C Q The drug-related side effects, you talk about the effect of drugs at an earlier stage in his life?

A I think that ---

Q --- Parkinsonism.

A The Parkinsonism is certainly talked about in the notes at this later stage, yes.

D Q You said as well in your opinion, paragraph 7.3, towards the end, you say that this was a dying man, the family appear to have been appropriately involved and the patient eventually died without distress and you give the date, the 24th January?

A Yes.

Q This, you have suggested, is a not untypical or atypical pattern of decline of someone who is terminally ill?

A I think that is absolutely right, yes.

E MR JENKINS: Thank you very much.

THE CORONER: There are no family members for [Code A] but if there are any generic questions that might be put forward I will hear those now. Mr Farthing?

F MR FARTHING: I do have a couple, sir, if I may.

THE CORONER: Mr Farthing is Mr Cunningham's stepson and what I have said is that if there are generic questions that are appropriate, I will take those as we go through, and then the families may well obviously want to query the specific deaths of their relation. Mr Farthing?

Questioned by MR FARTHING

G MR FARTHING: I just want to deal with firstly the increases in the diamorphine that you mentioned, 50 per cent?

A Indeed.

Q What sort of spacing would you expect to find (inaudible)?

H A I think you have to treat the patient in front of you, and that is why they need, the patients would need regular reassessment, and ---

- A
- Q What is “regular”?
- A Sorry?
- Q What is “regular”?
- A I would normally expect someone on a syringe driver in hospital to be seen daily. I would normally expect in a hospital someone on a syringe driver to be seen daily.
- B
- Q Daily?
- A Yes, and if not then clearly you have nurses there, they need, perhaps, to be talking to you or at least be fully trained in order to know when there is a change that needs further review.
- C
- Q Yes, but daily would be normal?
- A That would be normal for hospitals. Clearly, there are difficulties with being in a District General Hospital when there are doctors on the wards every day, from one where you are in a community hospital where there may not be doctors on the wards every day. So I can give you my experience, which might be slightly different to the Community Hospital experience.
- D
- Q Indeed. You mention the starting dose would be assessed, if you like, based on the idea that you would prefer the patient to continue to be conscious ideally?
- A Yes. Absolutely. Yes.
- Q She was starting (inaudible) an increase was necessary?
- A I think that is what most clinicians do, yes.
- E
- Q What sort of low dose are you talking about? Possibly increase to achieve that level did you say?
- A Well, clearly, if you look in the British National Formulary, which is the standard book that all doctors work to, there is always a range. The conventional starting dose on morphine orally in the BMF it talks about between 30 and 60 mg of morphine orally a day. That does not mean that you might want to start with less in someone who was very frail, who had never had drugs before. It does not mean that you might not start at the top end, if somebody had just had a major road traffic accident and they had burns. You have to treat each patient individually and make judgments.
- F
- Q (inaudible)?
- A That was oral morphine. If you are talking about diamorphine then, as I said, in the BMF it says the normal conversion is – let me get this right – is 3:1, although some books talk about 2:1. If it is 3:1 you talk about between 10 and 20 mg of diamorphine would be the normal starting dose. That does not stop you starting with 5 in 24 hours or 30 if there was a really good reason.
- G
- Q Yes.
- A But you would normally expect to see that reason documented in the notes where doctors deviate from, perhaps, what would be obvious normal clinical practice. It is normal to document that so that if you are ever challenged you can show the evidence for it.
- H
- Q May I just ask then: what would be the normal small step between the correct

A (inaudible) if it had to go up?

A The BMF says that conventionally you would increase by 50% each time you do an increase, but that does not mean that if somebody had got no relief at all with your first dose you would not double it the next day. If it had no relief at all, it had no side effects at all you could quite happily double it. It is possible.

MR FARTHING: Thank you very much indeed.

B MR LEIPER: In the light of Mr Cunningham having explored some of the more general issues might I take up some of the matters which have been raised at this stage?

THE CORONER: Mr Leiper is here for members of four families that are represented.

Questioned by MR LEIPER

C MR LEIPER: Mr Black, I will be asking you in due course about the circumstances surrounding some particular individuals. At this stage I just wanted to ask you about some general principles. You are here, essentially, to assist members of the jury with whether or not there were acts or omissions which constitute suboptimal care or care falling below an adequate standard.

D THE CORONER: That is not what he is here for. He is here to explain to us how these people have come by their deaths.

MR LEIPER: Yes. I am grateful for that, sir. When considering the care that was given it is important I think to differentiate between care which is classed as rehabilitative care and care which is classed as palliative care. Would you accept that as a distinction?

E A I think with any patient you have to be clear what your goals are, and they may change and often do change and it is often the passage of time that helps you do that. When you see a patient at any one stage, you have to base it on the story, or if you have seen them before you, and you have to see where you are now. I guess in practising the art of medicine doctors will normally start with the assumption that "I hope we can cure this problem, and if we cannot well I hope that we can make it a little bit better and I hope that we can deal with the symptoms", so – "and if we cannot do that, we must too the best for the patient and their distress we possibly can" and you may sometimes pursue things in parallel. It is perfectly reasonable, and actually correct, that you would deal with someone's pain with, if necessary, very strong painkillers at the same time as you are treating their chest infection if that was giving them distress. So there may not be a black and white answer to that, but in general, let me give you two extremes. If you had been admitted having had a small stroke and there was nothing else wrong with you then the expectation is that you will be coming there for physiotherapy, occupational therapy to become independent enough to leave hospital and go home. That would be the expectation around that. That does not mean that some disaster might not befall you 24 hours after you have come in. Similarly, if you are going there with terminal cancer or terminal heart disease, you are going there for symptom relief and for nursing care because that is what is the most appropriate treatment.

F

G

Q Cancer is an interesting illustration, is it not, because if cancer is caught early enough a patient can be admitted for chemotherapy, radiotherapy and the intention of that is for rehabilitative purposes?

H A No, it is to cure ---

- A
- Q To get them over the cancer. It is to cure?
- A Yes, yes. As I have said, there are many different reasons. I think that we have to try and be clear with many of these patients, try and put what it was they were going to this hospital for.
- B
- Q Exactly. What was the aim: were they trying to cure or were they trying to relieve symptoms?
- A But you might do both simultaneously is what I am trying to say.
- Q I understand that, but in some circumstances there will be a change of direction when caring for a patient, moving from rehabilitative care to palliative care?
- A Yes. I accept that.
- C
- Q There are some circumstances in which a doctor will feel somebody is sufficiently ill that there is really no hope?
- A Yes, effectively.
- Q Once you have changed direction, once you have decided that there is no hope for the individual, the goal of palliative care is the prevention and relief of suffering?
- A Agreed.
- D
- Q In offering palliative care, it should never be the intention of the medical carer to hasten death?
- A That should not be the primary intention, agreed.
- Q It should not be the intention?
- A It may happen as a side effect.
- E
- Q As a side effect.
- A Of relieving distress, of course.
- Q But it should not be – I think there is something called a principle of double effect?
- A Certainly should not be the primary aim, yes, exactly.
- F
- Q If the intention of treatment given is to hasten the death, that would be unethical and unlawful?
- A If that was the sole intention, yes.
- THE CORONER: Sorry, that is a significant comment. If it is the sole intention; I think we would understand what that is.
- G
- A Yes.
- MR LEIPER: The intention should be for the relief of suffering by offering palliative care?
- A Absolutely. Yes.
- Q So you are not intending that the patient should die. It may be a side effect?
- A Yes.
- H
- Q But that should not be part of your intention?

- A A Exactly right.
- Q Focus should be on the relief of suffering?
- A Absolutely.
- Q Before arriving at a decision to change the focus of a medical care regime from rehabilitative to palliative care, a doctor obviously has to make a determination as to whether a person's illness is likely to be responsive to treatment?
- B A Yes. Now you are getting into the complexity, where you, as I have said already, you may, in a way, pursue two paths. You may relieve symptoms at the same time as saying: well, let us have one more go just in case, they have had (inaudible) course of antibiotics, I do not think it is going to help this time but why not. So, you know, you can pursue both and if – equally, you always have to keep an open mind because I can certainly remember cases where I thought that I was going down palliative care where there is
- C a sudden and totally unexpected change. It happens. Medicine is an art. It is not an absolute science. Then you must be prepared to change course with your treatment regime to do that.
- Q Yes. But before arriving at a decision that you are no longer trying to cure a patient, that can involve quite a complex decision on behalf of the clinical carer.
- A I think it is usually a multi-disciplinary decision and that would normally involve discussing with the nursing team and the family.
- D Q Before giving up on rehabilitative care, the doctor has to be satisfied that the patient is unlikely to respond to further curative treatment?
- A Yes, I think that is correct.
- Q Now, because of the obvious significance for a patient in the mental regime change from the focus being rehabilitation to palliative care, the clinical decision is one which needs to be made with the utmost clinical care.
- E A I would hope that all clinical decisions were, but I accept that this is an important one and, therefore, you would take great care over it.
- Q And the General Medical Council provides relevant guidance. A doctor, you can confirm, is obliged to perform an assessment of a patient's condition which will involve a reading of the patient's records and an accurate understanding of the history, and the doctor is also obliged to perform an appropriate examination.
- F A I do not think that is a direct quote from the GMC guidance, but I think the actual direction is correct, the actual – the ideas within it are essentially correct.
- Q Let me take you to the direct quotation, this is from the 1998 General Medical Practice:
- G “Good clinical care must include an adequate assessment of the patient's condition based on the history and clinical signs and, if necessary, an appropriate examination.”
- A Then that is the exact quote. Indeed.
- Q Thank you. Without performing that exercise, a doctor will be unable to arrive at an informed diagnosis?
- H A That is why it is in the GMC requirements.

- A Q But the doctor's duty is not just limited to patient assessment. That patient assessment must be recorded?
 A It should be recorded, yes.
- Q That is part of the standards set down by the General Medical Council?
 A That is indeed part of the standards set down by the GMC.
- B Q When providing rehabilitative care, so when providing care the intention of which is to cure, a doctor has a duty to apply effective measures ---
 A Sorry, can I stop you there for a second. So rehabilitative care is not necessary to cure. It may be simply to maximise the relief of the current symptoms and to overcome those disabilities and resultant handicaps. So rehabilitation may be simply stabilising or even slowing the progression of a disease process. The rehabilitation process is about trying to maximise someone's functional state.
- C Q Take yours as the definition, the duty of the doctor, in those circumstances, is to apply effective measures that carry the least risk to life?
 A Yes.
- Q And the same principle applies in relation to palliative care. A doctor has a duty to apply effective measures that carry the least risk to life?
 D A Yes.
- Q One of the symptoms that may need to be dealt with in a rehabilitative context or in a palliative context is pain
 A Yes.
- Q We have heard that there are number of different drugs that can be used. There are the non-opioids, the weak opioids, and the strong opioids. We have been told that there are risk factors associated with the stronger opioids, yes?
 E A There are risk factors with every drug, yes.
- Q But particularly with the stronger opioids?
 A Well, there are risks with any drug if you do not use them properly and you do not monitor them properly.
- F Q Yes, but in relation to strong opioids there are fatal risks which are associated with improper use?
 A There are, and there are fatal risks associated with paracetamol.
- THE CORONER: Do you want a list of the drugs, they are all high risk elements. I can give you a list of the ones I have had over the last 20 years.
 G
- MR LEIPER: One of the risks associated with opioids, narcotic analgesics is a risk of an aggravating confusion?
 A That is true.
- Q And the signs of confusion may manifest itself in a patient getting lost, a patient getting scared or a patient getting aggressive.
 H A Those are unusual side effects of opiates. The most common side effect is actually

A sedation. So it is very unusual – I mean I am trying to think back if I have ever seen opioids leading to wandering; it is certainly possible, but I have not seen that in an old person. It is much more common I think in a younger person, to be frank.

Q Symptoms of confusion can result in a patient feeling scared or becoming aggressive?

A Of course they can, but, as I said, I do not think that those are common symptoms in my experience of – I am not saying they cannot happen – but in my experience they are not common.

Q They are not common but they do nevertheless happen?

A I believe it is in the books, yes.

Q Not within your experience?

A Not. I really cannot remember an experience like that in an elderly patient who was very frail.

Q What, their becoming confused?

A No. That they were getting – sorry, you actually said that they were getting more agitated, what was the other phrase you used?

Q I said scared and aggressive.

A Scared, aggressive. Again, I cannot remember someone getting aggressive, I have not recognised it, with strong opiates.

Q But you recognise that it is recognised in ---

A But I recognise that it is in the list of side effects that you would read in a conventional textbook.

E MR JENKINS: One of the side effects is drowsiness.

A Yes.

Q And taken to its extreme, that side effect can result in a coma?

A Yes.

F Q And when providing palliative care your aim is not to result in the patient sustaining lack of consciousness?

A Your aim is to release – is to relieve the symptoms they have, absolutely. You are certainly not aiming to make them unconscious.

Q And if one of your patients does experience a loss of consciousness, that indicates that the amount of pain relief is likely to be excessive?

A Not necessarily. I think that as people get older, I mean as they are getting frailer and coming nearer to the end of their life, they will be spending less and less time in a conscious state.

Q But ---

A Whether or not you are on opiates or not.

H Q But, nevertheless, loss of consciousness is a possible side effect?

A It is certainly a possible side effect, yes.

A Q And when you are dealing with a patient who has loss of consciousness, one of the reasons may be that they are on opiates?

A Indeed, I would agree with that.

Q And that the amount of opiates they are on is excessive?

A That is also a possibility.

B THE CORONER: Is that not part of the balancing exercise? Sorry to interrupt you. Is that not part of the balancing exercise between pain relief and consciousness? You have to balance that. If a patient remaining conscious means that the pain level is intolerable is there a point at which you would tip that balance and say: well, we need more pain relief, the effect of that is sedation, that may lead to unconsciousness for the level of pain. I am particularly concerned, and I cannot remember which one it is, but you will need to deal with the point specifically where the patient is lapsing into unconsciousness because the pain relief is not effective.

C A I think that is very fair. It is very fair. At the end of the day, you know this is someone coming to the absolute end of their lives, in the next few hours or days, and our job is to relieve suffering. If that did lead to unconsciousness because that was the only way to relieve suffering I would find that acceptable.

D MR LEIPER: But that would have to be in really very extreme circumstances. The pain would really have to be absolutely horrendous.

A Not just pain. Mental distress.

Q Okay.

A Breathlessness can be awful. Breathless can be worse than pain.

E Q But the condition of the patient would have to be absolutely extreme in order to justify an intention to sedate them to the extent where they lose their consciousness?

A Again, I do not think the intention would be to sedate them. That would be the outcome because you are doing your best to make certain that the symptoms have been relieved.

F Q But in order to go down that route, in order to justify ending up with a patient who is unconscious, the symptoms would have to be very extreme?

A It would have been only able to control them by using that level of medication.

Q Yes, yes. One of the other associated risks is respiratory depression?

A Yes.

G Q And respiratory depression I think manifests itself, in the first instance, by there being chesty symptoms.

A No.

Q Can do?

A No. That would be a complication. You would have to have got chesty symptoms, you would have to have a chest infection or secretions in the chest. I do not think you can relate the two directly.

H

- A Q But the respiratory depression flows from or can flow from the excess opioid?
A Oh absolutely, yes.
- Q And it can result in there being breathing difficulties?
A If you gave a large dose into a vein you could stop breathing and die on the spot, yes.
- B Q Yes. If breathing appears extremely laboured, that could be an indication that a patient is suffering from respiratory distress?
A I do not – would not not accept that.
- THE CORONER: Can we define one or two things here? By “laboured breathing” do you mean slow breathing? Few breaths, low respiratory rate?
- MR LEIPER: Slow and shallow, that is one example.
- C A I would not use the word “laboured”. Laboured to me means sort of the distress and breathless. Just because, if you are having respiratory depression you are not breathless. You are not breathless.
- Q It can result in you stopping breathing for long periods, respiratory depression?
A I have already given you an example where you have stopped breathing completely, yes.
- D Q So if you come across a patient who does not appear to be breathing for long periods and then suddenly take a deep breath, that in itself ---
A There is, it is what is called Chain Stokes Respiration. It is a pattern you see where people may have a period of apparently doing very little breathing and then take a very big breath and several big breaths sometimes with a grunt, and that can mean several things. It can occur in otherwise fit patients who have had a stroke affecting the brain stem. It can occur in people who are very, very near death from any cause. It can occur with drugs. By itself, it is just a marker of severity of illness. I do not think you could say, “oh, you have had too much of something” because you showed it.
- E Q But it is a possible indication of an excessive dose?
A It is possible. I would accept it as being on the grounds of possible.
- F Q Sorry, you accept it as possible?
A I would accept it as possible.
- Q So that if you have an individual who has had opiates and if those opiates are excessive then it is possible that one of the symptoms of that will be that they will appear to stop breathing for long periods and then suddenly take a very deep breath?
A It is also possible that that is simply because they are very near death.
- G Q Of course, but it is also compatible with excessive opioids?
A Yes. I think it could be compatible, yes. I think it could be compatible.
- THE CORONER: Could I take you back to N **Code A**, where he is recorded as having a respiratory rate of 6 per minute?
A Yes.
- H Q It is not said that they are laboured breaths or that they are anything other than regular,

A albeit infrequent.

A Yes.

Q Is that the kind of pattern that we are talking about that one would expect?

A I think that would be the sort of thing you would expect in someone who is on a significant dose of opioids and it is clear near death. I did not see what I would understand by the word "chain stokes", this pattern of apnoea, no breathing and then sudden very big, deep, noisy breaths which you see, as I said, very near death.

Q I am sorry, Mr Leiper. I am quite keen that we just take a respiratory pattern is just decreasing as opposed to any in extremist kind of condition that is producing a marked reaction. What we are talking is absence of reaction I think, is that not more the point? It is not reacting to anything. He has not got a chest infection, he is got coughing, he is not spluttering?

A No.

Q It is just a decreased respiratory effort.

A Absolutely. No, no, I agree with that.

MR LEIPER: But it can also manifest itself in terms of there being breathing stopped for long periods followed by sudden deep intakes of breath?

A Yes. I have said that that I think is a possibility.

Q Yes. I think, when you have a patient who is suffering from respiratory depression, there can be secondary complications which flow from that?

A Yes.

Q And one of those would be bronchial pneumonia?

A Yes.

Q Obviously, if left untreated, the respiratory depression and coma can ultimately result in death?

A Yes.

THE CORONER: I do not understand the concept of "left". Because it is the treatment you are saying that is causing the condition. If you remove the treatment, presumably the patient's condition will change; whether it would be better or worse is another matter, but it is part of the treatment, is it not?

MR LEIPER: It is one aspect of the treatment. May I just explore that with Mr Black?

THE CORONER: Yes, please do.

MR LEIPER: If someone does lose consciousness as a consequence of an excessive opiate dose, if they are on a diamorphine (inaudible) syringe driver at the time it is possible to redress the situation, or it may be possible to redress the situation, either, in the first instance, by reducing the amount of diamorphine?

A Yes.

Q It might also be possible to redress the situation by administering an antidote,

- A naloxone I think is indicated in some circumstances?
 A Yes. That is, I mean it is really a case of last resort because it is incredibly cruel to a patient to take somebody who is, whether they are a drug addict even, you know, got no illnesses, but somebody who is having their symptoms controlled by strong opiates, to reverse it dramatically by that and they would just get hit by whatever the symptoms were, I think would be a very, very unpleasant thing to do to a patient.
- B Q Depending on how bad the pain is in the first instance?
 A The pain or other symptoms, yes.
- Q Exactly. Exactly. So are those two steps that one can take in the first instance or can give consideration to taking, and hyoscine, my understanding is that – well, perhaps you will explain?
 A Hyoscine is something, is an anti-colonergic (?), it is a drug that reduces secretions in the airways. So as you are coming to near to the point of death, from many diseases, you will often be able to stop having respiratory – coughing, you will stop bringing up secretions and you will get a sort of a rattle. It is very often quite very distressing for carers and relatives. So it is given symptomatically to help dry up those secretions and prevent the sort of rattles that people will get.
- C Q Thank you. Just to summarise where we are then. The aim when administering opioids is to relieve the pain without sedating the patient so heavily that they lose consciousness?
 A Yes.
- D Q If a patient does lose consciousness, or begins developing the breathing difficulties which you recognise in some circumstances can be associated with excess opioids, that suggests that the amount of opioids is excessive to their needs. It may suggest that.
 A It may suggest.
- E THE CORONER: I do not think that is right as a general rule. That is not what you are saying, is it? Across the board that is not what you are saying, that it may be indicative?
 MR LEIPER: Not conclusive.
- F THE CORONER: It is a question of their needs, of assessing their needs, and to say because they are becoming unconscious it is therefore excessive is not right, is it?
 A No. Absolutely. Absolutely. That goes with disease progression.
- G MR LEIPER: Sir, just to be clear about this, I was not suggesting that one necessarily followed the other. What I said is that if the patient does lose consciousness or develop particular types of breathing difficulties, that suggests that the amount may be excessive to their needs, and you accept that?
 A I do accept that, yes.
- Q Given that there is a risk to life associated with respiratory distress syndrome, and coma, a doctor, in those circumstances, has a duty to apply effective pain relief measures that carry the least risk to life.
 A Pain and any other symptom relief, yes.
- H Q So if you have a patient who is suffering from those adverse consequences an

A appropriate standard of care would require a reassessment of the patient's condition prior to the continuation of the opioid analgesic?

A I have already suggested that there should be regular reassessments of patients conditions, their symptoms of all sorts, and that would also be why you have got them on the medication in the first place and any possible complications.

B Q So there should be those regular ones done. If these adverse symptoms, adverse life threatening symptoms become apparent those, themselves, would necessitate a review of the appropriateness of continuing with the opioid medication?

A I think that once you have got people who were this seriously ill that you have got them on opioids then I am pretty certain that you are going to continue the opioid, but you may move the dose up and down. You are quite right.

C Q Where you have a patient who has lost consciousness, in no circumstances should the diamorphine or the midazolam be increased?

A I think that once they are unconscious and they are very near the point of death I can see no reason, sitting here, to increase the dose. That does not mean there is not a reason I can think of, but I cannot immediately think of why you would want to do that if somebody was calm, they were very close to death, for whatever reason they are now conscious or semiconscious most of the time, they have no other symptoms, I cannot see why you would need to increase the dose, no.

D Q To do it to hasten the death would, as you said, be unethical and unlawful?

A I believe that is the case.

E THE CORONER: Sorry, Mr Leiper. How do you assess unconsciousness? If you have somebody with a debilitating condition who would may appear unconscious but is responding to pain stimulus, is there a point at which you say this patient is unconscious, therefore, we are not going to do anything, or, do you say this patient is responding to pain, is demonstrating the experience of pain, twitching, whatever it might be; how do you do that assessment or do I need to do a five year course in medicine to be able to answer that question?

A I think we seem to be getting bogged down in the hypotheticals. You have to manage the patient in front of you.

F Q Yes.

A You should be there about doing the best for the patient in front of you. Every patient, although there are common patterns, every patient is different. I have already indicated that should be a multi-disciplinary question. The nurses that are there all the time, they are very key to this process. A doctor may be there 10 minutes a day, but the nurses are there 24 hours a day, so they are absolutely key to this.

G MR LEIPER: Consistent with the obligation of the doctor to administer pain relief in a way which is least likely to adversely effect the patient, once a patient has lost a degree of consciousness such that they are no longer able to eat or drink, it would be appropriate, in those circumstances, to administer some sort of fluid, either naso-gastricly or otherwise?

H A I think this is a very, very controversial area. I think that current standard practice would be: if somebody is terminally ill, very near the end of their life, and on a diamorphine pump, whether or not they would be unconscious, it would not be normal practice to put up a drip or a nasogastric tube. These are seen as invasive. There are some very difficult studies

A that have been done in this area of trying to assess which is the best approach. It is a fantastically difficult area, as you can imagine, to research, but in general, putting up drips, all you find is the fluid goes straight into their subcutaneous tissues and makes bed sores worse, and so on. So I would not accept that.

Q But you would accept that to not put up an intravenous drip would be an appropriate decision to make only in circumstances where the treating clinician was absolutely certain that the patient was going to die?

B A I think that I would have to look at exact cases, rather than giving an absolute yes or no to that answer because I think there might be complexities behind it, but in general you are right. You would say that ---

THE CORONER: It is a clinical decision taken with the patient in front of you?

C A Absolutely.

MR LEIPER: It is presumably as a consequence of the risks that you have described associated with strong opioids that there was, and still is, substantial guidance as to the level of opioid analgesia to administer?

A Yes. I think I have mentioned both the British National Formulary and the Wessex Protocol, which I think I have copies of.

D Q Could I hand up a copy to you of the – well, two documents? If I can hand up to you, sir. I understand that on Friday of this week this was a document which was circulated and so the jury have certainly seen some pages of it, if I could hand that up to you together with the BNF. (Document handed). The version of the British National Formulary; the jury have not seen that. The intention is not to burden them with documents unnecessarily, but are you able just to give an overview as to what the BNF is?

E A Yes. It is a booklet that is produced I think quarterly now, it may be six-monthly, that is produced by an independent body but for the Government which lists every drug that one would normally be able to prescribe in the United Kingdom. It gives guidance as to when you should use it. It gives guidance on the dose ranges to be used. It gives guidance on specific areas, such as prescribing in children or in old age. It mentions the common side effects. Really it is the standard book that clinicians would use when they are prescribing. It is something that you refer to on a very regular basis.

F Q Every doctor would know of the existence of the BNF and the importance of complying with the advice that is set out in it?

A There is nothing that says you have to comply with the advice in it, but certainly every doctor would be aware of the BNF.

Q Yes. There would be risks involved if you did not comply with the advice that it gave?

G A That is always a possibility, is it not?

THE CORONER: I think what you said earlier was that if you were not going to comply with the guidelines you would expect to see a reason in the notes as to why it had not been?

A Absolutely right. I think that is an important point.

MR LEIPER: And the other document that you have mentioned is the Wessex Guideline, which you have a copy of there, the fourth edition there.

H A Yes.

- A
- Q You see in the top right-hand corner they have been paginated.
A Yes.
- Q On the page which is numbered 7. On the left-hand side of that you have the heading “pain” and it describes what you should do where you have a patient in pain, and what is appropriate in the first instance is a diagnosis. Yes?
B A Correct.
- Q The doctor is under an obligation to identify sight, severity, duration, timing, aggravating and relieving factors. Yes?
A Yes.
- C Q Because before you would have done that, you are moving in a fog, when it comes to the treatment. If you do not know what the problem is you cannot treat it properly?
A Absolutely at the heart of medicine is that you have to assess the problem.
- Q And if you go to page 11 in that document, under the heading! “Management of specific pains”, you will see that there is reference there to “bone pain, abdominal pain, neuropathic pain, rectal pain, muscle pain, acute pain of short duration and pains amenable to nerve block”. Trying to say obviously all sorts of different pains and it is important to identify what the nature of the problem is?
D A Yes.
- Q The Wessex Guidelines suggested in the first instance you manage that pain, if you can, without reference to medication, if it is possible?
A You would manage any condition in medicine without medication if it is possible.
- E Q Yes. If it is not possible, then you move on to medication. You go through the analgesic now that we have heard that paracetamol, the co-proxamol, and then the (inaudible)?
A Yes.
- Q These guidelines suggest that it would be substandard and clinical practice to progress straight to strong opioid in a patient complaining of pain. You accept that, do you?
F A As I think I implied earlier, there may be exceptions. If you have had someone in front of you with a heart attack I would immediately give them diamorphine. If you have had somebody in a road traffic accident you would immediately give them diamorphine. There are cases when you know that that is such a severe pain that is the only thing that is reasonable to do.
- G THE CORONER: Can we take it off the intellectual level and say: in the ten cases that we are looking at, we are not talking about that extreme situation?
A No. I do not think that is fair.
- THE CORONER: If we can address it from the point of view that we are looking at older people with chronic pain generally and if we can interpret the analgesic ladder on that basis?
A That is certainly what I would expect to be followed.
- H MR LEIPER: So an appropriate standard of clinical practice would require that graduated

- A approach?
A Yes.
- Q If, after that graduated approach, a doctor comes to a conclusion that only strong opioids are appropriate, there is a choice, and we have heard that that choice includes morphine and diamorphine and a drug, fentanyl.
A Yes.
- B Q Those are all opioids?
A Yes. They are all strong opioids, yes.
- Q And it is presumably because of the risks involved in using these strong opioids that there is guidance in relation to dosage both in the Wessex Guidelines and in the BNF?
A Yes.
- C Q And the importance of adhering to those guidelines is that it is very difficult to predict an individual's reaction to a strong opioid before it is administered?
A That is fair.
- Q For that reason, it is extremely important to start off low and work up gradually?
A I said that earlier, yes.
- D Q If you do not do that then you are running a risk of injury and possibly death?
A Yes.
- Q And just so there should be no doubt in relation to the amount that it is appropriate to start off with, the BNF, this is the version for 1998.
A Yes.
- E Q It suggests, it is page 12, it has been copied in a sort of eccentric way. The first page you have, in the second column, three paragraphs down, it refers to the starting dose on the modified release preparation designed for twice daily administration is usually 10-20 mg every 12 hours if no other analgesic or paracetamol has been taken previously?
A That is what it says, yes.
- F Q 10-20 mg every 12 hours, that equates to a 20-40 over 24 hours?
A Yes.
- Q Yes. If one takes the mid point between the 20, sorry, the 10-12, the average starting dose would be 15 mg over 12 hours and 30 mg over 24 hours. That is what is suggested?
A If you are using morphine slow release preparations, yes.
- G Q The starting dose is modified exactly so.
A Yes.
- Q Exactly?
A Although, of course, very few of these patients were put on that medication.
- H Q Ultimately they ended up on diamorphine?
A Yes, but many of them were on oral morphine, which is a different preparation to this.

- A
- Q Let us just progress through with how you go from the 30 mg every 24 hours.
- A Because I think I quoted that an oral dose of 30-60 mg of oral morphine, i.e., what was a fairly standard dose. I mean, you can read many different books, but that, I think, is – so that is 5 mg four-hourly between 5 and 10 mg, four-hourly, i.e. 30-60 mg of oral morphine in a day. Many of the patients were started on four-hourly oral morphine. All right. I can only remember one, but you may find others who actually received these slow release
- B preparations. The reason for doing it is that you will get to a level of faster pain relief by using oral morphine rather than these slow release preparations, which may take several days to get to maximal effect. You always have a risk of starting off with a low dose, thinking it is not working and giving a higher dose before you have got to a steady state because of the drug (inaudible).
- C
- Q In the BNF, there is a section on prescribing for the elderly.
- A Yes.
- Q You will be familiar with the passage which suggests that dosage should generally be substantially lower than for younger patients and is common to start with about 50% of the adult dose. This is on page 17.
- A Yes. I would agree with that.
- D
- Q You would agree with that?
- A Yes.
- Q So if the standard is between 30-60 mg.
- A Yes.
- E
- Q Morphine generally.
- A Yes.
- Q And for an elderly patient it is not going to be more than a 30, if one is following ---
- A If you can follow this, and, of course, you come back to individual judgment. There is a great difference between a frail sort of 30-kilogram 90 year old lady, and a 70 year old 100-kilogram man who is otherwise fit. So there is still a huge variation and you have to make a judgment, but I completely accept that that is where you think about – you think about giving 50% less, certainly if you are dealing with someone, a patient who is frail and often malnourished.
- F
- Q Okay. So if the 30-60 is the normal starting doses for your healthy individual.
- A Yes.
- G
- Q Half of that is obviously going to be 15-30 for the elderly patients?
- A Yes.
- Q So we are dealing, obviously, here with elderly patients, so one can assume that the starting point should be no higher than 30 mg of morphine?
- A Unless there was another reason, that would be a very reasonable place to start.
- H
- Q Fine. Given the importance of avoiding the risk of excess doses, you would not, with

- A a frail elderly individual, want to start at more than 30?
A I think you would need a very good reason to do so.
- Q There are some circumstances in which a syringe driver is indicated and the Wessex Guidelines at page 9 suggest that the syringe driver is appropriate where there is evidence of a patient becoming unable to swallow or vomiting. On page 12. I am so sorry, page 9.
A All sorts of different numbering systems on this version.
- B THE CORONER: Can I stop you so we can deal with the mechanics for a minute?
MR LEIPER: Yes, of course.
THE CORONER: How much longer are you going to be?
- C MR LEIPER: Syringe drivers. The indication is where there is difficulty with swallowing, vomiting, or weakness. Yes?
A Yes.
- Q In circumstances where you are moving from administering morphine through the mouth, to using a syringe driver, in those circumstances the preferred choice of opioid is diamorphine.
D A Yes.
- Q The reason for that is that it is more concentrate than morphine?
A Yes.
- Q So you can put more in the syringe driver?
E A And it is water soluble so it gets absorbed from the subcutaneous tissues.
- Q If you go on to the following page, under the Wessex Guidelines, you see under the heading “opioid equivalents”.
A Yes.
- Q It has there:
F “This table provides some approximate guide to opioid equivalents. Total daily doses are broadly equivalent of oral morphine of 30 mg.”
A Yes.
- Q So 30 mg is really the upper limit. You have said you need a very good reason to go above that. If one looks at, according to this, the diamorphine, the level of diamorphine which is equivalent to that 30 mg is 10 mg?
G A As I said, I mean, that is a conversion of 1:3 was what I said originally and certainly what appears in the BNF, although it is interesting that on the previous page in the Wessex Guideline it says it varies between 1:3 to 1:2, allowing some flexibility. So they say slightly different things on different pages.
- Q If one actually looks at the BNF at page 12, under the heading “parental route”, which is at the bottom of the right-hand paragraph, you see the heading, the reference to diamorphine in bold there. “Diamorphine is preferred for injection because, being more
H

- A soluble, it can be given in smaller volume. The equivalent intramuscular or subcutaneous dose of diamorphine is only about a quarter to a third of the oral dose of morphine.”
- A The difference between the two documents, indeed.
- Q So some people put it as a quarter?
- A Yes.
- B Q Some people put it as a half?
- A Yes.
- Q The sensible or the compromise appears to be a third?
- A I think that is usual practice.
- C Q That is usual practice. It is for that reason it is set out clearly in the Wessex Guidelines. So if 30 mg of morphine, oral morphine is a safe starting dose for an elderly, frail individual, then 10 mg of the diamorphine administered subcutaneously would be the safe starting dose.
- A If you were not increasing the dose, yes. If there was a reason why you needed to give more, then, as we have said, you would give a higher dose conventionally and you might do it at the same time as you were converting one from the other. If things were absolutely stable, then, yes, we would do a direct conversion of 30 to 10.
- D Q You were not here, Mr Black, but yesterday I put it to a witness that a starting dose of 40 mg of diamorphine would be substantially in excess of the normal starting dose; the witness agreed with that. Do you agree with that?
- A I would, without further – I would need further information. What is the justification for that? In general, in the hypothetical state, yes, obviously.
- E THE CORONER: The point that is being put to you was a starting dose of 40 mg would be in excess of the norm?
- A Yes.
- Q And I think what you are saying is: yes, it would be.
- A Yes. I quite agree. There may be a justification.
- F Q But it would not be normal?
- A It would not be normal.
- MR LEIPER: In fact, giving four times the recommended starting dose would really be pretty unusual.
- A If they had not had any oral morphine before?
- G Q Exactly.
- A Yes.
- MR LEIPER: It would be an indicator, of itself, of substandard practice in the absence of a good reason for doing so. Is that a “yes”, Mr Black?
- H THE CORONER: No, he is not going to answer it.

- A MR LEIPER: You have said that so far as elderly people are concerned, it is important, particularly important to start off on the bottom rung of the ladder, as it were. Is that, in part, because the older you are the less efficient your kidneys are or is it for a different reason?
- A I think there are multiple reasons. Sorry, when you say “the ladder”, are you talking about all analgesics or are you talking about opiates in particular?
- B Q Well, both.
- A I think the other – I think that the metabolism of morphine is mostly, metabolised in the liver and then excreted, and then the degradation products are excreted in the kidneys. So liver disease is, and liver function in old age, is likely to be far more important than any change in kidney function. But I think it is more than that. It is about tissue sensitivity, it is about ageing brain and possibly that being more sensitive. You may get very poor absorption in somebody who is very frail with a poor circulation and lots of dependent oedema. I think it becomes increasingly difficult to predict what will happen, either you may need more or you may need less. Very clearly set out in the BNF you would start with less. That does not mean that you might not need significantly more if you are getting poor absorption.
- C Q So if you have an elderly person, who has a history of kidney problems, would that be an added reason for being cautious as to the amount of opiate analgesic that they should be given?
- D A I do not normally worry about kidney function. Liver function I would be much more worried. It has an effect, but it does not seem to be critical.
- Q I do not want to get unnecessarily technical about this, but the position is that the active metabolites of morphine are excreted by the kidneys, are they not?
- A I think we are getting very technical. I think they are mostly degradation products. I think I would have to look further at that, but it is, in conventional terms, I would be much more concerned about liver function than I am about renal function.
- E Q Okay. We will be hearing from Mr Wilcock in due course, his view is that caution is required in patients with an impaired kidney function. That is not something you are going to disagree with?
- A I will not disagree with it. No.
- F Q You will not one way or the other. Okay. The consequences of starting with a dosage of 24-hour dosage of diamorphine in excess of the 10 mg that we have identified over that 24-hour period is obviously running the risk of adverse consequences to the patient's health?
- A Indeed.
- G Q And the greater amount by which you exceed the recommended dose, the greater the chance of adverse injury to the individual?
- A Correct.
- THE CORONER: Can I just say: it is not rocket science. You know, if you overdose on an opiate sufficiently you will die. Up until then the cumulative effects of opioids will be increased depression and the central nervous system affected, the respiratory system and everything that goes with it. Sliding scales.
- H A Yes. I mean, I have already said if you give it a big enough dose you can die at the

A end of the needle.

MR LEIPER: The position is that it is not acceptable to run such a risk in the absence of clear evidence that it is needed?

A We have been round that, yes. It is about treating the patient's symptoms first.

B Q And the doctor should not be running unnecessary risks?

A No.

Q Anything above three times the recommended dose or anything above two times the recommended dose, in the absence of clear evidence the pain could not be controlled in any other way would be grossly substandard practice, would it not?

A Well ---

C THE CORONER: Please do not go there. Please do not do that. If you want to take an objective view of it, then fine, but what you are looking at is a particular set of circumstances and asking: is this bad practice.

A Yes.

D Q I do not think I can accept it. I really do not and I think we need to be very careful how you interpret that. If it is not in accordance with the Guidelines, one would say: of course it is not. Is that something you would do? No, it is not. I do not want that kind of judgmental view into it; that is what I have been trying to avoid.

MR LEIPER: But it is in order for Mr Black to confirm that in the absence of ---

THE CORONER: You would expect to see a reason for it in the notes and in the absence of that reason you would query it?

E A Indeed. That has been my evidence, yes.

MR LEIPER: You would query it because, in ordinary circumstances, it should not be given.

THE CORONER: In accordance with the Guidelines. If you were departing from the Guidelines you would expect to see a reason. In the absence of a reason you would wonder why it has been departed from the Guidelines?

F A Exactly right.

MR LEIPER: Diamorphine is indicated principally for the relief of pain?

A No. I think it is used for almost any symptom when you get in terminal care.

G Q There is no evidence in the Wessex Protocol that diamorphine should be indicated. What the Wessex Protocol appears to suggest is that midazolam is the choice of drug for terminal restlessness and agitation. It is page 41. Under the heading "terminal restlessness"?

A That is obviously one specific symptom, yes, and if that is a specific symptom then midazolam is obviously a well-recognised drug.

Q So if you have got an elderly patient who is receiving midazolam the likelihood is they are receiving that because of the terminal restlessness?

H A I would have thought so, yes. I would have thought you would be adding it for that specific symptomatology.

A
Q If they are receiving the midazolam, for the agitation, the terminal restlessness, the addition of the diamorphine would be or might be indicated for the relief of pain?

A Or other symptoms. I have already mentioned breathlessness or agitation or just mental distress.

B
Q But the agitation would fall under the umbrella of terminal restlessness, would it not?
A I think we are getting into all sorts of semantics here.

Q But agitation is a symptom of terminal restlessness?
A It might be, but it might not be.

Q Yes, but it might be?
A It might be.

C
Q So if you have an elderly patient who is receiving midazolam the likelihood is that it was administered for that terminal restlessness and their agitation?

A It is certainly likely that a symptom was restlessness, yes, that is why you might well be using it.

D
Q If you are using the diamorphine alongside the midazolam that suggests that there is some pain problem which needs to be addressed ---
A No, I have said that several times.

THE CORONER: You keep saying it, but it is just not right. It is not purely for pain relief. That is where you started, is it not? That is the whole point of it.

E
MR LEIPER: Yes, but just so that we are clear about this. In circumstances where the restlessness and the agitation is being dealt with by midazolam.

A If the patient had no symptoms, the distress around their dying was controlled by midazolam, you would not need to add diamorphine. No, I think that is fair.

Q So far as breakthrough doses are concerned, page 15 of the BNF guidance on pain relief, and page 15 at the bottom of the page beneath that table.

F
A Yes. I was on the wrong one, sorry.

Q Beneath that.
A Yes.

Q The table, it says:

G
“If breakthrough pain occurs, give a subcutaneous, preferable intramuscular injection of diamorphine equivalent to 1/6th of the total 24-hour subcutaneous infusion dose”.

A Yes.

Q So if a patient is on a recommended starting dose of 30 mg of morphine, an appropriate breakthrough dose would be 5 mg?

H
A Yes.

- A Q Likewise, if they were on a recommended starting dose of 10 mg of diamorphine an appropriate breakthrough dose would be under 2 mg?
A Yes, I think it was very rare to give less than 2.5 mg of diamorphine.
- Q So 2.5. In the first instance, if it appears as though there is breakthrough pain occurring, that is the staged approach that you would expect to see?
A Yes. I think that that is the way it would often be written up so there would be the possibility of giving doses of analgesia, but once you have done that then that is an indication for the patient to be reassessed as to the total medication and symptomatic package you have got them on, because that is – you do not want to give people breakthrough doses; that is almost, in a way, is almost a failure. You have not quite got it right, yes.
- B
- C Q Then just going back to this issue of dealing with agitation, BNF page 13, under the heading, the right-hand column under the heading “restlessness and confusion”, do you see it says:
A “Restlessness and confusion may require treatment with haloperidol”.
A Yes.
- D Q Then it goes on: “Chlorpromazine, 20 to 50 mg by mouth every eight hours” is an alternative.
A Yes.
- Q Causes more sedation.
A Yes.
- E Q So would it be right to say that chlorpromazine would be an alternative to midazolam where someone has, appears agitated?
A Yes, I think it is widely used. Some use midazolam, some use chlorpromazine.
- Q But it would be unusual to use them both together?
A I think ---
- F Q What would be the reason for that?
A You would need a reason for putting them both together, yes. That would be unusual.
- Q So far as the appropriate dose is concerned, if you go to the end of that bundle, page 165.
A Yes.
- G Q Reference to chlorpromazine hydrochloride and reference to, at the top of the second column dealing with it, it refers to the amount which should be given by mouth.
THE CORONER: Where are you?
MR LEIPER: This is on page 165 in the BNF.
THE CORONER: Thank you.
- H MR LEIPER: The pages divide into four columns. It is the third column under the heading

- A at issue by mouth. Do you see that?
 A Yes. It says schizophrenia at the top, yes?
- Q Exactly so. It says that initially 25 mg – this is three times daily or 75 mg at night adjusted according to response to usual maintenance dose of 75:30 mg daily. Then it goes on to say: “Elderly or debilitated, a third to a half of the adult dose”. So when you are giving chlorpromazine it is appropriate to reduce the standard dose by between a third and a half when you are dealing with an elderly patient?
 B
 A It obviously says that, yes.
- Q Yes?
 A It was just the way – I mean that is written up for oral treatment of severe psychotic illnesses. Clearly, it is also used for dealing with the restlessness of terminal care. I am just not certain of the dose of that and I would have to look that up. It might be different, yes.
 C What this talks about is oral treatment for people who are acutely psychotic and that might be different from, I cannot remember, as I stand here, the actual dose.
- Q But just to clarify the principle that if insofar as it is appropriate to reduce the standard amount, if it is administered orally, chlorpromazine.
 A Yes.
- D Q Likewise it would be appropriate to reduce the standard amount when it is being administered?
 A It is the same advice they have given for all people in general.
- Q Yes. So an injection of chlorpromazine, the starting point would be less than the 25 mg?
 A That is where you would normally start, yes.
- E Q And the starting dose, if it is 25 to 50 for the normal adult, the starting dose the maximum would be 25, and the minimum would be 12 and a half.
 A Unless there was a reason. That would be the BNF guidance.
- F Q 12.5 to 25. Thank you. Just so far as the risks associated with drugs which deal with agitation concerning midazolam, there are reports that midazolam is itself associated with respiratory depression?
 A I am sure any sedative can lead to respiratory depression, yes.
- MR LEIPER: Sir, I am very grateful for that opportunity to explore the general principles. I have no further questions at this stage.
- G THE CORONER: Mr Farthing.
 MR FARTHING: Couple of questions. I missed the point or ---
 THE CORONER: Can I just point out to everyone that we are now under time pressure.
 MR FARTHING: Sorry?
- H THE CORONER: We are now under time pressure which means we need to get a move on.

A If you have a point that is going to be relevant and is going to move us forward, then I will happily take it. If it is your own personal curiosity then I would rather we did not.

MR FARTHING: It is something perhaps misunderstood with Professor Black and so I thought I would get clarification.

THE CORONER: Go on.

B MR FARTHING: You said that it was not necessarily the issue that pain was a factor in the use of diamorphine?

A Yes, that's right. Yes.

Q In that case why then is diamorphine necessary at all? I missed that.

C A Essentially, it is very widely used for all the symptoms of terminal care, all the symptoms because it does not matter whether it is mental distress, whether it is agitation, whether it is restlessness, whether it is breathlessness. Actually, it has been found to be probably the single best drug that will help people at this awful end stage of their lives. I quote in one of my papers one little study I found suggested that 56% of patients did not receive diamorphine at the end of life. So it is widely recognised in clinical practice, especially those who are experts in terminal care, those that work in hospitals that is the best single drug for helping patients at that time of life.

D MR FARTHING: So to me, if I may say, it is a legal non-issue ---

THE CORONER: I do not want a comment from you either.
Ladies and Gentlemen, anything?

E MR JENKINS: I do not mind whether I go before the jury or not.

THE CORONER: It is a question now of sorting it out. You are dealing with general points now are you?

A Yes.

THE CORONER: Okay.

F MR JENKINS: I will not be long. The study you have quoted just now I think was a study published in 1987.

A Yes.

Q 56 per cent of terminally ill patients were receiving opiates.

A That was the small study I found, yes.

G THE CORONER: Give him that again.

MR JENKINS: There is a study in 1987: 56% of terminally ill patients on long stay wards, you say?

A Yes.

H Q Received opiates?

A Yes. I think it was done – at that stage, of course, people tended not to die in nursing

- A homes. They were all on long stay wards where they stayed until they died.
- Q For those that want to see the reference it is your report on Elsie Devine, page 19. Opiates are very commonly used in this sort of setting?
- A Yes.
- B Q Diamorphine is the drug of choice.
- A Yes.
- Q For a syringe driver?
- A For a syringe driver, yes?
- Q Syringe drivers are recommended in the BNF?
- A Indeed.
- C Q For various reasons to do with volume and the solubility of the drug?
- A Yes.
- Q Can I come back to a distinction you drew sometime ago between I think a District General Hospital and a Community Hospital. In a District General Hospital where there are long stay beds you would expect there to be a consultant on the premises?
- A Yes.
- D Q There might be other grades of doctor below the consultant as part of the team?
- A Yes.
- Q For the elderly medicine team?
- A Yes.
- E Q There may be a registrar, senior house officer, other doctors. The grades have changed I think over the last ---
- A Yes, yes.
- Q But there may be a team of doctors juniors to the consultant on the premises all the time?
- A Yes.
- F Q In a Community Hospital, you said there may be a doctor there for 10 minutes.
- A No, I think I said – that was not actually what I said. The ten minutes was the difference between the time in any ward that a patient might see a doctor in the 24 hours versus the nurses who are there all the time. So this was not a distinction about community versus district general, hospitals, but clearly you do not have 24 hour on-site medical cover in the sort of hospital where these patients were.
- G Q Does that make a difference to the thinking of the doctor who might be prescribing. Let me give you an example. You were asked about breakthrough pain. If a patient does have breakthrough pain and a further dose is necessary, or needs to be prescribed, you have to have a doctor there to prescribe it?
- A Absolutely. Unless you e written up a small dose as described in order to be given, yes.
- H

- A Q I understand. If you are in a district general hospital or a teaching hospital, a large hospital with doctors on site all the time that is not going to be too much of a problem to ensure that the prescription is written quickly and the drug administered to the patient. I am afraid what you are saying is being recorded, so if you are just nodding ---
A Sorry.
- B Q It does not get recorded.
A Okay.
- Q If it is a community hospital and there is no doctor on site, let us say there is no doctor there for the whole weekend, and more drug is required, you cannot get a doctor to prescribe it?
A It is my understanding that any patient in any hospital has 24-hour medical cover. The fact that that doctor may not be doing regular ward rounds is different, but if you have a problem with a patient they are in a hospital, I am sure that people would expect the same level of responsiveness.
- C Q What we have heard, what the jury has heard is that there was some reluctance on the part of doctors to come out at the weekend and prescribe for a patient that they did not know, out-of-hours doctors?
A I think that is a completely different issue to be truthful.
- D Q Right.
A I think my expectation is that there would be 24-hour cover.
- Q Yes. I wanted to ask: Did you know the position of Dr Barton when you were asked to write reports about these cases?
A I was provided with information I think after I had written in the first set of reports.
- E Q I understand. In one of the reports you make mention of the fact that you did not know the position of Dr Reid?
A No, at that time I did not. The first time I got – there were names that I just saw in the notes, but I understand now that Dr Reid is or was, I do not know, male or female, I do not know, a consultant.
- F Q Do you now understand the position of Dr Barton and how much she was contracted to be at the War Memorial Hospital in Gosport?
A I have certainly seen her contract and that she was employed for five sessions, i.e. half a week, specifically. If I was a medical manager again then I would be thinking I would expect that, it is five mornings or five afternoons or some pattern around that, I also understand, but you know you may get different evidence that there were arrangements for 24-hour cover, for care. All patients in this country are entitled to 24-hour care, if you have a syringe driver at home, you will have nurses helping you, and if they need to call a doctor out they will call a doctor out.
- G Q There were, but we have heard some evidence as to how keen doctors were to come out, but that is a.
- H THE CORONER: That is a different issue, is it not? What Professor Black is saying is that everybody is entitled to the care. What actually happened on the ground is a slightly different

- A issue.
A Yes.
- Q Not what Professor Black can actually deal with?
- MR JENKINS: No, I was not going there. So far as the prescribing administration of drugs is concerned, you gave an interesting answer to a question asked by Mr Farthing at the back.
- B What you said was: you have got to treat the patient in front of you.
A Absolutely.
- Q Guidelines are guidelines.
A Guidelines.
- C Q You may look at the guidelines but that does not tell you how to deal with Mr Smith who may be in front of you at the time?
A What we are here to do is doctors were trained to make judgments.
- Q The doctor will want to factor in the information they get from medical records as to the history of the patient, what medical conditions they may suffer from. They will want to factor in their own observations in determination of the patient, but you also describe the nursing staff as “key”?
D A Yes. Yes. Absolutely.
- Q “Key” in the sense that they can provide information to the doctor as to how the patient is getting on?
A Absolutely. 24-hours a day the nursing staff are there caring for that patient. You have to get the information from them, particularly if the patient is confused and/or has dementia and, therefore, cannot always give a realistic history to you.
- E Q You talked about titrating the dose. That is adjusting the dose?
A Yes.
- Q Up or down or maintaining it, depending on how the patient is getting on?
A Yes.
- F Q In a Community Hospital setting, where there is not a doctor there much of the time, you would expect the doctor to get much of the information, most of it from the nursing staff?
A Yes.
- Q If a patient is still experiencing pain notwithstanding what has been prescribed, the doctor clearly needs to know?
G A Yes.
- Q You have talked about opiates and you have talked about the possibility of a patient receiving an overdose: too much?
A Yes.
- H Q You have said that someone could die on the end of a needle if an overdose is significant?

- A A Yes.
- Q The mechanism I think is because one effect of an opiate in addition to the pain relief that it provides is that it affects the breathing centre in the brain, the messages do not get through to the lungs to continue to breathe.
- A I think if you gave a large dose intravenously that is probably the mechanism. You stop breathing completely or stop.
- B Q If a patient gets a large overdose, you can die within minutes?
- A Yes.
- Q It is a respiratory death?
- A That is what I understand.
- C Q You have talked about the loss of consciousness and you were asked a number of questions about it. The thrust of your answers, as I understand it, was this: loss of consciousness is not uncommon in patients who are dying?
- A Indeed.
- Q It can happen with patients who were on no medication at all?
- A Absolutely.
- D Q Do you say that one should not then interpret the loss of consciousness as indicating overdose?
- A I think I have said previously it might indicate it, that is why you assess the patient and where you are at.
- E Q You were asked about bronchopneumonia and bronchopneumonia is very common in patients who are bed-bound?
- A It is both common and pathologists tell me very, very common in the lungs of everyone who has died, whatever they have died of, because at the last minute, for whatever reason, if you do not clear your secretions there will be some infection, so it is part of whatever you are dying of, cancer or heart failure, you are likely to also have some infection in your lungs once you come to a post mortem.
- F THE CORONER: You normally see it as consolidation whether it is the cause of death it is another matter.
- MR JENKINS: Yes, but very common in bed-bound patients?
- A Yes.
- G Q The old man's friend is how it is sometimes described, for that very reason?
- A That is a phrase that has been used.
- MR JENKINS: Thank you very much.
- THE CORONER: Before I move to the jury, Ladies and Gentlemen, do you have anything you want to ask? Yes.
- H A MEMBER OF THE JURY: Going back to the raising the dosage from the oramorph to the

A diamorphine, and specifically about (inaudible), would you assume that the jump in dose is because there has been a marked downturn in health, got into a weird sort of situation?

A I cannot explain. There is nothing in the notes that explain to me why the dose was increased.

THE CORONER: It is a question and hang on to it because it is one for Dr Barton (inaudible). Anything else? Yes?

B A MEMBER OF THE JURY: Some of the patients, it does not appear there were all (inaudible) analgesia for cream. We might get more information in the trial I am not sure but you would not expect them to suddenly go on to the syringe and diamorphine without ---

A As I said, I think it is the symptoms you are trying to control. So if you have got, if you are very restless and very breathless then putting someone on a simple painkiller will not do any good.

C Q No.

A You are using the other effects of the drug in those circumstances, which is ---

MR JENKINS: That is unusual then?

A So it is perfectly possible that that can be the case.

THE CORONER: Right. Can we move on to ---

D MR JENKINS: Sorry, can I raise two matters? I think we will get that every patient was on something.

THE CORONER: I do not know.

E MR JENKINS: Can I just ask two more matters. So far as the start dose of putting somebody on a syringe driver and diamorphine, you were asked a lot of questions by Mr Leiper at the end about the starting dose. If they had previously been on pain relief of some form, or oral morphine, that will obviously affect where you start on the ladder?

A Indeed and that is why what I explained. If you had been on oral morphine and you had no problems with it, but you were no longer swallowing, for example, then you would convert normally at the 2:1 or 3:1 level. If, on the other hand, simultaneously with that you have become more restless and that was why you were not swallowing you might well increase the dose by 50 per cent.

F Q Or if there was pain, you might ---

A Or whatever. You would increase it, conventionally, by 50%, yes.

G Q I understand. I think you have also said that there will be some, perfectly reasonably, might increase the dose on a syringe driver by not 50 per cent but 100 per cent?

A I think there might well be occasions when you would, but you would have to be clear what that was.

Q I understand, but it might be perfectly reasonable to do that?

A It might be and it would obviously be documented.

H MR JENKINS: Thank you.

- A THE CORONER: Do you want to have a break? A couple of minutes?
A Just for two minutes, please, just to go to the ---
- THE CORONER: Five minutes.
- (A short adjournment)
- B THE CORONER: Can we have the jury back in, please?
- (In the presence of the jury)
- THE CORONER: Do you want to sit down?
A I cannot. It is so low I cannot see what is going on. Stand up and move restlessly.
- C THE CORONER: I will try the magic words again. Elsie Lavender.
A Thank you. Mrs Lavender was 83 and she was admitted having had a fall at home. She had previous problems. She had had long, long standing diabetes going back to the 1940s, so a very long standing survivor of diabetes, but had got some of the well-documented long-term complications: peripheral neuropathy, which is loss of function, usually at the end of your fingers and toes, harder to do things, may affect your balance. She also had, I think she was registered blind, so he had very, very poor eyesight. When she comes into hospital she is clearly documented as having a neurological illness which is consistently referred to as a stroke. I have a problem with that in that the notes are very clear at all times that she has weakness of both sides: left arm and right arm and left leg and right leg. Together with this constant pain around her shoulders. None of that is typical of a stroke. A stroke will typically affect one side of the body or the other side of the body. It very rarely gives you pain. There are strokes that give you pain but it very rarely gives you pain. There is a stroke that can give you weakness of all four limbs but it is not the sort of one that would give you pain. That is in a different part of the brain. I think that what actually happened to her is that she broke her neck and that she has got what is called a quadriplegia, which is weakness of all four limbs due to damage to her cervical spine, that is the bit of the spine just below the brain. It is also causing her incontinence of both urine and faeces after she comes into hospital. As far as we know, she never had that problem prior to admission. The investigation that would most likely have shown that would have been an x-ray of her cervical spine. The notes say that it was done, but there is no record of it that I have ever –
- D has ever been found, and nobody in the notes ever records seeing it. I suspect I cannot prove my diagnosis because the investigation was not there, and neither was a scan done of her neck, which would be the normal investigation there, but I feel that is what fits the clinical picture by far of this quadriplegia with pain bilaterally around her shoulders.
- E
- F
- G Questioned by THE CORONER
- THE CORONER: Quadriplegic; I did not pick that up. That is a weakness. I did not see it.
A Quadriplegia, of course, just describes a weakness of all four limbs. It can be very minor or it can be you are totally quadriplegic and cannot move anything at all. It is just an expression saying that you are weak in all four limbs. There is no doubt that I can see, it says that she cannot use her arms properly, her hands and wrists are noted as weak. She cannot stand and walk. I think she has weakness in all four limbs and she is doubly incontinent.
- H

- A Q But one significant factor being that it does not show the picture of a stroke?
 A It does not show the picture of a stroke, in my view. Anyway, she is reviewed in hospital. She is not making any progress, which is not surprising because if you do not make the diagnosis and stabilise the spine, which either means very prolonged bed rest or having an operation, then there is no reason at all why this should improve. Indeed, at any time it is likely to get worse. She does not improve at all and is transferred to the Gosport War Memorial Hospital. Then there is a second problem: someone does a blood test. It shows an extremely low platelet count on admission to Gosport, at a level that would make her at risk of a life threatening bleed at any time. Why did she have this? There is no reason to think that she had a blood disorder prior to admission. There are various possibilities, but the investigations were never done. She might have had an infection. She might have had a bone marrow problem, potentially bone marrow cancer, it is possible but she was apparently okay until she came to hospital so it would be surprising. There are really rare conditions like thrombotic thrombocytopenic purpura, which is systemic problems of the blood system that can occur in people that have been ill. Anyway, there was a serious problem going on, but, again, that was not investigated at any stage. She remains in Gosport, frail. She cannot do anything for herself, she is not able to get out of bed and she develops pressure sores. She remains doubly incontinent. As far as I can see, no explanation is made in the notes of why she remains in pain or why she has these abnormal blood tests or why I think she was slowly – I think she was just slowly getting weaker and weaker because there was no effective rehabilitation because her underlying medical condition did not appear to have been treated and, therefore, she was gradually getting weaker. She is bed bound. She cannot feed herself. It does not mean that she is not being fed, but it is a progressive problem, on top of her longstanding issues. I felt that by about 24 February really a decision needed to be made: is this somebody who needed proper sorting out, which I think would have had to have meant a return to the District General Hospital, scans, investigations, and maybe you could not have found anything anyway, or are you about treating and palliative care. Indeed, you could still do both. I think it was very important that she did receive adequate pain relief.
- B
- C
- D
- E I think that, whatever is going on, she is getting frailer and she was clearly in pain, documented throughout the notes. So at that stage she is started on the slow release morphine that was referred to earlier, MST, 10 mg twice a day which increases after two days to 20 mg twice a day. I think that was very appropriate to treat the pain, but I am worried that we did not – that there was not documented in the notes any attempt to come to a diagnosis as to why things were continuing to deteriorate. MST is used widely for pain relief while you are doing other things. It does not imply this was an absolute decision at that stage that there was nothing more to be done.
- F
- Q Is not the problem or part of the problem that there is a diagnosis? It might be a misdiagnosis but there is a diagnosis.
 A I completely agree.
- G
- Q It is one of the problems that I find time and time again when people are admitted to hospital, there is a diagnosis at square one and that preconditions everybody that then reads the notes: “admitted with colic”. In fact, it is innocuous, admitted with colic and therefore everybody looks at the hospital notes and says this is a colic case, fine, treat it this way. Nobody goes back to square one and starts again. I think this is, when you say there is no diagnosis, I do not think that is right, is it? It is the misdiagnosis that is the problem.
 A Yes. I have to say, even if that was diagnosed, the options in a very elderly, frail lady are not – either means long-term bed rest, which in itself many patients would simply die of because the pneumonia, the pressure sores, the clots, pulmonary emboli that occur in people
- H

A like that. So simply being put to bed for maybe months always has a very high mortality in itself, or you needed neurosurgery, which in itself has a very high risk. Even if I am right about the diagnosis then I think the prognosis would have been in general poor. However, she does get pain relief and she is clearly physically deteriorating and making no progress at all. On 5 March the oral MST is stopped and diamorphine is started and I think is given 100 mg in 24 hours, having been on 40 mg in total of oral morphine the week before, together with midazolam. So I think, I cannot explain why that dose was chosen – I go back to the discussion we have had earlier – that would be significantly higher than the conventional doses as set out in the BNF. Equally, I can find no evidence documented in the notes that she received any significant side effects from that dose. The notes, I think, refer to her as being “comfortable”, I will have to double check that, it says, yes, the notes I think on the 5th that it was because of deterioration over the last few days starts subcutaneous analgesia and analgesia the next day, 6 March, analgesia commenced “comfortable overnight.” Quite clearly, there had been, up until 5 March, there had been lots of comments in the notes about the pain. However, as I said, I am not able to explain why she was started on that dose of diamorphine and midazolam. She finally passes away on the – sorry, you will have to remind me – the 7th, on 6 March.

Q I think the point that was raised with you was on 5 March the entry says “pain uncontrolled, patient distressed, syringe driver commenced at 9.30” (inaudible)?

A That is right.

Q By that stage she is in uncontrolled pain?

A Absolutely; that is despite being on the oral morphine at 40 mg a day. I just wanted to look back at my other notes. So I feel that the likeliest diagnosis which led to her death was her high cervical cord injury. I obviously cannot say that that dose of diamorphine might not have slightly hastened death, but I feel that the high cervical cord injury was the major problem; she was going to die of that anyway.

Q If you were certifying you would have given me that as a 1(a)?

A Yes.

Q Anything else?

A I suspect I might have put thrombotic thrombocytopenic purpura down as well and I have not, no.

THE CORONER: Never could spell it anyway! Okay. Anything arising from Elsie Lavender? Mr Jenkins?

Questioned by MR JENKINS

MR JENKINS: Not much you will be pleased to know. I think what you have told us is that, in your view, it was a high cervical cord injury?

A Yes.

Q How confident are you that was what had actually happened?

A Well, I am confident enough that I would have immediately, if I had seen her clinically, have put her in a neck brace and got a CT of her neck.

Q I think she was at the Haslar Hospital for some period of time?

- A A Yes.
- Q It was there that an x-ray was ordered?
- A Yes. It is interesting, is it not, that when she was seen by a consultant prior to her transfer he actually writes in the notes: "I assume her cervical cord x-ray was normal". I think by that that it went through his mind: did this happen? He saw in the notes that someone had done the x-ray and it is my assumption, I cannot know, it is my assumption that
- B he assumed it must have been normal because no one had done anything about it.
- Q She was certainly admitted after a fall?
- A And she was certainly admitted after a fall, and apparently having fallen downstairs.
- THE CORONER: What you say in your conclusion, page 1 of your report, dealing with Elsie Lavender, that she provides an example of a very complex and challenging problem in
- C geriatric medicine.
- A Yes.
- Q It included multiple medical problems and increasing physical dependency causing very considerable patient distress.
- A Yes.
- D Q "Several doctors, including consultants, failed to make an adequate assessment of her medical condition", and that is before she gets to Gosport?
- A Yes.
- Q After she arrived at Gosport, I think you say, it is the bottom three lines of the first page of your report:
- E "It seems to me likely that she had several serious illnesses which were probably unlikely to be reversible and therefore she was entering the terminal phase of her life at her point of admission to Gosport Hospital".
- A Yes, I think that is what I wrote.
- Q Again, I think during the course of her time at Gosport, Mrs Lavender was prescribed various forms of pain relief by Dr Barton: dihydrocodeine, subsequently morphine sulphate
- F tablets, and I think the dosage of those was adjusted.
- A Yes.
- Q Only at a later stage was the syringe driver commenced in the circumstances that we have heard. I think the entry for 5 March 1996:
- G "Has deteriorated over the last few days, not eating or drinking, in some pain therefore start subcutaneous analgesia".
- A Yes.
- Q I think you told us that the nursing notes indicate that the pain was well-controlled?
- A On the 6th it says I think the nursing care plan says the pain, is that – is pointless. Hang on. I think it says, the medical notes actually say on 6 March "Analgesia commenced, comfortable overnight". I think I have taken that quote from the medical notes.
- H

A Q I think the medical note, Dr Barton's entry for the 6th the day she died:

“Further deterioration, subcutaneous analgesia commenced, comfortable and peaceful”.

A Okay, well ---

B THE CORONER: Does that relate to the 6th or is that historical because [Code A] says that the notes for the 5th say that the pain is under control. Syringe driver starts on the 5th.

A Yes.

THE CORONER: So I would think that Dr Barton's note is being historical.

MR JENKINS: Her note on the 5th is “in some pain”, which nurse [Code A] described as “uncontrolled”.

C THE CORONER: Yes.

MR JENKINS: That is why the syringe driver is started on the 5th and by the 6th the doctor, certainly, is saying that the analgesic has started because by that stage it had?

A Yes.

D Q She was saying the patient was comfortable and peaceful?

A Quoting from medical notes?

Q I understand, and that is information you would expect the doctor to get from the nursing staff?

A Yes, indeed.

E MR JENKINS: Forgive me. Yes. Thank you very much.

THE CORONER: Ladies and Gentlemen, can we move to Ruby Lake, please? Anything you want to say. 84 year old.

F A Just to refresh my memory. (pause). Okay. So Ruby Lake I believe was 84 and had clearly got some previous medical problems, including left ventricular failure, that is heart failure, atrial fibrillation, another problem with the heart. Gross swelling of the legs, which is usually of a complex etiology, but often leads to recurrent infections. She had a bout of renal failure at one time. She also had some sort of systemic rheumatological vasculitis so that there were some other underlying illnesses going on, but the final started having fallen and got a fractured neck of femur. Fractured neck of femurs are very common in old age and, unfortunately, are, although it seems like a straight forward problem of just putting a pin in and solving the fracture, the prognosis of people having had a fractured neck of femur is actually very (inaudible). 30% of women, 50% of men die within one year of having

G a fractured neck of femur. It is often a mark of frailty and other diseases and having the fractured neck of femur and then the complications that flow from it, having an anaesthesia lead to problem, particularly with somebody who already has heart disease. After she had had that she was clearly unwell on the ward. Impaired renal function. She became breathless so after she had that she was clearly unwell on the on the ward. Impaired renal function. She became breathless. I think there was an episode of chest pain. Looking at the notes, I think she may well have had a small heart attack or some other cardiac event during her admission

H into the Haslar Hospital. She seems to have never been right. The Kardex repeatedly says

A that she us unsettled, she is calling out, she is short of breath, and, indeed, was short of breath and needed oxygen the night before her transfer to the hospital. So I am certainly not convinced that her medical condition was stable for transfer to a Community Hospital. However, she is seen, she is assessed thoroughly by a consultant who assesses her heart problems and her leg ulcers and leg problems and various blood abnormalities, but believes she is fit enough when she sees her, which was of course several days before she actually got transferred, to be transferred to see if it was possible to get her out of hospital.

B that she was not right and there had been problems most evenings, but she had not been prescribed, as far as I could tell from the notes, opiates with these problems when she was in Haslar. She arrives on the 18th and I think it is noted in the nursing notes that she does have some pain, although it had not been mentioned in Haslar. That night she is written up – she is woken up, the nurses I think say she is distressed and anxious and confused; we have talked about that, she almost has a degree of acute confusion, a state of delirium because she is not well. That was treated, so it is similar to the episode she had previously in Haslar where she

C had received oxygen and she is given couple of doses of oral morphine that night, which appears to settle her, although she is reported in the notes as being a bit drowsy. Sorry, no, can I just correct that, I think that is the next day, can you just remove that? However, something clearly happens on the 19th, and I just want to, sorry, do you mind if I – yes, about 11.50 in the morning the nursing notes recorded that she had marked chest pain and was grey around the mouth. This could well have been a heart attack. She had known ischemic heart disease and heart failure. It could have been a pulmonary embolism, a clot going from her

D legs which is very common again after people have had a fractured neck of femur, but she does not appear to have had any investigations. However, she does get given oral morphine and later in the day is started on a syringe driver. I think it would be very reasonable to give a dose, if somebody is in pain and looking very unwell and distressed and having a heart attack, I think a strong opiate is the treatment of choice.

Q I think you mentioned that earlier if someone was being produced to you with ---

E A Yes. However, no more observations appear to have been done, no more investigations, and a syringe driver is started containing I think 20 mg of diamorphine and midazolam. I am looking at the medical notes, but I think in the nursing notes it says that pain had only been relieved for a short period. I have said, if you have had a heart attack you are normally dealt with, normally managed by giving pain relief as required; there is no issue about that, but if you have continuing pain, then that is an indication for interventions with other medications. If she is in heart failure she has the heart failure treated. If she is ongoing

F angina you will need that treated, you certainly need oxygen. I think it would have been appropriate to speak to the consultant to see what the management would be. So I cannot quite understand the need for a syringe driver. This was a heart attack, although there does appear to be continuing pain mentioned in the nursing notes.

Q She was agitated, was she not?

G A Yes. I think there is no doubt she was in pain and she was agitated, I suspect she was also breathless. I think all those reasons are good reasons to give doses of diamorphine or morphine. I am just struggling a little bit, I have not seen a syringe driver used in somebody who has had a heart attack, for example. So one would need some justification for that form of management. She then dies apparently peacefully the next day. I have struggled to think what I would actually write on a death certificate. I think she may well have had a heart attack and that may have been the final event on a background of never being quite right since the operation. She may have had a pulmonary embolus.

H

A Q It is not (inaudible) of a PE, is it?

A It is not clear. No, it is not.

Q It is typical of a heart attack, ischemic heart disease and the fracture neck of femur?

A Those are the likeliest causes, but we do not have any ECGs, we do you not have normal investigations that we put in train.

B Q One has to build up a picture. It is not necessarily a science. Death certification is far more of an art form that one looks at the picture and says: what is the most likely event. The most likely event is a heart event.

A Yes.

Q So myocardial infarction against the background of the heart disease?

C A Yes. I think that is perfectly – I do agree that is the most likely train of events, with the added train strain of the fractured neck of femur.

Q Yes.

A And an operation, yes.

Q When is the date of the (inaudible); do we know when that was?

D A I do not have it. It would probably be 5 or 6 August, but I do not actually have it here.

MS BALLARD: 5th August.

THE CORONER: Thank you. I think it was significant that quite a lot of the documentation was missing with regard to Mrs Lake. You were trying to piece things together ---

A I do not think – I think this is not one of the cases where I thought there was missing documentation.

E Q Thank you.

A But there was very little in the medical notes, which made the difficulty of actually assessing what had happened.

Q So most likely administered the diamorphine not necessarily for pain relief but for general well being?

F A Well, I think there is no doubt she was in pain, and clearly a serious event happened that morning and she was in pain. She may well have been breathlessness, but she does not appear to have been medically assessed or if it was there is no record at all in the notes.

THE CORONER: Anything from the family that you want to ask. Mrs Lake?

Questioned by MRS LAKE

G MRS LAKE: Only that we were very surprised an ECG was not done and there is no ECG machine in Gosport.

THE CORONER: Is there one now?

A There is one now.

H MRS LAKE: And the investigation into those chest pains if she was having them. You just

A stated that it was doubtful as to what you would have put on the death certificate. Is that because it could have been her underlying condition?

A I think that if we have an ECG that shows an obvious heart attack there is no doubt as to what should have been put on. The fact is that we do not have – I did not find enough information in the notes for me to be confident, or as confident as you can be.

THE CORONER: The kind of case he would have had to talk to the Coroner about.

B A That is exactly what my conclusion was. I would have discussed it with the Coroner.

MRS LAKE: That is why you would have possibly suggested in her notes a post mortem?

A If you do not know the cause, if you have not got investigations you have a discussion with the Coroner about whether that is an appropriate thing to do.

C THE CORONER: --- we have a post mortem examination and we give you an answer, but what is difficult is the type of conversation one has, she went, at 11.20 that morning she seemed to be in pain, she went grey, she had a pre-existing heart condition. Is it more likely than not that this is going to be a heart attack? Is it as a result of her pre-existing heart disease and, by the way, she had the fractured neck of femur that was repaired. That is going to actually contribute to the overall condition. That is the way I would address the problem with the doctor in discussing it. It is a “more likely than not” discussion, is it not?

D A I think with a few investigations I do not think there would have been a problem writing the death certificate, no.

MRS LAKE: The rest of my questions have been answered actually, thank you.

THE CORONER: Okay. Any questions?

Questioned by MR JENKINS

E MR JENKINS: Just one. You have told us that after the oramorph was given, Mrs Lake was still in pain, it is referred to in the nursing notes. You talk about agitation and breathlessness as well. You said that those are good reasons to give diamorphine.

A Yes. Those are very good reasons to give diamorphine.

MR JENKINS: Yes. Thank you.

F A While you are finding the underlying cause and treating that.

THE CORONER: Ladies and Gentlemen ---

(In the absence of the jury)

G MR JENKINS: Did you know that they did not have an ECG at Gosport?

A That, of course, might have been a reason to send her back to the Haslar.

THE CORONER: I am grateful. You would probably welcome a bit of a break now. If you can come back at 2 o'clock sharpish?

A That will be fine.

H THE CORONER: In that case you are released until 2.00. Jeffrey Packman.

A MR LEIPER: Sir, as far as Packman is concerned I have not had the opportunity to discuss questions with the family as yet.

THE CORONER: That is why I am going to stop now, come back at 2.00, and if you are not ready then, then tip me the wink.

B MR LEIPER: Sir, I think that the likelihood is that I will be short, I will be tomorrow morning, if that is okay, in relation to Packman, but I am in a position to proceed in relation to ---

THE CORONER: Because, of course, Wilson wants to be tomorrow afternoon, does he not, because he is at a funeral tomorrow morning.

C MS BALLARD: Sir, just to make it absolutely clear, there are two cases that are likely to take a substantial amount of time (inaudible).

THE CORONER: You are ready to deal with either of these.

MS BALLARD: With Cunningham or Gregory, yes, absolutely.

D THE CORONER: That is fine. Can we go to Devine? Sheila Gregory, Cunningham, Spurgeon, and then take Packman and Wilson after that. Mr Wilson has a particular problem in that he is at a funeral tomorrow morning and will get here when he can.

MR LEIPER: Would sir have any objection to beginning with Cunningham immediately after lunch is what I have in mind?

E MS BALLARD: Have I missed you mentioning Helena Service, sir? In the order of things that we have been conducting she usually comes before Ruby Lake.

THE CORONER: Yes, she does. Yes, I have and I am sorry. Thank you very much indeed for that. I am grateful. Right. Helena Service first after lunch, then Cunningham, and then let us look at it again because I think that will probably take us the rest of the afternoon. Thank you for that, I am sorry. I complete overlooked her.

F (The Luncheon Adjournment)

(In the absence of the jury)

THE CORONER: We are going to Helena Service.

A Sorry, are we doing Helena service first?

G THE CORONER: Yes.

A Is that right?

THE CORONER: Yes, that is correct. The way things are going, anything could happen. If we could have the jury back in, please.

H (In the presence of the jury)

A THE CORONER: Are we all okay? Mr Black, if we could go on with Helena Service, please?

A Yes, sir. Helena Service was a very elderly lady, I think 99 by the time of her last admission to hospital. She had a number of problems. She had at least two strokes documented in the past. She had had quite severe heart disease, raised blood sugars, a gastric ulcer and surgery and she had been living for at least two years in a residential home prior to her admission where there was documentation of decreasing mobility and increasing frailty, so much so that she seems to become bed-bound and to have developed some pressure sores. Anyway, she is finally admitted to hospital with confusion, acute confusion, again delirium, marker of multiple problems, and illnesses. She is disorientated, dehydrated and yet she is also in heart failure, so she has got excess fluid but at the same time she is dehydrated. It is a very complex problem to solve, even in young people. She is unwell. She makes very little progress at first. Then she seems to – she has been in hospital, seems to have another stroke. She remains dependent and after a medical assessment she is transferred across from the Queen Alexander Hospital to the Gosport War Memorial Hospital where she remains demanding, shouting out continuously; all the signs of ongoing confusion, ongoing problems. She remained continually breathless, needing to be nursed and upright at night, so obviously unresolved heart failure going on in this lady. She is totally dependent, 0 out of 20, she could do nothing for herself. On 4 June, midazolam is started by syringe driver because of restlessness and agitation. On 4 June she deteriorates overnight. The syringe driver is now replaced by 20 of diamorphine of 40 mg and she continues to slowly deteriorate and dies on 5 June. I think this is a very frail, very elderly lady who never makes, I do not think makes any progress at all while she is in hospital, has a relentlessly downhill course and is becoming very restless and agitated. I think it is reasonable to have used either – I think diamorphine at the start would have been the best drug in this case because of heart failure and unresolvable heart failure. I feel really quite confident that the cause of death here was congested cardiac failure, ischaemic heart disease, and cerebral vascular disease under 2.

E THE CORONER: Sorry, cerebral vascular disease?

A She had multiple strokes, including another one on this admission.

F THE CORONER: I do not want to digress, but one of the things that caused me concern with this lady was the move because she survives what is clearly 36 hours after the move. One is always concerned that moving older people can cause its own problems. Is that significant in this case or ---

A I think, like one of the other patients we were talking about this morning, I do not think it is good practice to move patients who are clearly medically unstable. I do not think that is good practice, but in itself I cannot see that that has significantly changed the outcome in this lady's case.

G Q Any significance from the medication point of view? You say you would have started the diamorphine earlier?

A Yes, yes. Well, again, we have discussed this this morning, the normal range. She was frail, it would appear from the notes. From the information in the notes I suspect I would have used, if I was treating her, a lower starting dose than she received, probably 5 or 10 mg in the first 24 hours. There may have been a reason why she was started on 20. I do not know.

H Q She is clearly very disturbed, is she not?

A A Well, she is clearly very, very short of breath and very agitated and she did not settle with midazolam. You know, I have not seen the lady, it is really difficult, but I suspect I would have used a lower dose, but it is difficult, I find it difficult to criticise the 20 mg without having been in a position to actually examine her.

Q So you may have started her on 10?

A I think so.

B Q When I read this originally, she is 99 and really unwell, but is demonstrating conditions that are probably susceptible to treatment?

A Yes. You can usually improve people who are in heart failure, but not on everybody.

Q Yes.

C A I think the other point is that she had had the heart failure for several years. I think it is poorly understood that people who have severe heart failure often have a worse prognosis than patients with cancer. People always think people with cancer: oh, you are going to die, but actually if you have severe heart failure your chances of 5-year survival without various interventions nowadays of course, you know, you are likely to have a worse prognosis than some forms of cancer. At 99, I mean, many people it is old age.

D THE CORONER: Which would be quite acceptable, the office of consensus and population do not like it at all. Right. Thank you for that. Anybody want to ask any questions about Mrs Service? Mr Jenkins?

Questioned by MR JENKINS

MR JENKINS: Professor, the jury had read to them yesterday a report from a cardiologist from Haslar Hospital, Michael Petch. I do not know if you have seen his report?

E A No, I have not.

Q He deals with the same patient. He was asked to deal with a number of questions so far as Mrs Service was concerned. He was asked what his view was of the prescription for diamorphine, 20 mg, together with midazolam by syringe driver and in case she “deteriorated and developed pulmonary oedema”, his view was that that treatment was appropriate.

F A I feel that they may be muddling up various things here as to if someone gets acute pulmonary oedema you want to give them, probably, an intravenous dose of diamorphine, by far and away the best treatment, while you try and do other interventions to stop it recurring. Diamorphine, interestingly, also has a direct effect on the vascular chain triggering the cardiac output. So it is a very good treatment for acute left ventricular failure, but I would not normally use a syringe driver to do it. You give one episode and then treat the heart failure. I think you are using a syringe driver when you believe you have got to the situation where you cannot reverse what is going on.

G Q Let me raise the second question, it is easier to deal with. Those who have Dr Petch's I am going to be questioning on 8, he was asked: What is your view on the subsequent administration of 20 mg of diamorphine given subcutaneously over 24 hours and 40 mg of midazolam given in 24 hours in order to “reduce the pulmonary oedema and the distress and agitation from the drowning sensation of the pulmonary oedema”, of that administration, 20 mg of diamorphine, 40 mg midazolam given by syringe driver subcutaneously in 24 hours, he said that that was appropriate and desirable.

H

A A Well, you would get a body of opinion, and if, as I have already indicated, I might have started on 10. If that did not deal with it then I would increase it to 15 or maybe even 20. So, you know, it is about clinical judgment, but she was a very frail 99 year old lady and you want to make absolutely certain you are dealing with their symptoms, but equally you want to be careful.

B Q It is quite significant though, is it not, the way the question is put: what is your view of the subsequent administration of diamorphine 20 mg, midazolam 40 mg in order to reduce the pulmonary oedema and the distress and agitation from the drowning sensation. Fairly emotive questioning, but nonetheless it highlights just what is going on with the patient, does it not?

A I mean I did not come across phrases like “this patient had a drowning sensation”, but you are quite right that when you are very ill, in heart failure, that is, indeed, how people can feel, and it is very, very upsetting.

C Q Over the page, for those who are reading Dr Petch's report.

THE CORONER: I just wonder if there is a spare copy of Dr Petch's report for Professor Black to look at. At least you have the questions in front of you. If you take tab B.

A Thank you.

D THE CORONER: Just at least so you have something to look at, if anybody has a spare copy.

MR JENKINS: I am not going to ask that you read it all now, Professor Black, but what I would like to take you to is paragraph 8.2 if I may. He talks about Mrs Service remaining unwell despite corrective treatment. In the preceding paragraph he has talked about various treatments that she has had to do with cardiac problems, congestion, being giving a diuretic?

E A I think I have said the same things, that it was that diamorphine would have been my treatment of choice in this patient.

Q I understand.

A The only quibble might have been about the dosage.

F Q I just want to read one more sentence to you and ask if you agree with every element of it. The second sentence in paragraph 8.2: “Opiates notably diamorphine, are standard drugs for the alleviation of shortness of breath, and distress and associated with pulmonary oedema”.

A I completely agree with that.

Q “And are particularly helpful at night.”

G A Yes, I agree.

Q I am grateful. The difference between you and me clearly is as to dose?

A Yes, I think, and I said that is down to judgment.

THE CORONER: Arthur Cunningham now, please. What do we have here?

H A Mr Cunningham, who I believe was 79 when he died, he had had two really difficult (inaudible) problems. Firstly, the war injury that left him with a lumbar spine fusion and the foot drop and mobility problems, and then developing Parkinson's disease during the 1980s.

A Now, Parkinson's disease is a degenerative disease, we do not know what causes it, of the parts of the brain that control movement and balance. It classically starts just with a tremor, at rest, and then the tremors will get worse and then people start getting stiff. Then they start not being able to initiate activity. So it is classic problems of tremor, of stiffness, of inability. In its early days, and he starts on treatment certainly by 1987, responds extremely well to drugs, but it is progressive problem. The areas are gradually still getting more and more damaged in the brain, and it often spreads wherever the disease process is to other parts of the brain.

B As the disease gets worse, it becomes harder and harder to treat it. Because the drugs become less effective, you need higher doses, you need frequent doses, and the drugs then start to have their own side effects as you push the dose up. If you push the dose of these drugs up many of them cause hallucinations, in themselves bad enough, having other problems, they cause falls and problems in blood pressure. You start to get a situation where people can be either on too little and they become very stiff and cannot do anything, they are rigid, they are stuck. Then very suddenly, might be every five or ten minutes, they are having

C too much of the drug in their system and they start doing writhing movements and twitching or dystonias as though they have too much drug. So it becomes increasingly difficult to manage. I think that is what is gradually seen in this case from when he starts getting a good response in the 1980s to starting to get difficulties, certainly by 1997. He has also got diabetes. He is getting these writhing and jumping movements and he is getting serious problems with his mobility, difficulties in transfers, walking indoors with sticks. Interestingly, he starts to lose weight. He was around 102 kilograms and we see now a

D progressive decline so that by the time he gets admitted to hospital I think he has lost 40 kilograms in weight, 40% of his body weight which is an absolute massive amount and certainly suggests serious problems. It is also noted that he has abnormalities now in his blood count which he never actually sees a haematologist, a blood specialist, but it was referred to, and I would agree, is probably myodysplasia. Myodysplasia is a pre-leukemic condition of the bone marrow. It is a condition which is not quite leukemia which is the cancer of the white cells in the bone marrow, but it shows that the cells are going wrong. He

E had a reduced white count and has a reduced platelet count, so he is much more likely to get infections than a normal patient because of this immune problem. Then he starts to get depressed; not uncommon at all in Parkinson's disease. The drugs themselves will lead to, often seem to lead to depression, and, as I have suggested, you can start getting the neurological deterioration can affect other parts of the brain. You can may get some early dementia-type illness and depression as well. In fact, I see at one stage it was thought that he had got early dementia. He then starts to get behavioural problems. He is depressed, he is

F tearful, he is low in mood, he seems to be struggling. He is already in a nursing home. He is not getting on well in the nursing home. He gets admitted to the psychiatric ward where I think he has probably got both depression and possibly he is getting a bit of mild acute confusion, the delirium I have talked about because it was described at other times that he would be shouting out for help, being noisy, refusing medication. So he is ill, he is chronically ill on top of the chronic other problems we have just described. During that admission, he goes into retention of urine, his renal function goes off, and there were

G catheters put in, his renal function goes back to normal. He is assessed. He is on a psychiatric ward this time. He is assessed by the physicians who say that they will be happy to follow him up in the geriatric day hospital. It is somewhere, a sort of halfway house. When you have gone home you would come back there on a regular basis, maybe once or twice or even three times a week in order to receive physiotherapy or nursing care if there are nursing tasks that need to be done or other actions. It is a way of monitoring very

H closely patients that you are concerned about so you do not have to be in hospital, but you are being monitored carefully. At first, it does look, I think on the 11th the community

- A psychiatric nurse has seen him in the nursing home, the new nursing home that he has moved to, and she thinks that she has settled in. He comes to the day hospital on 14 September, a bit brighter, blood pressure is a bit low. Clearly, people are worried about his pressure sore that had developed over the previous time because they take a swab and they prescribe him for an antibiotic for that. He then comes back again on the 17th with pressure sores now discharging markedly, apparently not complying in the nursing home with dressings, would not wake up sometimes, refusing to even dress. I think he is acutely confused again. I think he has a delirium on top of his medical state. On the 21st, he comes back again and clearly now he is very ill. He has not taken his tablets, his pressure sore has got very much worse, it is offensive, it is described as a large necrotic sacral ulcer. He is admitted for nursing and oral morphine for pains and the consultant says that he was to come in for nursing and oral morphine for pain. The consultant also says that while the nursing home bed should be kept open, the prognosis poor, and, in my experience, if a consultant says the prognosis is poor they usually mean I think it is very unlikely they are going to leave hospital and they are going to die in the near future. I think that that is how I would understand from that sentence. So he is clearly very ill. He is very ill from his pressure sore. We have talked about the chronic problems that he had with his Parkinson's disease. Clearly, the consultant thinks that he should receive oral morphine for pain. I think it was absolutely appropriate to admit him at that stage and to observe and provide nursing care and to provide pain relief, I think that you would very quickly so you see which way he was going. I think to come in for pain relief is absolutely appropriate. If you have a large pressure sore, at the end of the day he is already on antibiotics, the chances of someone with a large necrotic pressure sore that has been going downhill for some months who has these other disorders, in my experience they almost inevitably die in hospital. It is very unusual. If he was much younger perhaps major surgery and plastic surgery may make a difference, but I fear this is often a pattern of illness that, quite frankly, we just cannot cope with. It is too complex, too difficult, and you see a relentless downhill state.
- E THE CORONER: But he was not cooperating, was he, so any question of any treatment for the pressure sore would have been quite difficult?
- A It would have been extremely difficult. Very difficult to manage him. He kept moving from nursing homes. For six months there had been difficulties in people managing, probably because he was getting episodes of acute confusion and probably because he had early dementia, I think there was 23/29 records somewhere in the notes. As you got more ill you get more of this delirium, more confused and the problems will become much more complex to manage. So he is given, if I get this right, oral morphine, two doses, one of 5 mg and one of 10 mg on the first day, and then subsequently – sorry, I just need to go back to my notes – the next day he is still very confused, delirious, and a decision is made, it would appear, to start him on having had two doses of oral morphine on diamorphine. He is put on 20 mg of diamorphine together with 20 mg of midazolam. The notes, as I read them, say that with that he is still agitated at night and the night staff have reported pain, but it does not seem to be as bad as my judgment from the notes. Because of that, they say that they increase the diamorphine to 40 and the midazolam to 80. Certainly, if your symptoms are not controlled it is appropriate, as we said earlier today, to increase the dose to the point at which they are controlled, although I could find nothing in the notes to explain the four-fold increase of midazolam from 20 mg on the 23rd to 80 mg on the 24th. Then following the 40 mg, I could find no further notes referring to distress in either the medical or the nursing notes, so it would appear that, certainly, he was symptomatically controlled at that stage. Diamorphine is then again increased on the 25th and on the 26th. Again, I can find no justification for that in either the nursing notes or the medical notes. In summary, I have no

A | doubt that in view of our previous discussions sepsis would be 1(a). It was from this large pressure sore, and that it was end stage Parkinson's disease which had led to the problems. While under 2 I put his diabetes mellitus and of course the myodysplasia which again would make him far more susceptible to infection and sepsis from the pressure sore.

THE CORONER: He actually had a post mortem examination.

A | Oh right.

B | Q | I do not have my copy here because it is in the front of a file. Let me just go and get it because I know exactly where it is. (pause). Dr Hanif gives the cause of death as bi-lateral bronchial pneumonia, which may be the terminal event.

A | Truly, there was nothing in the notes that could have directed me to that.

C | Q | Well, in fairness, I do not think there would have been. (inaudible) Gosport War Memorial Hospital on 26 September 1988. Death certificate issued by Dr Sarah Brook, she included bronchial pneumonia and Parkinson's disease. Stepson said he did not agree with these causes and requested a post mortem and the coroner agreed. A bed sore, wet ulcer was identified on the sacral area measuring up to 10 cm in maximum dimension. No flesh is present beneath the ulcer.

A | Being very unfettered.

D | Q | Yes. "(inaudible) contained thick mucal pus. (inaudible reading) congested and copious amounts of pus exuding." The comments at the end are initially quite difficult because they are anecdotal.

A | It seems very similar. Infection has led to the death of the deceased, mobile pressure sore, sacral bed sore and Parkinson's disease. That is all the things I have talked about.

E | Q | That is right. Thank you. Interesting it is only one out of the 10 that there was actually a post mortem examination. I think that was at your request, was it not, Mr Farthing?

MR FARTHING: Yes, it was, but it was not put in that particular form. What I requested was entirely different to what happened, sir, because I know more about it I will happily say so now.

F | THE CORONER: Let us deal with this first, rather than take your comments at this stage, I think I would like to know what you were going to say before you said it. Okay? Right. Anything for Professor Black from Mr Cunningham? Yes.

Questioned by MR LEIPER

G | MR LEIPER: Sir, I would ask the Detective Sergeant to dig out the medical records. There are two bundles of them. I believe there are two files there which are they, can. I ask that those, in the first instance, be handed to Professor Black? I understand that you, sir, have the originals.

THE CORONER: I have.

MR LEIPER: I am grateful for that.

H | THE CORONER: Can I tell you I do not know my way around these terribly well.

A MR LEIPER: I have also, sir, prepared for Arthur Cunningham a small table which sets out the dates and the dosages of diamorphine and midazolam, hyoscine and Oramorph.

THE CORONER: Thank you.

B MR LEIPER: Can I hand that to this witness and a copy to yourself?

THE CORONER: Please, if you would.

C MR LEIPER: Should sir find it of assistance, it is something which I would invite you to distribute to the jury in due course. (Document handed). Lastly, sir, before I begin my questioning, Mr Farthing, as you know, is Mr Cunningham's stepson sits behind me. He has brought a photograph of Mr Cunningham here. It is obviously extremely difficult for this jury to be able to clearly identify particular individuals. In the circumstances it is thought that if they were to have a quick look at this that might help them remember the case of Mr Cunningham.

D THE CORONER: No. There is any number of reasons for not doing that. Over many, many years it is much easier for juries to be able to dispassionately exercise their duty without becoming attached. It is actually quite difficult, and after all the time I have been doing this job, one thing I must not do is sit down there with you, because that immediately puts me in the position of, forgive me if I am being indelicate, entering a grieving machine. I cannot be dispassionate and to adjudicate objectively your cases if I am actually sharing that grief. Grief is a fairly destructive emotion and one that is very difficult to come to terms with. I can be dispassionate and give you a judgment without sharing that. By producing artifacts and photographs, juries can very quickly become involved and to identify with deceased and identify with families, and that is not their job. That is not what we are here to do. So no disrespect in that in any way at all, but it is actually a very difficult issue. I have long stories I can tell you about this; if you have got a few hours I can share them with you, but it is a very difficult issue for all coroners and for all coroner's juries and it is not something that I dismiss lightly. It is something I dismiss after 20 years' experience. Please do take it in that way. No disrespect to you or your late stepfather. All right? Yes, if the jury could have a look at this I would be grateful. Just as an aid memoir, a copy.

F MS BALLARD: Sir, I notice one error on it. That is all I have had a chance to highlight at the moment. Get my tutor to check it before we hand it to the jury.

THE CORONER: All right. Thank you. (Pause).

G MR LEIPER: Professor Black, you have two bundles of medical records in front of you. Can I, in the first instance, ask you to turn up page 457. A letter from Dr Lord to Dr Growcock.

A Yes.

Q This is a letter which was dictated on 21 September of 1998, which was the day that Mr Cunningham was admitted to the Gosport war memorial hospital. It is from Dr Lord who was the consultant geriatrician who was responsible for his care.

H A Yes.

- A Q And it appears from that letter that Dr Lord was admitting Mr Cunningham to the Gosport War Memorial Hospital in her words “with a view to more aggressive treatment of the sacral ulcer as I feel this will now need Acerbine in the first instance”. Do you see that?
A Yes. I was reading that, just ---
- Q The reason why Dr Lord was admitting Mr Cunningham to the Gosport War Memorial Hospital was for rehabilitative care.
- B A Could we look at page 643, providing the numbering of this is the same as in my notes. It might not be, of course.
- Q It is. It is the same document. It was the next document.
A That is right. I think I can see exactly where you are going, but I think there is a different impression to me. In the notes, the contemporaneously written notes together with the letter. We can discuss that.
- C Q Let us go to this document; as I say, it was the next one I was going to be referring to.
A Yes.
- Q Page 643 is the document which sets out the care plan that Dr Lord felt should be instituted.
A Yes.
- D Q In the first instance, under that, by the number 2, it says that Acerbine cream for topical use on the sacral ulcer?
A Yes.
Q It then suggests that there should be a high protein diet to help improve his nutrition and help wound healing?
A Yes.
- E Q There is then by the number 3 a request that the nursing home bed should be kept open for the next three weeks in order to establish whether Mr Cunningham would become well enough to return there.
- THE CORONER: That is the bit you are putting to him there, is it?
A Shall I come to all of that when we have gone through the points?
- F MR LEIPER: You see that? There is also then a recommendation in relation to oramorph which you have already highlighted?
A Yes.
- Q Now, it is correct that the prognosis at that stage, so far as Dr Lord was concerned, was poor?
A Yes.
- G Q That is what she said?
A Indeed.
- Q Poor but not completely hopeless.
- H THE CORONER: Well, can we look at that? We heard this, we looked at this before. What

- A does “prognosis poor” mean to you?
 A As I gave evidence this morning, I see that as shorthand for: I do not expect this patient actually to improve and go home. I see this, the picture that I see is, and particularly we have to remember that when they came there he is very frail, there was all the confusion that had been going on, that he was brought in to do two things. One was to use standard treatment, to see if things might improve; at the same time, to treat the patient symptomatically. I do not see any problems with those things going side by side because you are seeing this patient, you have seen them before. You are getting a snapshot. You are not quite sure what is going to happen in the next 24-48 hours. I think it was probably in that consultant's mind, no doubt you may ask him or her, that they expected them to go downhill. That is what I would think from reading this, but you do both things. You treat the symptoms, you do what you can for the pressure sore, which is high protein diet if he is going to take anything, but he had not been eating, went off food in the nursing home because of the acute confusion, some topical stuff for the ulcer, but that is never, ever going to cure an ulcer that we know shortly afterwards went down to bone. It is never going to be a cure. You wait and see what happens. I think the thing about the nursing home, if you genuinely thought that somebody was going home, I think that you would say “do not give up the nursing home place”. The three weeks is just a standard thing. You hope for a miracle but it very rarely happens. That is what I read from this, but I accept your point. You might get a slightly different picture from the letter.
- B
- C
- D Q It is the letter which clearly encapsulates her view, the reason why he is being admitted to the Dryad Ward at Gosport War Memorial Hospital was with a view to more aggressive treatment of the sacral ulcer. That is what she said.
 A Yes, that is exactly what she says.
- E Q Yes.
 A Because you cannot do what she suggested, which is 24-hour nursing care, a high protein diet, oral morphine PRN, and this acerbose in a nursing home. Those were all done on the ward.
- F Q On 21 September 1998 when Dr Lord wrote that letter she would have been aware of the past history of back injury, Parkinson’s disease, with the myodysplasia, the depression, the bed sore, and she would have had the option, if she felt it was appropriate, to admit Mr Cunningham for terminal care.
 A I think she was doing ---
- G Q Did she?
 A I think she was assessing ---
- H Q Could you just answer the question?
 A Well actually, no. I think you assess somebody. I think you assess somebody. You bring them in. You can see they are ill. You can see they are ill. You can see you are not winning. You know this patient, I think she had known this patient for some time, and you can see that they are certainly not fit to go back to the nursing home. At the same time, you just want to get an assessment and it will take a period of time, which might be quite quick if she goes downhill very rapidly or it might be slower, in order to see where you are going with this patient's management, but as I have said, in my view, putting “prognosis poor” means that this doctor was not at all optimistic that this was going to change the course.

A Q Professor Black, it was a simple question that I asked you. She had the decision, she made a decision on 21 September, she could either have admitted him for rehabilitative care or she could have admitted him for terminal care?

A No, no. I do not accept that. I am afraid, you know, that suggests that there is a black and white path.

THE CORONER: I think you referred this morning that it could have been for both?

B A That is just the point I was going to make.

THE CORONER: Sorry.

A That is exactly the point I was going to make, that I felt that she is pursuing both things, providing appropriate symptom relief. If there is a dramatic change, fantastic, you have the nursing home place open, but I do not think she expects that.

C MS BALLARD: Sir, I rise to my feet just to assist in you may find assistance in Dr Lord's statement itself as to what she meant by "prognosis poor". Page 25 of her statement, penultimate paragraph, sir.

THE CORONER: "Prognosis was poor. Whilst the treatment plan was aimed at maximising the prospect of an improvement in Mr Cunningham's condition, I recognised that his general condition was very poor and contributed to the development of a large pressure sore. Felt he was unlikely to recover." Seems to be the explanation. That relates certainly to that letter itself.

D A That is just what I thought was probably meant by that statement.

MR LEIPER: It is not quite. Prognosis was poor, no doubt about that, but it was not completely hopeless. It was for that reason that she mentioned that she referred him for more intensive therapy to his ulcer. She recommended a high protein diet, indicating that he might live long enough to benefit from that. She also asked the nursing home to keep open his bed for the next three weeks at least.

E THE CORONER: Am I being obtuse? The phrase is "prognosis poor", not hopeless or gone or signing off or anything of that kind, it says prognosis poor. There is treatment clearly given as recommended and referred to in the notes. This is not a goodbye job. This is a prognosis poor.

F A Yes.

Q That is what it is, is it not?

A Indeed.

G Q I have difficulty with a nomenclature and the way you are interpreting that and saying: well, of course this is a completely hopeless case, just stop it now. That is not what is being said and that is not what is being done. If you are putting to Professor Black that that is what it is, he is going to say no, are you not?

A Yes. Well, no if you see what I mean.

Q I think we all understand what "prognosis poor" means. Go on.

H MR LEIPER: I am grateful, sir. The next entry in Mr Cunningham's medical records, as I understand it, is the entry at page 645.

A A There is an entry at the bottom of page 643.

THE CORONER: 24th September: "remains unwell".

MR LEIPER: That is an entry that has been put in place, normal chronologically. The next chronological entry as I understand it is 21 September, the day of his admission.

A Yes.

B Q So two medical records on 21st September, the one Dr Lord recommending the staged approach to future care. The next medical record is this, and this, as I understand it, is an entry from Dr Barton:

"Transfer to Dryad ward, make comfortable, give adequate analgesia. I am happy for nursing staff to confirm death."

C Mr Farthing, who sits behind me, will give evidence in due course that he visited on 21 September and was informed that in the light of his father-in-law's bed sore he would not survive. He was told that on 21 September and told that on 23 September. There is no evidence, I do not think, of his receiving the high protein diet to help improve his nutrition and help wound healing which had been recommended, is there?

D A I did not find any evidence of that, no, but, equally, I think he would have had great difficulty taking it because I think somewhere else it has been recorded that he was not eating anyway in his nursing home. I think the chance of him getting this high protein diet would have been very small.

Q You have mentioned that in circumstances where people lose consciousness it is possible to administer nasogastric nutrition and, therefore, provide food and liquid replenishment by that route, yes?

E A Yes, indeed.

Q That would have been an option?

A Yes, I think that would have been an option.

Q Given that he had been admitted with a view to more aggressive treat of the sacral ulcer, in Dr Lord's words, in your view would that have been appropriate?

F A I think that is quite difficult to assess, and also, practically, it would almost certainly have been extremely difficult. I really would not know if they could do NG feeding in that home or not and whether he would have had to have been moved to a different hospital. I think that is a hypothetical, though I am not sure I can deal with here.

Q But if they could have done it?

G A That was a possibility.

Q Would you expect them to do it?

A I think you would assess the patient for 24-48 hours; that would be my approach and ---

Q If the patient was unconscious in the course of that first 24 hours?

H A Then they are terminally ill and you would definitely not.

A Q Depending on the cause of the unconsciousness?

A Indeed, but I think ---

Q If the cause of the unconsciousness was excess opioid you would not be able to draw an inference of terminal death, of terminal illness, would you?

A No. I think that is fair.

B Q Given that Mr Cunningham had been admitted to the hospital with the intention of returning to his nursing home, or at least the possibility of that, one would expect the medical records to record a clear discussion and decision making process involving medical staff which gave the reason for his not being given subcutaneous fluids or nasogastric nutrition, would you not?

A No, I do not think that is necessarily the case. I think it would certainly be good practice to have discussed all aspects of his case and prognosis with the family.

C Q You mentioned in the course of your evidence that it was not until the day after his admission that he was commenced on the diamorphine.

A That is what it says in the notes.

Q The position is, and I think if you look at the notes, it is clear that they were commenced, the diamorphine was commenced at 10 past 11 on 21 September.

D A You are right. I have got this wrong. I have got it in my notes, actually. That is where I actually say so. I accept that was an error.

THE CORONER: That is at night?

A At night. It was started at 11.10 at night, 23.10.

E THE CORONER: Whilst you are there, can I just ask for clarification. On 26 September I cannot make out the first word. Somebody's condition continued to deteriorate. Does anyone know what that word says?

MS BALLARD: Brian's.

THE CORONER: Was he known as "Brian"?

F MR FARTHING: Yes, he was.

THE CORONER: Oh, right. That is probably why I am confused.

MR FARTHING: His name was Arthur Dennis Brian. He was always known as Brian.

THE CORONER: Okay. Thank you for that.

G MR LEIPER: You have expressed the view, according to the medical records, the diamorphine and midazolam were commenced on 21 September and then they continued until 26 September?

A Yes.

H Q Over the course of that period of time there was between a four and five fold increase in them both?

- A A There was a five-fold increase. The last one was started just before he died, yes, indeed. I agree.
- Q Five-fold increase in the midazolam?
- A Four-fold increase in the diamorphine from 20 to 80 and, as you say, a five-fold in midazolam, from 20 to 100.
- B Q And then he died?
- A And he died at the end, yes.
- Q Your view is, at paragraph 6.30 of your report, that the dose of diamorphine and midazolam on 25th and 26th, so the two last days where it is increased you say was excessive.
- C A Yes. I think that – I am afraid I have got two copies of the reports. I have my later one here. I say the dose of diamorphine has increased on 25th and 26th to 60, then 80 mg and the midazolam increased again on the 26th to 100 mg. There is no justification given for either of these changes in the nursing or medical notes, nor at any stage that can possibly tell from the notes whether the decision to change the drug dosage was a medical or a nursing decision. I also say in the previous paragraph:
- D “In my view, the increased dose of diamorphine prescribed was appropriate.”
- That is from 20 to 40.
- “However, the four-fold increase in midazolam from 20 on the 23rd to 80 mg on the 24th appears excessive without explanation in the medical notes. “
- E Q The report which you sent to the police, paragraph 6.30 reads:
- “In my view, the dose of diamorphine and midazolam was excessive on the 25th and 26th and the medication may have slightly shortened life.”
- A “However, I am unable to find evidence to satisfy myself to the standard beyond reasonable doubt and I would have expected a difference of at most no more than a few hours to days if a lower dose of either or both the drugs had been used instead during the last few days.”
- F THE CORONER: Am I right in thinking that the significance of that is without reference to it in the medical records? If that had been there, that would have explained – is that the point you are making?
- G A Absolutely. I do not understand why those doses were used. There may have been an extremely good reason and it would be entirely appropriate. On the other hand, if there was no good reason and it was not appropriate, then they would be excessive.
- Q In the light of his having been commenced on the syringe driver on the evening of his admission, it appears as though a palliative care regime was put in place right from the outset. Would you accept that?
- H A I think that the doctor or nurse would have to find out why, that simply given PRN Oramorph was not dealing with his current symptoms and a decision was made, and I would think you would have to clarify that, to put him on a syringe driver to deal with the

A symptoms, particularly pain, that Dr Lord had requested when he was seen in the day hospital. That is how I assess that.

MR LEIPER: Given what Mr Farthing was told on 21 September when he attended, that his father would die, given that he was not provided with the nutrition which had been recommended by Dr Lord, and given that there was no attempt to provide him with nasogastric assistance of intravenous fluid, it appears that from 21 September at the Gosport War Memorial Hospital Mr Cunningham was being treated with palliative care for an illness which they did not think was going to get better.

B A Could you just clarify for me? Do I take it as given that that is the information given to the son?

THE CORONER: I have no idea. He has not given his evidence yet.

C A I have not got this evidence here at all.

THE CORONER: If that is what has happened, is that what we have got?

A All I can see from here is that he had to come in and one of the aims of coming in was pain control. They were to use – and the consultant says that you should use a strong opioid. A decision is made after two doses of strong opioid that it is not resolving the symptom problem and, therefore, a decision is made to use the diamorphine pump as a way of – syringe driver, sorry – as a way of controlling the pain.

D MR LEIPER: Sorry, how do you know that?

A I am giving you my impression of what I can see here in that ---

Q You have the medical records. You do not know why it was that the syringe driver was administered.

E A That is fair comment, unless it actually says.

Q That is ---

A Let me see exactly what it says.

Q I will take you to the relevant entries in due course, but it is important that you should not speculate in relation to why particular individuals did pick acts.

F A Okay. That is fair. I think it actually says, the notes say:

“The son is told diamorphine pump has been started for pain relief and to allay his anxiety”.

That is what the notes actually said.

G Q That is what the son was subsequently told.

A Yes.

Q There was no detailed analysis of his past medical history at the time when he was admitted to the Dryad ward apparently from the notes?

A Agreed.

H Q It is usual medical practice to do a sort of resume of past medical history when you are admitting a patient to give you a baseline?

- A A Yes.
- Q So that if subsequent problems occur in the course of that patient's stay, one has something to compare it against?
- A Absolutely. I agree.
- B Q And the omission to do such an assessment and recall such an assessment would be substandard clinical practice so far as you are concerned? You have made that clear.
- THE CORONER: It would not be what you would expect.
- MR LEIPER: It would not be what you would expect. Yes?
- A Yes.
- C Q He had been in receipt of medication including mirtazapine, carbamazepine, Triclofos and risperidone medication; yes?
- A Yes.
- Q The purpose of that medication would be what?
- A Well, the first question is, of course, whether he was taking it or not, and think there is ---
- D THE CORONER: I do not think that is the question. What was the purpose of the medication?
- A The purpose: he had been put on those medications by the psychiatrist to try and control his depression and his mood states. That is my understanding.
- E Q So mood condition?
- A Yes. Okay.
- Q No ---
- A I am not a psychiatrist, but that is ---
- Q But that is what you would understand.
- A That is what I would understand.
- F Q In the view of the psychiatrists who were responsible for his care it was appropriate that he should receive that medication?
- A They certainly had him on that medication, indeed, yes.
- Q In the event of somebody in Mr Cunningham's condition not receiving that medication, one might expect adverse consequences in terms of behavioural behaviour. Is that fair?
- G A I think that, again, it is very difficult. What is not documented here is why the decision was made not to continue it. I think that is a very reasonable question to ask. So you do not want me to speculate why that happened, that there may be a reason I can speculate on but I do not know why it was not continued.
- Q One might infer from its ---
- H THE CORONER: Speculate, yes. It is actually very difficult. There are obvious answers to

A the question, but that is speculation. Why would one take him off his psychiatric medication at that point when he is an inpatient at hospital on a syringe driver? Was he taking his medication anyway? Was he able to take his medication? I think probably Mr Farthing can help us with that. I do not think you are going to get much further with Professor Black.

MR LEIPER: The cause of death was bronchopneumonia?

B A Certainly, there was – that was 1(a) on the death certificate was it, so that was the cause of death.

Q You agree with that?

A I cannot argue with it.

C THE CORONER: It is a septic death, is it not? What we have is a bronchopneumonia that is going to do the deed one way or the other. Whether you call it sepsis or whatever. You have a problem?

MR LEIPER: Bronchopneumonia you confirmed this morning can occur as a secondary complication of opiate and sedative-induced respiratory depression?

A I think I also said it was a very common finding of deaths from all causes.

D Q I am not trying to trap you in any way, I am just asking you to say, to confirm your evidence this morning that bronchopneumonia can occur as a secondary complication of opiate and sedative-induced respiratory depression?

A Yes. I totally agree.

Q Thank you.

E THE CORONER: But is that not how it happens? You have: immobility, the lungs not functioning, the build up of the fluids and they have become septic and you get pus formation and – do go on.

MR LEIPER: I am grateful, sir. What I want to explore with you, Professor Black, is whether or not the original diamorphine dose proved to be excessive, The adverse consequences of that opiate overdose were not properly managed, that there was an omission to follow the advice which had been given in relation to nutrition, and that these were the immediate cause of death. That is what I want to explore with you. So far as the original opiate analgesic being excessive is concerned, you have confirmed in the course of this morning that when administering opioids the intention is to relieve pain?

F A Yes.

Q The aim is to relieve the pain without sedating the patient so heavily that they lose consciousness?

G A That is the ideal.

Q If they do lose consciousness, it is possible that that is as a consequence of excessive opioids?

A It is possible.

Q When Mr Cunningham arrived he was fully conscious.

H A Sorry, I do not understand what you mean by “fully conscious”. He was certainly in

A an acute confusional state. Now, I am ---

Q Okay. Let me assist. The jury, in due course, will hear from Mr Cunningham's son-in-law, Mr Farthing, who sits behind me. He attended his father-in-law in Dryad ward and he found his father-in-law sitting up in bed. He had a discussion with him and:

B “From our discussion I understood that he had been admitted to hospital as he had bed sores. He was perfectly normal and cheerful and remarked that he was there because his behind was a bit sore”.

Mr Farthing will then tell the jury that before he left he visited a local shop for some chocolates and a box of paper handkerchiefs he was in need of.

A Sorry, when did he go?

C Q On the 21st, the day of the admission.

A How did he get this box of chocolates, sorry? I am very confused I have to say by this evidence I have to say.

THE CORONER: No, no. What is being said. I think there is a confusion between Mr Cunningham and the visitor. That is what the problem is. Can you make it plain who is getting the box of chocolates?

D MR LEIPER: I do apologise. It is Mr Farthing going for the box of chocolates.

A Yes, sorry.

THE CORONER: Just let us be clear: what were they?

E MR FARTHING: I was sent away to get chocolates.

THE CORONER: What were they? What did you get?

MR FARTHING: The visitors supplied chocolates for a couple of days and I went to London for a couple of days. I got him the supplies he wanted.

F MR LEIPER: “Perfectly normal and cheerful, Mr Cunningham remarked that he was there because his behind was a bit sore.”

A Well, as I said, I have gone through the notes and, certainly, when he was being reviewed on 17 September it says that he would not comply with dressings, he would not make up after bed rest, he was refusing to eat and drink and expressing a wish to die. I think that he had an acute confusional state. I think he was ill with that. I think you get very fluctuating problems and, you know, it is absolutely classic. I will do a ward round in the morning and I will see a patient, have a totally lucid conversation. We will say “we will plan for you to go tomorrow” and the relatives come in the evening and they are very confused and wandering round. They cannot understand what we said. So you can get very variable pictures; it is quite possible that that is what you are describing. I can only go on what I have seen in the notes.

H MR LEIPER: I can quite understand that. That afternoon, on 21 September, Mr Cunningham was commenced, as per the geriatrician, Lord's, recommendation on oramorph. At 10 to 3 that afternoon he was given 5 mg of oramorph. At 6 o'clock that

A evening he took co-proxamol. Page 753.

A Yes, that is right.

Q At quarter past 8 that evening he received 10 mg of oramorph?

A Yes.

B Q That 10 mg of oramorph was at the top end of the bracket which had been recommended by Dr Lord. Correct?

A Yes.

Q There is nothing in the notes which justify the increase from 5 to 10. Correct?

A I do not think I found anything, no. That is correct.

C Q There is no history of his having had (inaudible) previously?

A Yes.

Q And at 10 o'clock that evening, you will find this on page 754.

THE CORONER: Sorry, 754?

D MR LEIPER: 754. If you have page 754 there, this is a document which is entitled "Exceptions to Prescribed Orders". Yes? You have the document?

A Yes.

Q Do you see that at 10 o'clock that evening he was due to have his co-proxamol, his Sinemet and his senna.

A Yes.

E Q What was the reason recorded for his not having them?

A It clearly says "sedated", so presumably he was sleeping at that time.

Q What do you mean "sleeping"?

F A Well, that would be quite a common cause. If they did not – if someone had already adequate pain relief and they were sleeping you would not do anything. Having said that, I accept the word says "sedated" and you are going to accuse me of making a judgment, so I think you should ask that question, obviously, of the nurses or whoever wrote that as to whether or not that means sleeping or they have been over-sedated which is what ---

THE CORONER: I think if we take Mr Leiper's questions as they come, rather than anticipate them. Okay?

A Yes.

G MR LEIPER: The record of his being sedated at 11 o'clock that evening, sorry, at 10 o'clock that evening, at 10 o'clock that evening, is consistent with the 10 mg of oramorph administered at 20.15 being too much, is it not? It is consistent with it. I am not saying conclusive, but it is consistent?

A I think you would have to clarify what the word "sedated" means in this circumstance. I obviously have got he was sleeping. Now, I may have got that wrong. That may not have been what they meant, so I do not think I can comment on that.

H

A THE CORONER: There is little doubt he is going to be sedated if he has actually had the oramorph. Would anyone doubt that? He is going to have some sedation, is he not? That is going to be one of the effects of the oramorph. Whether it leaves him unrousable or whether you would want to rouse him or not, I do not know. Is it a point? If you are going to suggest he is unrousable then I think that is something I would listen to and say: okay, we had better check that.

B MR LEIPER: The reason for his not taking his usual medication is that he is sedated. Yes?
A That is what it says here.

Q All I am asking you is whether or not that is consistent with the oramorph, the 10 mg of oramorph given at 20.15 being excessive. Is it consistent with that?

A It is also, it is consistent with it working.

C Q But is it consistent with it being too much?

A If it said "over-sedated" then it would certainly be consistent with being too much. "Sedated" I find there is – that one word does not answer the question you are asking.

Q Are you saying that it is inconsistent?

A Am I saying it is inconsistent? Sorry?

D Q It is a simple question I have asked. The record of his being sedated at 10 o'clock that evening, is that consistent with his having had an excessive amount of opiate analgesia?

A I think if it said "over-sedated" then it is consistent.

Q Seriously, Mr Black.

E MR JENKINS: A cloth would be of assistance. My apologies, I think I have knocked the ---

THE CORONER: As long as you do not electrocute yourself.

MR JENKINS: I am trying not to.

F MR LEIPER: If this appears possible, the sedation at 10 o'clock that evening, the reason for his not having his usual medication, if that may have been as a consequence of the oramorph, the 10 mg of oramorph that he had already received, that should, should it not, have resulted in a reassessment of the continuation of the opioid analgesic treatment?

A No. I think you can equally come to the conclusion that it was working well and that the patient's symptoms and pain had been relieved and that he was appropriately sedated.

G Q Would not you expect that, in those circumstances, given that that must have been at least a risk of there being an excess overdose, at least a risk in those circumstances, that it would be appropriate to not administer the diamorphine until such time as you were able to gauge whether that sedation was as a consequence of the excess oramorph?

A I do not know why the diamorphine was started. I do not know what condition – what had changed an hour and ten minutes later to start the diamorphine. I cannot find, unless you can point me to it, I cannot find that evidence. You may have ---

H Q If you go to page 867, second entry down, there is a reference to his being agitated until approximately 20.30. Syringe driver commenced as requested and I cannot read the

A next word.

THE CORONER: Diamorphine 20 mg, midazolam 20 mg at 23.00.

MS BALLARD: I am very grateful, sir.

THE CORONER: "Remains agitated" is how it starts.

B MR LEIPER: Remained.

A You have got remain agitated 8.30, then presumably he received, presumably the 10 mg of oral morphine at 10 – what times, I am sorry, you will have to remind me?

Q At 20.15.

A At 20.15. Okay.

C Q So that would be consistent?

A 15 minutes, well, and then the syringe driver, but you do not know when the syringe driver, I do not know from here what time the follow-on note was actually written. I presume it would be 23.30, Nor does this say anything about what happened between that comment, where you pointed out about sedation at 10 o'clock, and 11.10. So I do not know why the syringe driver was started because I cannot find the evidence in the notes.

D Q It is interesting, it says "as requested".

A Again, one would (inaudible).

Q Yes, that is right.

THE CORONER: That is not helpful, is it?

E MR LEIPER: It suggests, does it not, that the reason for beginning the syringe driver is that a request had been made that it should be re-done rather than as a consequence of any adverse development in his symptoms?

A I think you would have to ask that of Professor ---

THE CORONER: This witness cannot answer that, but I think somebody, hopefully, will be able to at some point because it is an interesting point, not that the rest of your points are not interesting.

F MR LEIPER: There is little explanation in relation to why a syringe driver was commenced at 10 past 11 rather than a repeat administration of the oramorph that Dr Lord had requested should only be administered as required earlier on that day?

A I agree it would have to be ---

G THE CORONER: It is going to be the same answer, that somebody somewhere can presumably answer that question and can we stop for two minutes?

(A short adjournment)

(In the presence of the jury)

H THE CORONER: Ready to go on?

A MR LEIPER: You told the jury in the course of this morning that when it comes to the administration of diamorphine to frail, elderly individuals 30 mg of morphine would be the upper limit, and that equates to 10 mg of diamorphine and you said that there would have to be very good reason to go above the recommended dose; your words.

A Yes.

B Q Now, at 10 past 11 on 21 September, Mr Cunningham was given two times what you consider the appropriate amount; yes?

A He was started on 20 mg, yes.

Q That would appear to be double what you would ordinarily feel to be appropriate in these circumstances?

C A I think we have spent some time this morning discussing the range of options and the clinical decisions that had to be made, but certainly you would want to see a justification for starting on 20 mg, yes.

THE CORONER: I think that is what causes me some concern is what Professor Black is saying all the way through is: I would not exceed that without some reason, and there is nothing in the notes to tell me that.

A No.

D Q I think that is what you are saying?

A Yes. I have said it many times.

Q And that is what he has said all day, really, and I have taken that on board if it is any help.

E MR LEIPER: I am very grateful, sir. Page 867 of the medical records, entry dated 22 September 1998, there is a reference to Mr Cunningham's son-in-law telephoning, this is on the 22nd, so the day after he has been admitted. It says this:

“Mr Farthing has telephoned explaining that a syringe driver containing diamorphine and midazolam was commenced yesterday evening for pain relief to lay his anxiety following an episode when Arthur tried to wipe sputum on a nurse saying he had HIV and was going to give it to her. He also tried to remove his catheter and empty the bag and remove his sacral dressing, throwing it across the room. Finally, he took off his covers and exposed himself.”

F Mr Farthing was told on 22 September, and this is the evidence that he will give to the jury, that he was told by nurse Hamblin that his father-in-law had been given something to quieten him down.

G A I ---

THE CORONER: He cannot comment, if that is any help.

MR LEIPER: What appears to have happened is an episode of abnormal behaviour, possibly delusional behaviour, yes?

H A Yes, I think that is likely.

- A Q The sort of behaviour ---
 A Well, delirium. I have talked all day about acute confusion, about delirium. This looks to me like delirium.
- Q It is the sort of behaviour that you might expect a patient to display if he is not receiving the psychiatrically recommended carbamazepine, risperidone, clamizipine (?) and (inaudible). Do you accept that?
- B A I think that if he had – I think it is consistent with him having an acute confusional state, and that can happen, as we have described, in many different circumstances. Equally, I would accept that if he had been taking and able to take all those psychotropic medications this may well not have happened or may have happened in a different way. I do not know. He was not taking them.
- Q That may have contributed to his behaviour?
- C A It may have, but equally this could have had happened irrespective of whether or not he was on those drugs. This is the sort of thing you see in people who have acute confusional states.
- Q Given the agitated state that he displayed, midazolam was given and I think in your view would be appropriate?
- D A Yes. I agree.
- Q Would it not have been appropriate to restrict treatment of the agitation to midazolam in the first instance, especially in the light of the fact that he appeared to be sedated at 10 o'clock that evening? Do you accept that?
- E A That is a one of a number of possibilities, you know, you have to assess the patient at the time. You would have to – there being the question was he in pain as well as all these things happening; if he was, that might be a justification for him to be started on the diamorphine. If there was no pain and very agitated you have talked about chlorpromazine. That might have been a very appropriate drug. There are various options and you have to assess them and make your decision. The problem I have is that I have no assessment, no medical assessment at that stage to help me.
- Q It does not appear from the notes as though at any stage any analysis is done in relation to the cause of Mr Cunningham's pain.
- F A You mean whether or not it was coming from his pressure sore?
- Q Yes.
- A As I remember it, I do not remember the two being deliberately – I will have to take your word for that. I will have to go back through the notes.
- G Q There are a number of different reasons for the pain that he may have experienced. You have mentioned his back pain, yes?
 A There is his back problem, yes.
- Q There is a reference to difficulties with his knees?
 A Yes, I am sure you are right.
- H Q The fact that he was immobile would mean that it was highly likely that he would

A experience some muscle and joint stiffness that could lead to pain on turning and moving. Yes?

A I would accept all of those as possibilities.

Q It is appropriate, is it not, well you have agreed this morning it was appropriate to analyse what the pain is before endeavouring to treat it?

A Yes, I agree and ---

B Q In the absence of that analysis, there is a risk that the opioid treatment will be excessive to the needs.

A Or it would be inappropriate, yes; that would be a risk if you have not assessed what is going on. I presume we have a consultant's assessment. It was Dr Lord who assessed him earlier in the day and said to use strong opiates.

C Q Now, you have charted the four and five-fold increase in the diamorphine and the midazolam over his five day, six day stay at the Gosport War Memorial Hospital. It appears that he became sufficiently sedated to lose consciousness by 23 September. If I can take you to the relevant part in the medical records, it is page 754.

THE CORONER: Sorry, what date?

MR LEIPER: Page 754, the date is on 23 September.

D A Is this the one says "not able to take"?

Q Do you see above the entry, Triclofos and the reason for his not being given Triclofos on 22 September is that he is on a syringe driver. That is the reason given.

A It says "not able to take".

Q No, above that?

E A Sorry. Above that.

Q Do you see that?

A Yes, I see that.

Q On 23 September he is not able to take or the reason given for his not taking his regular medication, he is simply not able to take, yes, and that is repeated thereafter?

F A Mm hmm, yes.

Q His son-in-law, Mr Farthing, attends him on 23 September and finds him totally unconscious with the syringe driver attached to his arm. Yes?

THE CORONER: Sorry, what date?

G MR LEIPER: 23 September. It then appears that on the morning of, well, actually the morning of 23 and 24 September, he develops chesty symptoms, yes?

A Yes. If we look in the nursing notes of the 23rd, so page 876, on 23 September, as it says: "On the 23rd became agitated at 23.00, syringe driver boosted with effect. Seems in some discomfort when moved, driver, something, I cannot read that word, "prior to position change." Then, as you say, it goes on: "Chesty this morning". He talks about it on the 24th. Boosted, oh right. So evidence here that he was not totally unconscious because he was

H agitated and was describing discomfort. That is what the nursing notes say.

A

Q Yes. The reference to his being chesty may have signified the onset of his bronchopneumonia, which was subsequently diagnosed?

A Quite possible.

B

Q It appears from the notes that no consideration was given to the possibility of his respiratory symptoms and deterioration being due to excess opiate and benzodiazepine induced respiratory depression.

A There are two things. There is nothing in the medical notes here about his chest. That is in the nursing notes. It is not clear whether that is brought to the attention of the doctor or whether his chest is ever examined by the doctor. I do not remember seeing anything in the notes about it.

C

Q No.

A As we have said before, you expect any virtually, perfectly possible that any patient dying of whatever cause will get dependent agonal bronchopneumonia, so it would not surprise you if someone got chesty symptoms in their last few days of life.

D

Q But you confirmed to the jury this morning that bronchopneumonia is secondary to respiratory depression which itself is secondary to excess opiates is a possibility?

A It is always a possibility that that is one of the untoward side effects when you are treating the symptoms. It is also possible that you could have that in somebody who has severe Parkinson's disease, who is immobile, who has a serious pressure sore going through to bone. All of those, the whole picture together of somebody who is dying, you will find very commonly bronchopneumonic changes as an agonal event. You cannot pick out one little bit and just say: it is just this bit that caused it. I do not see how anyone could ever decide that clinically.

E

THE CORONER: But having said that, it is clearly an overall position, including medication, including everything else. It is a (inaudible) picture.

MR LEIPER: Of course it is, but in the circumstances where diamorphine has been commenced on double your recommended dose it would have been prudent, would it not, for consideration to be given to whether or not his chest symptoms may have been as a result of excess opioid analgesia?

F

A I do not think that I can make that assumption from the notes as I see it.

THE CORONER: But it might have been a factor?

A Might have been a factor, of course.

G

MR LEIPER: On 23 September, his midazolam is increased from 20 to 60, three-fold?

A Yes.

Q That three-fold increase does not appear to, as I understand it, it happened at 8 o'clock that evening.

A 8 o'clock on the 23rd, yes. That is what I believe, yes.

H

Q There is no entry prior to 8 o'clock on 23 September which obviously explains that increase. There are references to agitation, certainly at 11 o'clock that evening, and it is not apparent from the notes why the increase was from 20 to 60 as opposed from 20 to 30?

A A That is exactly what I said in my evidence to you, that the – sorry?

THE CORONER: There is no evidence. Not why. There is no evidence at all.

A No evidence at all, no, exactly. That was my evidence that there was no evidence. Yes.

B MR LEIPER: It is possible, is it not, that that agitation may have been as a consequence of the midazolam and the diamorphine?

A I think that is very unlikely.

Q Why?

A I think that somebody getting – we have discussed whether agitation can be a side effect of diamorphine. I think the evidence against one of us was that was very unusual in my experience.

C Q But it is ---

A It would be ---

Q It is unusual but it is something which is recognised in medical textbooks you say?

D A It is recognised in medical textbooks, indeed, but I think the combination of that with midazolam, I have not heard of it causing it with midazolam, not that I have used midazolam in large numbers, but I have not heard of it, not seen it. I think the two together, two sedative drugs, I think the chances of that causing agitation, I just find, I cannot find an explanation for that.

Q When was the last time you set up a syringe driver which contained what was being given to Mr Cunningham?

E A I do not think I have ever given a syringe driver with diazepam and midazolam together.

Q Sorry diazepam or diamorphine?

A Sorry, diamorphine. With midazolam I usually use chlorpromazine myself, but that was my decision.

F Q So you have never administered ---

A I have given midazolam by itself, but not with diamorphine.

Q Yes, and why is that?

A Because my common practice was to use chlorpromazine; that was how I was taught, so I think both are perfectly reasonable approaches and clearly in the literature.

G Q It is possible, is it not, that the agitation which was recorded on 23 September was attributable to a lack of oxygen secondary to respiratory depression. Would you accept that as being a possibility?

A When you get respiratory depression due to morphine, you do not get short of breath. It is not the symptom. Your consciousness is depressed with the respiratory function, therefore you are not, I have not seen it, give you problems of feeling breathless because of it. It is a very different thing to the heart failure we were talking earlier, when you have fluid in your lungs and so on. That would give you very serious symptoms, but I do not think that if you have respiratory depression it makes you feel breathless.

H

A Q So if an expert were to come and tell this Court that Mr Cunningham's agitation was due to hypoxia and that may have been secondary to respiratory depression, is that something you disagree with or just say that is outside of your knowledge?

A I think that ---

Q You would not disagree with it?

B A I think that hypoxia could give you agitation, but it is not the feeling of breathlessness. I think the two things are different.

Q But would you accept then that it is conceivable that the agitation that Mr Cunningham was experiencing was due to hypoxia which may have been secondary to respiratory depression? Do you accept that as a possibility?

C A I accept that he had respiratory problems because we know he had bronchopneumonia by that stage and he may well have had hypoxia due to that, yes.

Q The four-fold increase in his diamorphine, and five-fold increase in the midazolam over the six-day period, such increases were likely to result in the respiratory depression, were they not, given the final amount that he got?

A I think that there was a significant possibility of that, yes.

D Q They were likely to result in a marked depression at conscious level?

A I think there was a significant possibility of that as well, yes.

Q And there was a likelihood of his dying?

A I think he was going to die no matter what happened.

E Q But it is conceivable, is it not, that the reason why he died when he did was because of the amount of diamorphine and midazolam which he had been given?

A I gave – in my evidence, I said it may have slightly shortened life. It is possible.

Q One of the less risky strategies could have been pursued to cope with his agitation and any experiences of discomfort and pain, could they not?

A What would you suggest?

F Q Well, subcutaneous injections. You talked us through how where you have breakthrough pain one goes in and one can perform and an injection which is 1/6th of the 24 hour total amount. Yes?

A Yes.

Q That would have been a possibility in this case?

G A Could have had – I do not think any breakthrough pain killing was actually written up, so that was – could have done that, indeed, yes.

THE CORONER: Is not the point of a syringe driver that it allows slow or regular delivery rather than a lump?

A That is what – you want to get to a situation where you are not having to get further injections. One of the reasons, getting away from this, is to stop people having to have regular injections. That is one of the reasons we use a syringe driver.

H

A Q You have told the jury that you think the – sorry – you confirmed your evidence in your report that in your view the dose of diamorphine and midazolam was excessive on 25 and 26 September.

A I said that I could find no justification for these changes in the nursing or medical notes.

B Q If you go to page 876, the entry dated 25 September 1998, can you read out what that says, please?

A Sorry, the 25th?

Q Yes.

A “Peaceful night.”

C Q Yes. Go on?

A “Position changed.”

Q Yes?

A I cannot read the rest at the moment.

THE CORONER: “Does not like being moved.” “Still does not like being moved.”

D A “Still does not like being moved.” Okay. That is helpful.

MR LEIPER: The principal concern of Mr Farthing is that his stepfather was admitted by Dr Lord for rehabilitative care and that does not appear to have been pursued, and that he was begun on a course of palliative care with measures that carried an excessive risk to life. Is ---

A That is what you are telling me, yes.

E Q Yes.

THE CORONER: I wonder if that can be phrased as a question to give the witness the chance to agree or disagree.

MR LEIPER: Is that a possibility in this case?

F THE CORONER: Is what a possibility?

MR LEIPER: What I just put.

A No. I think we have gone round that in great detail.

THE CORONER: My understanding is, I am sorry to interrupt, the diamorphine would have been the drug of choice for this condition?

G A I think – I think that certainly for dealing with the pain and distress of a pressure sore, and the consultant judged that a strong opioid was the appropriate medication. I would not disagree with that.

Q And it would cope with the agitation?

H A And it would also cope with the agitation. We know that there are various drugs and they could have been used in different proportions in different ways and different clinicians may have used the drugs in different ways, but I still think a majority would have used strong opioid analgesic.

A MR LEIPER: I have no further questions, sir.

THE CORONER: Let us see how much progress we can make.

Questioned by MR JENKINS

B MR JENKINS: Can I ask you to go back to page 87 from the records, please? I am taking us back a month before Mr Cunningham was to die. Just for the sake of continuity, you might need the other folder, we have this enormous folder. Do you have page 87?

A Yes.

Q We are going back to 18 August 1998.

A Okay. Okay.

C Q He is on a different ward?
A Psychiatric hospital.

Q He has a different consultant. He is on a lot of medication, and I think they are listed in the middle of the page. Yes?

A Yes.

D Q I wonder if you could just look at those, I do not think we need to go through them, but they are to be taken orally?

A Yes. Those are all oral medications, yes.

Q The plan, then, was that he should start some other medication?

A Yes.

E Q Yes?
A Yes.

Q I want to look at the entry for 18 August 1998, and just look at it at a time when he was on his medication for any psychiatric medication?

A Yes.

F Q Yes?
A Yes.

Q “Went to bed very happy, cooperative and contented. About 3.20 am found crawling about the bedroom floor, very muddled and confused, expressing this was his house, and he wanted to look around. Became verbally abusive and paranoid saying that the organisation had set all this up even though he expressed or trusted me”, writes the nurse”, he said I was trespassing and that the police would come and sort all this out. He implied that he was secretly sending out his medication to be analysed and that he was taping all of us.” It goes on.

A Mmm.

H Q Confusional state would you say, notwithstanding the medication?
A I think this is acute confusional state, indeed.

- A
- Q He is not, at the time, on any opiate, I think looking at the medication from the previous page?
- A No, there is nothing (inaudible).
- Q So as we come forward a month to the time when he arrives on Dryad, if we go to page 642 of the records that we looked at, I think we have the start of Dr Lord's notes which continue on to the following page.
- B
- A Yes.
- Q Yes?
- A Yes.
- Q She writes and she gives a blood pressure, gives a pulse and writes his weight. Says: "Very frail. Tablets found in mouth some hours after they are given." Yes?
- C
- A Yes.
- Q There is then mention of offensive large necrotic sacral ulcer with thick black scar, and she draws a diagram, and then goes on to write a number of entries about his past history and matters of that nature. What does it mean or what is the significance if a patient is found to have tablets in his mouth hours after they have been given to him?
- D
- A Hmm.
- THE CORONER: Seems to indicate he is not swallowing them.
- A Yes, but I was trying to think beyond that. Yes. Parkinson's disease certainly gives people significant swallowing problems, I did not mention that earlier. Clearly if you are ill that would be emphasised. It is unusual, I have to say, for tablets not to dissolve in the mouth, so I am surprised is all I can say, but it would certainly indicate, as the Coroner has said, that he was not swallowing.
- E
- Q Right.
- A But I do not quite know what it means that they had not dissolved. Again, people with Parkinson's disease often get very dry mouths and actually do not produce saliva, so perhaps – and he is ill, he is dehydrated – perhaps he simply was not producing enough saliva to dissolve them. I do not know.
- F
- Q I think we hear a few days later that he was producing saliva.
- A Oh, was he?
- Q I will come on to that.
- A Okay.
- G
- Q Over the page, I think Dr Lord's assessment goes on, she is suggesting a high protein diet for this gentleman.
- A I think that that was, to be frank I think it would be optimistic judging by where he is at that he would ever receive that.
- H
- Q We know that Dr Barton saw him on 21 September, the day he was admitted. You have that at page 645 of your medical records. We have a photograph I think as the start of her entry of his so-called bed sore?

- A A Yes.
- Q Would it be usual to put a photograph in the medical records?
- A It can be really quite helpful as a way of documenting progress. What it does not, of course, tell you is that usually it is a bit like an iceberg, and that actually the necrotic ulcer is actually much, much bigger than the hole that you are seeing on the skin.
- B Q This was a particularly nasty bed sore?
- A We know from the post mortem by the time it got to that stage it went down to the bone.
- Q There is reference at that stage to making him comfortable and giving him adequate analgesia. If you have taken a photograph of a bed sore like that, you know that this patient is going to require strong medication for pain relief?
- C A I think you have to assess the patient.
- Q Absolutely. I am not suggesting that was not done, but one knows that at that stage.
- A No. I think you have to assess the patient. I think it is very likely that he would have severe pain, but I cannot absolutely assume that.
- Q We will hear in due course I think that the patient was assessed. What we have at page 867 is an entry that has been read out before; let me cover it again. On 22 September 1998 this gentleman had had oramorph. He had then been put on a syringe driver the night before.
- D A Yes.
- Q On the 21st?
- A Absolutely.
- E Q This is an entry for the 22nd, and I will read it again:
- “Mr Farthing, the stepson, telephoned, explained rights, Nurse Hallam explained syringe driver containing diamorphine, midazolam was commenced yesterday evening for pain relief and to allay his anxiety following an episode when Arthur ...”
- F that is Mr Cunningham,
- “... tried to wipe sputum on a nurse saying he had HIV and was going to give it to her. He also tried to remove his catheter and empty the bag and removed his sacral dressing, throwing it across the room. Finally took off his covers and exposed himself.”
- G Does that sound like a patient who is over-sedated or unconscious?
- A Clearly he is not over-sedated or unconscious at that time, no.
- Q Does that present patient – what we know is that Dr Lord wanted to stop all his psychiatric medication – does that present a management problem with a patient that you are trying to treat, he was tearing off the dressings on his bed sore?
- H A Quite clearly, people who are acutely delirious present very serious management problems on any ward they are on.

A Q If you wanted to give this gentleman a high protein diet, you needed his cooperation in one form or another?

A Absolutely.

Q If you tried to pass a nasogastric tube?

A It would have come straight out.

B THE CORONER: The same way the catheter came out.

MR JENKINS: What we know is that Dr Barton saw him again the next day. If you turn over the page to page 868 there is reference on 23 September:

C “Seen by Dr Barton. Has become chesty overnight, and to have hyoscine added to driver. Stepson contacted and informed of deterioration and Mr Farthing to see part of the theme from him asked if this was due to the commencement of the syringe driver and he was informed that Mr Cunningham was on a small dose of which he needed.”

D Later that day, on the same page, there is a note by Gillian Hamblin saying that she and Staff Nurse Breda Shaw had seen Mr and Mrs Farthing, very angry – of Mr Farthing I think – very angry that driver has been commenced.

“It was explained yet again that the contents of the syringe driver were to control his pain.” You have no criticism, Professor Black, of the use of a syringe driver to treat this gentleman at that time?

E A What is interesting, of course this is the nursing notes, and there was nothing in the medical notes. I would certainly have expected to see a justification in the medical notes. I would like to have seen a medical justification, not just a record of the nursing staff.

Q I understand.

“It was also explained that the consultant would need to give their permission to discontinue the driver and we would need an alternative method of giving pain relief.”

F What were the alternatives for pain relief?

A Well, the alternatives were where one started, which was with regular doses of oral morphine which, if he was not able to take it orally – I do not know whether he was or whether he was not – then you would have to give regular injections. So rather than having a subcutaneous one you would have had to have had regular injections every four hours.

G Q “Also seen by Pastor Mary for one and a half hours this afternoon. He is now”, and I take the “he” to mean Mr Farthing, he is now fully aware that Brian is dying and needs to be made comfortable. Driver renewed”, and there is reference to the medication put in the syringe driver. Over the page, if you would, this is 24 September, report – do you have it?

A Yes. Yes. Just seeing if I had any medical notes that day.

H Q “Report from night staff that Brian was in pain when being attended to. Also in pain and his I/C day staff, especially his knees.”

- A THE CORONER: What does I/C stand for?
- MR JENKINS: (inaudible). C with a ---
- THE CORONER: "With."
- B MR JENKINS: C with a line over the top of it. There we are. We have had our attention drawn to an entry for 25 September, the day before he died. It is on page 876:
- "Peaceful night. Position changed, and still does not like being moved."
- If he is being moved and he is resisting it, does that suggest he is unconscious?
- C A No, he may be semi-conscious, but I do not think he is unconscious.
- Q "Does not like being moved." Does that hint at pain?
- A I think that is often seen as a sign that they may still be in pain, yes.
- Q It is the opposite of comfortable?
- A Sorry, say that again?
- D Q "Does not like being moved" is the opposite of "comfortable"?
- A Well, it is the opposite of: does not mind being moved.
- Q What you said in your report, and I am looking at page 21, paragraph 7.2.
- A I have the old version here.
- Q Start at 7.1. You say: "Arthur Cunningham is an example" – do you have it?
- E A You will have to read it to me because as I said I have only my most recent report and different numbering.
- Q Tell me if this sounds like what you said. Others will read it.
- A Yes.
- Q "Arthur Cunningham is an example of a complex and challenging for (inaudible) geriatric medicine. He suffered from chronic multiple chronic diseases and gradually deteriorated with increasing medical and physical dependency. It is always a challenge to clinicians to identify the point to stop trying to deal with each individual problem or crisis to an acceptance that the patient is now dying and that symptom control is appropriate."
- F A Yes, I agree with that.
- Q "In my view, Mr Cunningham was managed appropriately, including an appropriate decision to start a syringe driver for managing his symptoms and agitation as part of his terminal illness in September 1998."
- G A I am happy with that.
- Q You do go on to say:
- H "My one concern is the increased dose of diamorphine in the syringe driver on 25 and 26 September."

A A I have a number of further concerns, a number of areas, but we have highlighted the particular problems for today of explaining the four-fold increase in the midazolam and the five-fold increase in the diamorphine.

Q I understand. You say you have that concern because you were unable to find any justification for the increase in dosage in the nursing or medical notes?

A That is right.

B MR JENKINS: Thank you very much.

THE CORONER: Anybody else? Ladies and Gentlemen, anything you want to ask? Right. Thank you very much indeed. Would you like to speak to Mr Leiper about it? He is doing your questioning today. Do you want to have a quick word with him and then I will hang on?

C MR LEIPER: Thank you, sir. No further questions.

THE CORONER: All right. Can we resume fairly sharpish at 10 o'clock tomorrow? I do want to finish with Professor Black tomorrow. If we do not finish him tomorrow we are in difficulties with his availability. Anything? Any housekeeping notes, nothing like that? Mr Wilson, you are not with us tomorrow morning, but you are with us lunch-time?

D MR WILSON: I shall be in in the afternoon, yes.

THE CORONER: If you can get here as soon as you can, that will be helpful to all of us I think, all right? Good luck tomorrow morning. I hope it goes all right. Thank you.

(The hearing was adjourned to Wednesday, 25 March at 10 am)

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