## SUMMARY OF CONCLUSIONS:

Mr Arthur Cunningham a 79 year-old gentleman, suffers from long-standing Parkinson's disease with multiple complications followed by a fairly rapid decline in health leading to his first admission to the Gosport War Memorial Hospital on 21st July, 1998 and a final admission 21st September, 1998.

Mr Cunningham receives terminal care including subcutaneous Diamorphine and Midazolam through a syringe driver and dies on 26th September 1998.

The expert opinion is:

Arthur Cunningham is an example of a complex and challenging problems in geriatric medicine. He suffered from multiple chronic diseases and gradually deteriorated with increasing medical and physical dependency. It is always a challenge to clinicians to identify the point at which to stop trying to deal with each individual problem or crisis, to an acceptance the patient is dying and that symptom control is appropriate.

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.

My one concern is the increased dose of Diamorphine in the syringe driver on 25th and 26th September 1998, as I was unable to find any justification for this increase in dosage in either the nursing or the medical notes. In my view this increase in medication may have slightly shortened life for at most no more than a few hours to days, however, I am not able to find evidence to satisfy myself that this is to the standard of "beyond reasonable doubt".

## 1. INSTRUCTIONS

To examine the medical records and comment upon the standard of care afforded to the patient in the days leading up to her death against the acceptable standard of the day. Where appropriate, if the care is felt to be sub-optimal, comment upon the extent to which it may or may not disclose criminally culpable actions on the part of individuals or groups.

## 2. ISSUES

2.1. Was the standard of care afforded to this patient in the days leading up to her death in keeping with the acceptable standard of the day.

2.2. If the care is found to be suboptimal what treatment should normally have been proffered in this case.

2.3. If the care is found to be suboptimal to what extent may it disclose criminally culpable actions on the part of individuals or groups.

## 3. CURRICULUM VITAE

| | |
|---|---|
| Name | David Andrew Black |
| Address | Code A |
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| EDUCATION | Leighton Park School, Reading, Berks. | 1969-1973 |
| | St John's College, Cambridge University. | 1974-1977 |
| | St Thomas' Hospital, London SE1 | 1977-1980 |

**DEGREES AND QUALIFICATIONS**

| | |
|---|---|
| BA, Cambridge University (Upper Second in Medical Sciences) | 1977 |
| MB BChir, Cambridge University | 1980 |
| MA, Cambridge University | 1981 |
| MRCP (UK) | 1983 |
| Accreditation in General (internal) Medicine and Geriatric Medicine | 1989 |
| FRCP | 1994 |
| MBA (Distinction) University of Hull. | 1997 |
| Certificate in Teaching | 2001 |
| NHS/INSEAD Clinical strategists program | 2003 |

**SPECIALIST SOCIETIES**

British Geriatrics Society

British Society of Gastroenterology
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## PRESENT POST

| | |
|---|---|
| Dean Director of Postgraduate Medical and Dental Education | |
| Kent, Surrey and Sussex Deanery. | 2004-present |
| Consultant Physician (Geriatric Medicine) | 1987-present |
| Queen Mary's Hospital, Sidcup, Kent. | |
| Associate member General Medical Council | 2002-present |

## PREVIOUS POSTS

| | |
|---|---|
| Associate Dean. | |
| London Deanery. | 2004 |
| Medical Director (part time) | 1997-2003 |
| Queen Mary's Hospital | |
| Operations Manager (part time) | 1996-1997 |
| Queen Mary's Hospital, Sidcup, Kent | |
| Senior Registrar in General and Geriatric Medicine | |
| Guy's Hospital London and St Helen's Hospital | |
| Hastings. | 1985-1987 |
| Registrar in General Medicine and Gastroenterology | |
| St Thomas' Hospital, London. | 1984-1985 |
| Registrar in General Medicine | |
| Medway Hospital, Gillingham, Kent | 1983-1984 |
| SHO rotation in General Medicine | |
| Kent & Canterbury Hospital, Canterbury | 1982-1983 |
| SHO in General Medicine | |
| Kent & Sussex Hospital, Tunbridge Wells | 1981-1982 |
| House Physician, St Thomas' Hospital | 1981 |
| House Surgeon, St Mary's Portsmouth | 1980 |

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## 4. DOCUMENTATION

This Report is based on the following documents:

[1] Full paper set of medical records of Arthur Cunningham

[2] Full set of medical records of Arthur Cunningham on CD-ROM.

[3] Operation Rochester Briefing Document Criminal Investigation Summary.

[4] Hampshire Constabulary Operation Rochester Guidance for Medical Experts.

[5] Commission for Health Improvement Investigation Report on Portsmouth Health Care NHS Trust at Gosport War Memorial Hospital (July 2002).

[7] Palliative Care Handbook Guidelines on Clinical Management, Third Edition, Salisbury Palliative Care Services (1995); Also referred to as the 'Wessex Protocols.'

## 5. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence).

5.1. During the 1980's Mr Cunningham noted a tremor in his left hand and by 1987 a clinical diagnosis of Parkinson's disease had been made and he had been started on Sinemet a drug specifically for the treatment of Parkinson's disease (445). He then remains on Sinemet in one form or another for the rest of his life. In 1992 another drug called Selegiline is added to his Sinemet (445). His only previous problem had been a lumbar spinal fusion following a war accident (375) that left him with chronic back pain and foot drop.

5.2. In 1992 he had a percutaneous nephrolithotomy for kidney stones. (9). During that admission he was written up for Omnopon 10 – 20 mgs and received a dose of 20 mgs (12). There were no ill effects.

5.3. He was assessed in December 1994 (439 and 441) for declining mobility. He was noted to have a weight of 102 kgs, a mental test score of 10 out of 10, and a Waterlow score of 13 (391) suggesting some dependency. His wife had died in 1989 (439). His Barthel was 17 (433) some help needed was with dressing. The problems were assessed to be due to be Parkinson's disease, a weak leg from his war injury and obesity.

5.4. He was followed up in 1995 with a diet and change to his Sinemet regime in the Day Hospital. He was also treated with Ranitidine and Gaviscon, presumably for acid reflux (425) and was on regular Co-proxamol for pain (425). Subsequently Enalapril was started for hypertension (399 and 417). In March 1995 his weight was 99.4 kgs (407) and he was discharged shortly after from the Day Hospital (400).

5.5. In September 1997 the GP requests a domiciliary visit (379). He notes that he has been diagnosed with diabetes and was now losing weight (379). The GP refers to diabetes being diagnosed in 1986 when this should have been 1995 (555). His Parkinson's disease has deteriorated and he is now getting dystonic movements. Dystonic movements are writhing and jumpy movement that occur as a side effect of drug therapy in people who have had Parkinson's disease for many years. These movements often occurs at times of peak drug levels and may alternate with periods of severe stiffness and immobility at times of low drug levels. It was also noted that he had lost some lower body strength (379). He was now spending most of his time in his chair (379). His drugs included the regular analgesia, Solpadol (381).

5.6. An assessment in September 1997 (375, 377) finds he has weak lower limbs and has difficulty in transfers. He can walk indoors slowly with sticks. He has a poor appetite and daily home care. He is documented to have very weak flexion and extension of the left hip, wasting of the left quadriceps and left foot drop (377). It is suggested that he comes to the Day Hospital for physiotherapy. His weight in October 1987 (629) is 84 kgs. However in November 1987 he cancels further appointments (355). In September 1997 his white cell count is 4.0 and his platelet count is 112. It is likely that his haematological abnormalities date from this time.

5.7. In March 1998 he is seen again in outpatients with new episodes of shortness of breath (139 – 141). The diagnosis is not clear but was thought possibly to be cardiac in nature. However a chest x-ray (519) was normal. There is no further investigation of this problem. One note suggests that he had just moved to a nursing home (141).

5.8. In June 1998 he is seen at the Merlin Park Residential Home by Dr Lord, following a GP request (345). He is noted to have significant weight loss, is transferring very unsteadily, is occasionally breathless and has had two falls in the home. He remains on a five times a day dose of his Sinemet and is

also on a hypertensive drug Amlodipine, Diazepam and drugs for constipation. Examination (349) finds that he has markedly dystonic movements and records that the home had noticed visual hallucinations after he moved in. Dr Lord feels that he is on too much Levodopa (the main drug in Sinemet). She feels the Sinemet is causing his dystonic movements, too low a blood pressure on standing leading to falls, and his hallucinations. The notes state that Mr Cunningham never agreed with this diagnosis. Dr Lord also feels that he is depressed (349).

5.9. On 22nd June 1998 he is brought to the Gosport War Memorial Hospital by Social Services as he was refusing to stay at Merlin Park (343). He is described as a difficult and unhappy man (59). No acute health problems are found (343). Social Services place him in the Alvestoke Nursing Home (341).

5.10. On 6th July 1998 he is seen again at the Gosport War Memorial Hospital (339) and is noted to have decreased mobility and his weight has now decreased to 68.7 kgs. He is not happy with his new nursing home placement. His functional status has declined and his Barthel is 9/20 (334). His blood count that day shows a normal haemoglobin but a white cell count of 2.7, platelets of 103 (650). The reduced white count particularly his neutrophil count and reduced platelets count is thought to be due to "likely myelodysplasia known since February 1997" (68). This was never confirmed with specialist haematologist investigation.

5.11. On 8th July he is seen by Dr Scott Brown a psychiatrist and is thought to be depressed (117). Other problems including his Parkinson's disease and his myeloproliferative disorder are noted (115).

5.12. On 20th July his care is discussed with Dr Lord in the Day Hospital (111 and 113). It is though his Parkinson's disease is stable but because of concern about his weight loss, he is referred for a speech and language assessment, which subsequently occurs on 27th July (101). This finds he has difficulty in initiating swallow but there is no aspiration. This likely to be a complication of his Parkinson's disease.

5.13. On 21st July he is admitted to Mulberry Ward with depression (323) his weight is 65.5 kgs (303) a bed sore is now noted (293) he is thought to have dementia (67) and there is a documented mental test score in June of 23 out of 29 on the Folstein Mini Mental State Examination (343). He is found to be constipated (289) is restless and demanding at night (271) (269), nursing notes comment that he can be awkward and difficult (242). Waterlow scores are recorded on a number of occasions, all between 19 and 20 suggesting very high risk of further pressure sore development (309 and 310). He is documented to have various urine tract infections including proteus (207) and enterococcus on two occasions (211) (205). On

admission his white cell count is 2.9 neutrophil count 1.4 and platelet count of 97 (201). On 12th August his white count is 3.5 his neutrophil count 1.8 and platelets 135. The blood form states "known myelodysplasia" (193). On admission his albumin is 26 (185) his urea is 6 and his creatinine 59, his prostatic-specific antigen is 6.4 (179) normal is less than 4. This raised level is not investigated any further, it might represent either benign prostate disease or early prostatic cancer.

5.14. During his admission to Mulberry ward he has a fall on the 24th July (70). He is described as quite demanding, wanting staff to come and see him every few minutes (70), he is depressed and tearful on 24th July (71), he is rude and abusive to a member of staff on 26th July (72) and apologises later in the day (73). Dr Lord sees him on 27th July (74) and finds that there were no particular new problems. He is still low in mood on 3rd August (79) calling out for assistance quite a lot (80). He needs a lot more assistance on 10th August (83). On 17th August he became noisy, shouting for help and very abusive, refusing medication (85). He is assessed for a further move to the Thalassa Nursing Home on 17th August (86). He is again confused in the middle of the night on 18th August (87). On 25th August it is noted that he has not passed much urine (90). Blood tests carried out on 26th August (175) find a Sodium 134, Potassium 5.1, Urea 28 and Creatinine 301. He has gone into acute renal failure and is examined and found to have a large palpable bladder (90). He is catheterised. On 28th August there is a significant improvement in his renal function, Sodium 140, Potassium 4.1, Urea 15.6, Creatinine 144 (173). By the time of his discharge to his current usual medication of Sinemet, pain killers and anti-hypertensive drugs; Mirtazapine (an anti-depressant), Carbamazepine 100 mgs nocte, Triclofos 20 mls nocte and Risperidone 0.5 mgs early evening, have all been started as psychotropic medication to help control his mood and agitation (161 and 163).

5.15. He is seen by Dr Lord on Mulberry Ward on 27th August the day before his discharge, the day after he has had a catheter put in. She finds him much better in mood and eating better with a weight of 69.7 kgs (327). There were 2 litres of urine passed after he was catheterised (91). He cannot wheel himself but Dr Lord is happy for him to be discharged to the Thalassa Nursing home with a follow up in the Day Hospital on 14th September. He is then discharged to the Thalassa Nursing Home on 28th August.

5.16. On 11th September (99) he is seen by the Community Psychiatric Nurse who says that he has settled well into the Thalassa Nursing Home and his mood seems good.

5.17. On 14th September he is seen in the Gosport War Memorial Day Hospital his weight is 68.6 kgs (323), brighter and says he is eating not too badly (459). His blood pressure is a little low at 108/58 and his pulse is 90 (323).

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There is no comment on his pressure sore although, he is subsequently given a prescription for Metronidazole from " a swab to the sores on your bottom" (317). He is presumably still catheterised.

5.18. He appears to have a routine appointment at the Day Hospital on 17th September (908) for therapist assessment. It is noticed that the pressure sore is exudating markedly. During this session it is recorded that he would not comply with dressings and then would not wake up after bed rest. He was refusing to eat or drink and expressing a wish to die. The nursing notes state that he is seen by Dr Lord (909) who thinks he may need admission on Monday when reviewed again. I have not found any medical notes relating to this.

5.19. On 21st September (642) he is again seen in the Day Hospital by Dr Lord (909). He is recorded to be very frail with his tablets not swallowed and in his mouth. He has a very offensive large necrotic sacral ulcer. His weight is 69 kgs (642). A care plan is made by Dr Lord (643) to stop unneeded drugs, to admit to hospital for treatment of the sacral ulcer, to nurse on the side, for a high protein diet and for Oramorph prn for pain. The notes state the nursing home should keep the bed open for the next three weeks at least and the prognosis is poor (643).

5.20. He is taken to Dryad Ward (645) and seen by Dr Barton who says to make comfortable, give adequate analgesia and that "I am happy for the nursing staff to confirm death". The next medical note (which is out of sequence (644)) on 24th September, states, "remains very poorly, Son has visited again today and is aware of how unwell he is. Analgesia is controlling pain just. I am happy for the nursing staff to confirm death".

5.21. 25th September (Dr ?) Brook writes, "remains very poorly on syringe driver for TLC". There is then a nursing note on 26th September, the patient died at 23.25 on 26th September and the final medical note is on 28th September saying "death certificate discussed with Dr Lord, 1 – Bronchopneumonia, 2 – Parkinson's Disease, Sacral Ulcer".

5.22. The nursing notes are more detailed on 21st September. He is admitted (867) but at 20.30pm is noted to have remained agitated and was pulling off his dressing (880). Syringe driver is commenced "as requested" and he is peaceful. On 22nd September the Son is told that the Diamorphine pump has been "started for pain relief and to allay his anxiety". His Barthel is 0/20 (873) and Waterlow 20, suggesting high risk. The patient is recorded as "stating he had HIV disease" and trying to remove his catheter.

5.23. 23rd September (868) it is recorded that he is chesty overnight and Hyoscine is added. The Son and wife are angry that a syringe driver was commenced and the nurses "explain it was to control pain". He is agitated

at night that evening (876).

5.24. On 24th September the night staff and the day staff report pain and in the notes his Midazolam is increased to 80 mgs a day and his Diamorphine to 40 mgs. The nursing notes record that Dr Barton saw the Son, confirming the medical notes (643).

5.25. On 25th September Midazolam is continued at 80, he is on Diamorphine 60 mgs and is recorded as being peaceful (876). Finally on 26th September the notes record his Diamorphine is increased to 80 mgs and Midazolam to 100 mgs.

5.26. Drug Chart Analysis:

His original drug chart on admission to the ward on 21st September (752) prescribes Oramorphine 2.5 – 10 mgs orally 4 hourly, he receives 5 mgs at 14.50pm on 21st and 10 mgs at 20.15pm. He is also written up (753) for all his current anti-Parkinsonian and anti-psychotic medication but the notes demonstrate that on some dates the drugs are missing and on almost all occasions he is too ill to be able to take the medication on 21st – 24th September.

5.27. Diamorphine is 20 –200 mgs subcutaneously in 24 hours is written up on 21st September (756) and on the 21st at 23.10pm, 20 mgs is started. On 22nd September 20.29pm, 20 mgs is started and on 23rd September at 9.25am, 20 mgs is started. On 24th 40 mgs is started in the syringe driver at 10.55am, on 25th 60mgs is in the syringe driver (837) and on 26th 80 mgs.

5.28. Midazolam 20 – 80 mgs is written up on 21st September (756) and 20 mgs is given on 21st, 22nd and 23rd. On the 23rd though, this is increased to 60 mgs, 80 mgs on the 24th. He receives another 80 mgs on 25th and 100 mgs written up in 24 hours on 26th (837).

5.29. Hyoscine 200 – 800 micrograms sub cut in 24 hours is written up 400 micrograms are given on 22nd and 23rd September and 800 micrograms on 24th. This is then re-prescribed. Hyoscine 80 – 2 grams sub cut in 24 hours (837) and he receives 1,200 micrograms on 25th and 26th.

## 6. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

6.1. This section will consider if there are any actions so serious they might amount to gross negligence or any unlawful acts or deliberate unlawful killing in the care of Mr Arthur Cunningham. Also if the actions or omissions by the medical team, nursing staff or attendant GP's contributed to the demise of Mr Cunningham, in particular, whether beyond reasonable doubt, actions or admissions more than minimally,

negligently or trivially contributed to death.

6.2. Mr Cunningham's two main problems were lumbar spinal fusion as a result of a war injury, which left him his weakness in his lower legs and his progressive neurological disease, Parkinson's disease. Parkinson's disease is a degenerative disease of the central nervous system, which causes tremor, body rigidity and akinesia (stiffness in movement). It was first noted in 1980 presenting with a tremor, he was certainly on treatment by 1987. The natural history is often a good response to treatment over 5 years and then gradual increasing problems. Late Parkinson's disease becomes increasingly difficult to control with drugs; the patients get difficulty in swallowing, severe constipation, and often in later stages a dementing illness.

6.3. There are complications with the drugs as the disease progresses, as the drugs are harder to keep in an effective therapeutic range. Too much and the patients get marked writhing or shaking movements call dystonias, too little and the patient may cease up completely. The longer-term side effects of the drugs also include postural hypotension (loss of blood pressure when standing, leading to falls) and mental state deterioration, including hallucinations. To try and combat this, complex regimes are used with multiple doses at different times of days, sometimes combined with other drugs. There is no cure for the condition.

6.4. In 1992 he is troubled with kidney stones but has an uneventful operation.

6.5. In 1994 he has a decline in his conditions with reduced mobility. This is a multiple factorial problem caused by his Parkinson's disease, weak legs as a result of his war injury and his obesity of 102 kgs. He is now living alone as his wife had died in 1989. He uses an electric wheelchair effectively and his Barthel is 17 but most of the help he currently needs is with dressing.

6.6. Further problems occur include hypertension, which is treated in 1995, and diabetes mellitus (high blood sugar), which is diagnosed later in the year.

6.7. By September 1987 he is getting considerable problems in managing his mobility as well as his Parkinsonian drug regime with significant dystonic movements. He is now on multiple drugs to treat his various medical conditions. He is referred to the Day Hospital for more physiotherapy to try and support him and to change his drug regime but he cancels further appointments in November 1997 (355).

6.8. By March 1998 (141) when he is seen in the Day Hospital within the Outpatients it mentions that he was now in Solent Cliff Nursing Home, though when seen in June 1998 (345) he has moved to the Merlin Park Residential Home. Throughout this gentleman's last illness there is a pattern of him being persistently dissatisfied with the care he receives, either in hospital or in the various homes he is cared for in, leading to multiple moves. This often complicates assessment as one institution never gets entirely used to him, his management and his behaviour.

6.9. By June 1998 there is now a very marked change in his health. There has been massive weight loss from 102 kgs in 1994 (441), 84 kgs in October 1997 (629) to 68.7 kgs documented by July 1998 (339). He is walking very unsteadily, is having falls in the home, having hallucinations at night, he is depressed and has marked dystonic movements. He is not happy with the suggestion that he actually needs less medication rather than more to help manage his condition.

6.10. Whether the result of genuine unhappiness with the home or depression on top of what is now probably becoming an early dementing illness (his mental test score on 22nd June (343) was 23/29), he refuses to stay at Merlin Park. Social Services become involved and he is seen in the Day Hospital when no new acute problems on top of his known chronic problems are detected. Social Services manage to place him in the Alvestoke Nursing Home (341).

6.11. However, he is not happy at all with this placement when he is seen in the Day Hospital on 6th July 1998 (339). The plan is to investigate his weight loss and to reduce his Sinemet treatment. His Barthel is now 9/20. A further medical complication that has developed, probably since early 1997 (68), is that he has an abnormality of his full blood count with a reduced white cell count and a reduced platelet count. This suggests a problem with his bone marrow. Although the blood film say this is likely to be myelodysplagia (a pre-malignant condition of the bone marrow where there is partial bone marrow failure, but it has not progressed to Leukaemia) no definitive haematological investigations appear to have been undertaken. The main effect of this condition is he is likely to be much more susceptible to infections.

6.12. He is seen by the psychiatric team on 8th July (117) and then is admitted to hospital on 21st July to Mulberry Ward with a primary diagnosis of depression, probably on top of an underlying mild dementing illness (67). For the first time a bed-sore is noted in the nursing notes (293) although this is not commented on in the thorough medical clerking that was undertaken on admission (66).

6.13. There is no doubt that there has been a very significant decline in this gentleman's general health. He has now lost over 40 kgs of weight, including 25% of his body weight in the last year. He had rapidly declining mobility, an early bedsore, he has started to develop mental impairment and his Parkinson's disease has become increasingly difficult to manage.

6.14. Admission is characterised by descriptions of restless and demanding behaviour and occasionally aggression. I suspect he has a low-grade delirium (delirium is acute confusion on top of, in this case, an early underlying dementing illness). Probably being caused by a combination of his drugs and the urinary tract infections that are documented on serial urine samples. He is started on drugs for his (understandable) depressive illness, which in themselves may complicate his drug regime. Finally he is treated with major tranquillisers to try and control his moods and behaviours.

6.15. The outcome of this admission is that he is now on multiple medications to try and control multiple symptoms. Yet there is very little improvement or change in his behaviour, as noted in the nursing cardex.

6.16. He is planned to the Thalassa Nursing home on 28th August as his 4th residential move of the year. However, on the 25th August he is noted to be passing less urine and a blood test on 26th August shows that he has gone into quite significant acute renal failure. On examination he is found to be in retention of urine and is catheterised and two litres of urine is passed (91).

6.17. The retention of urine in itself is likely to have had multi-factorial causes, including the drugs he was on, his proven urinary tract infections and he may also have had an undiagnosed prostatic problems based on a raised PSA (179). However, he responds well to catheterisation and his renal function is dramatically improved by 28th when he is discharged, with a Urea of 15.6 and a Creatinine of 144 (173).

6.18. Following discharge things appear to go not too badly, the CPN seeing him on 11th September (99) states that his mood seems good and he is settled well. On 14th September when he is seen in the Day Hospital, his weight remains unchanged on 68.6 kgs (323) "he is brighter and says eating not too badly" (459). However, his blood pressure is rather low on 14th September at 108/58 (323) and the pressure sore must be causing concern as a swab is sent (317).

6.19. He then has a routine review, for a therapist assessment on 17th September. The nursing notes give a clue that he is quite unwell that day (908 and 909), they refer to the pressure sore now exudating

markedly, he would not comply with his dressings, he would not wake up after bed rest and was refusing to eat or drink. He was apparently expressing a wish to die. This suggests to me he was acutely delirious again and the underlying aetiology could well be sepsis from pressure sore or sepsis (which is very common) from his urinary tract after a recent catheterisation. The nursing notes say that he is seen by the consultant but I was not able to find any medical notes. The nursing notes suggest that Dr Lord considered that she needed to review him on 21st and might need admission at this stage. It is below normal acceptable good medical practice to not make a record when seeing a patient, particularly if there has been a significant change in their condition.

6.20. Mr Cunningham is reviewed again on 21st September (642) when he has rapidly deteriorated, is very ill and very frail. He has an offensive large necrotic sacral ulcer and is not able to swallow with tablets in his mouth. He is admitted to hospital appropriately. Dr Lord asked for a management plan, including nursing him on his side, a high protein diet, Oramorph PRN for pain and writes to the nursing home to keep the bed open for three weeks at least, the prognosis is poor.

6.21. This gentleman is very seriously ill, with multiple problems and has been in decline for at least three months. The consultant has to make a judgement whether these are easily reversible problems, which would need intensive therapy, including drips and surgery to the pressure sore in an acute hospital environment or whether this is likely to be the terminal event of a progressive physical decline.

6.22. In my view the combination of acute problems on top of his known progressive chronic problems, including the large necrotic pressure ulcer would mean that active treatment in an acute DGH was very likely to be futile and therefore inappropriate. It was appropriate to admit him into a caring environment for pain relief and to observe and provide symptomatic support. In my experience it is unusual for a consultant to write "poor prognosis" in the notes unless they believe the patient is terminally ill and death is likely to be imminent.

6.23. He is admitted to the ward, Dr Barton sees him and writes, "make comfortable" in the notes (645). As the patient has just been seen and examined by a consultant who has made a care plan, I think it is reasonable for no further clerking or examination to have been carried out, although many doctors would automatically do that, if briefly, so that they know the baseline of the patient. As suggested Oramorphine is written up and Mr Cunningham receives two doses on 21st.

6.24. However, a syringe driver has also been written up on admission (756) for Diamorphine and Midazolam. There is nothing in the medical notes that specifically explain why was it written up, when the drugs should be started or what dose. It would be normal medical practice to write a comment on such management plan in the notes, but it is not negligent by itself, to fail to do so.

6.25. The nursing notes state that he remains agitated, pulling off his dressings later in the day (880). A decision is made, with the drugs written up (who decides?) to start him on Diamorphine 20 mgs with 20 mgs of Midazolam in a syringe driver.

6.26. The dose of Diamorphine is within an acceptable starting range for patients in pain. Midazolam is also widely used for terminal restlessness; the dose prescribed is from 5 – 80 mgs per 24 hours. The starting dose is within the range of 5 – 20 mgs per 24 hours that is acceptable for older patients (Palliative Care. Chapter 23 in Brocklehurst's Text Book of Geriatric Medicine 6th Edition 2003). Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. As the patient was terminally ill and restless, despite his previous doses of Omnopon, I think this was a reasonable management decision.

6.27. By 29th he is clearly delirious and is now totally dependent with a Barthel of 0/20. There does not appear to have been very good communication with the Son as anxieties are raised about his management (868). The dose of Diamorphine and Midazolam remain unchanged on 22nd and 23rd, although he is a little agitated at night on 23rd (876) and both day and night staff report pain on 24th (869). At this stage Diamorphine is increased to 40m mgs and the Midazolam to 80 mgs. In my view, the dose of Diamorphine prescribed was appropriate, however the four-fold increase in Midazolam 20 mgs on the 23rd to 80 mgs on the 24th appears excessive.

6.28. After the pain on 24th there is no further distress noted in either the medical notes (645) or the nursing notes (869). Despite this, the Diamorphine is increased to 60 mgs a day on 25th and 80 mgs on the 26th and the Midazolam is put up to 100 mgs a day on the 26th. In my view it was reasonable to increase the palliative care regime of Diamorphine and Midazolam on both 23rd and 24th September. He was in pain and he was agitated. It might well have been better to increase the Diamorphine (as pain does seem to be a major issue here with the bed-sore) rather than the Midazolam to ensure that this dying man was symptom free and did require an increase in medication on the 24th.

6.29. The dose of Diamorphine is then increased on both the 25th and 26th to 60 then 80 mgs (837) and Midazolam is increased again on 26th September to 100 mgs. There is no justification given for this in either the nursing or the medical notes, nor at any stage is it possible to tell from the notes whether the decision to change the drug dosages was a medical or a nursing decision or which doctor or nurse made that decision.

6.30. In my view the dose of Diamorphine and Midazolam was excessive on 25th and 26th and the medication may have slightly shortened life. However, I cannot find evidence to satisfy myself to the standard of "beyond reasonable doubt". 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 of the drugs had been used instead during the last few days.

## 7. OPINION

7.1. Arthur Cunningham is an example of a complex and challenging problems in geriatric medicine. He suffered from 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 the patient is now dying and that symptom control is appropriate.

7.2. 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.

**7.3.** My one concern is the increased dose of Diamorphine in the syringe driver on 25th and 26th September 1998, as I was unable to find any justification for this increase in dosage in either the nursing or the medical notes. In my view this increase in medication may have slightly shortened life for at most no more than a few hours to days, however, I am not able to find evidence to satisfy myself that this is to the standard of "beyond reasonable doubt".

## 8 LITERATURE/REFERENCES

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5. Accuracy of Prognosis, Estimates by 4 Palliative Care Teams: A Prospective Cohort Study. Higginson IJ, Costantini M. BMC Palliative Care 2002:1:129
6. The Palliative Care Handbook. Guidelines on Clinical Management, 3rd Edition. Salisbury Palliative Care Services, May 1995.

## 9. EXPERTS' DECLARATION

1. I understand that my overriding duty is to the court, both in preparing reports and in giving oral evidence. I have complied and will continue to comply with that duty.
2. I have set out in my report what I understand from those instructing me to be the questions in respect of which my opinion as an expert are required.
3. I have done my best, in preparing this report, to be accurate and complete. I have mentioned all matters, which I regard as relevant to the opinions I have expressed. All of the matters on which I have expressed an opinion lie within my field of expertise.
4. I have drawn to the attention of the court all matters, of which I am aware, which might adversely affect my opinion.
5. Wherever I have no personal knowledge, I have indicated the source of factual information.
6. I have not included anything in this report, which has been suggested to me by anyone, including the lawyers instructing me, without forming my own independent view of the matter.
7. Where, in my view, there is a range of reasonable opinion, I have indicated the extent of that range in the report.
8. At the time of signing the report I consider it to be complete and accurate. I will notify those instructing me if, for any reason, I subsequently consider that the report requires any correction or qualification.
9. I understand that this report will be the evidence that I will give under oath, subject to any correction or qualification I may make before swearing to its veracity.
10. I have attached to this report a statement setting out the substance of all facts and instructions given to me which are material to the opinions expressed in this report or upon which those opinions are based.

## 10. STATEMENT OF TRUTH

I confirm that insofar as the facts stated in my report are within my own knowledge I have made clear which they are and I believe them to be true, and the opinions I have expressed represent my true and complete professional opinion.

Signature: Code A Date: 12/8/05