Field Fisher Waterhouse

GENERAL MEDICAL COUNCIL

-and-

DR JANE BARTON

FFW/69/03.

PROFESSOR BLACK – GMC STATEMENTS

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GENERAL MEDICAL COUNCIL

DR BARTON

Expert Reports of Professor David Black:-

1. Robert Wilson dated 8 May 2008
2. Eva Page dated 22 February 2008
3. Alice Wilkie dated 21 March 2008
4. Jean Stevens dated 1 April 2008
5. Enid Spurgin dated 5 June 2008
6. Gladys Richards dated 5 June 2008
7. Geoffrey Packman dated 4 June 2008
8. Leslie Pittock dated 9 July 2008
9. Elsie Lavender dated 26 May 2008
10. Ruby Lake dated 15 May 2008
11. Elsie Devine dated 2 June 2008
12. Arthur Cunningham dated 21 May 2008

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Version 4 of complete report - 8 May 2008 – Robert Wilson

Robert WILSON
Code A
Died: 19 October 1998

SUMMARY OF CONCLUSIONS

Mr Robert Wilson a 74 year old gentleman with Code A liver disease who was admitted with a complex and painful fracture of the left upper humerus. His physical condition deteriorates at first in hospital, with alteration in mental state, renal impairment and subsequent gross fluid retention. He then starts to improve and is transferred to the Gosport War Memorial Hospital for further assessment and possible rehabilitation or continuing care. He is started on regular oral strong opiate analgesia for pain in his left arm and rapidly deteriorates and dies within 5 days of admission.

There is evidence of both poor, and in my view negligent, medical practice at the Gosport War Memorial Hospital. The use of the drug chart is also significantly deficient.

1. INSTRUCTIONS

To examine the medical records and comment upon the standard of care afforded to the patient in the days leading up to his death against the acceptable standard of the day.

2. ISSUES

2.1. Was the standard of care afforded to this patient in the days leading up to his 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.

3 CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence in the police files).

3.1 Robert Wilson a 74 year old gentleman in 1998 attended Queen Alexandra Hospital, Portsmouth A&E Department on the 21st September 1998 (125-127) with a fracture of the left femoral head and tuberosity (169).

3.2 Mr Wilson had suffered many years before with Malaria and Diphtheria (143) but was first noticed to be Code A at the time of an endoscopy in 1994 (313). In 1997 he was admitted to

hospital with a fall, epigastric pain and was found to have evidence of Code A liver disease (129). During the 1997 admission, an ultra sound showed a small bright liver compatible with cirrhosis and moderate ascites (129). His Albumin was very low at 19 (150) and a bilirubin was 48 (129). All these are markers of serious alcoholic liver disease with a poor long term prognosis. His weight was 100 kgs (152). There is no record of follow up attendance.

3.3 When he attends A&E it is originally intended to offer him an operation on his arm, which he refuses. However, he is kept in A&E overnight for observation (161-2). It becomes apparent by the next day that he is not well, is vomiting (163) and he is needing Morphine for pain (11). His wife is on holiday (11) and it is not thought possible for him to go home so he is transferred on 22nd September to the Care of the Elderly team at the Queen Alexandra Hospital (163).

3.4 The day after admission he is no longer thought fit enough to have an operation on his arm, although he would now be prepared to. He is recognised to have been an extremely heavy drinker with considerable oedema and abdominal distension on admission (167). He has abnormal blood tests on admission including a mild anaemia of 10.5 with a very raised mean cell volume of 113 and his platelet count is reduced at 133 (239). Five days later his haemoglobin has fallen to 9.7 and the platelet count has fallen to 123 (237). There are no further full blood counts in the notes, although his haemoglobin was normal with haemoglobin of 13 in 1997 (241).

3.5 He is noted to have impaired renal function with a Urea of 6.7 and a Creatinine of 185 on admission (209) and on 25th September Urea of 17.8 and a Creatinine of 246 (203). He is started on intravenous fluids on 27th September (12) and his renal function then continues to improve so that by the 7th October both his Urea and Creatinine are normal at 6.1 and 101 (199).

3.6 His liver function is significantly abnormal on admission and on 29th his albumin is 22, his bilirubin 82 (he would have been clinically jaundice) there is then little change over his admission. On the 7th October is albumin is 23 and his bilirubin also 82 (199). His AST is 66 (171).

3.7 His vomiting within 24 hours of admission may have been due to alcohol withdrawal but he had also been given Morphine for pain (11). He is started on a Chlordiazepoxide regime (11) as standard

management plan to try and prevent significant symptoms of Code A This has some sedative effects as well.

3.8 His physical condition in hospital deteriorates at first. He is noted to have considerable pain for the first 2 – 3 days, he is found to have extremely poor nutritional intake and has eaten little at home (12). His renal function deteriorates as documented above. He is communicating poorly with the nursing staff (28) and is restless at night on 30th September (30). His Barthel deteriorates from 13 on 23rd September to 3 on the 2nd October (69), his continued nutritional problems are documented by the dietician on 2nd October (16). In the nursing cardex he is vomiting, he has variable communication problems, he is irritable and cross on 1st October (30). On 4th October (16) his arm is noted to be markedly swollen and very painful and it is suggested he needs Morphine for pain (31). The following day he knocks his arm and gets a laceration (16).

3.9 There is ongoing communication with his family which is complicated by inter-family relationships between his first wife's family and his current wife. The plan by 6th October is that he will need nursing home care when he leaves hospital and his Barthel at this stage is 5 (16) (69). However on the 5th the nursing cardex note that he is starting to improve (32) although, he remains catheterised and has been faecally incontinent on occasion.

3.10 On 7th October is now more alert and is now telling the staff that he wishes to return home (17). The nursing staff notes that he is now much more adamant in his opinions (33). However on 8th he had refused to wash for 2 days (18). He is then reviewed at the request of the medical staff by a psycho-geriatrician. The opinion is that he has early dementia, which may be alcohol related and depression. He is noted to be difficult to understand with a dysarthria (117-118). He is started on Trazodone as an antidepressant and as a night sedative, he is still asking for stronger analgesics on 8th October (35). The letter also mentions (429) "rather sleepy and withdrawn..... his nights had also been disturbed."

3.11 On the 9th October an occupational therapy assessment is difficult because he is reluctant to comply and a debate occurs about whether he is capable of going home (19). By the 12th October (21) his Barthel has improved to 7 (69) so Social Services say that he no longer fits their criteria for a nursing home and he should now be considered for further rehabilitation (21). The nursing cardex notes that his catheter is out (35) he is eating better but he

still gets bad pain in his left arm (36). His arms, hands and feet are noted to be significantly more swollen on 12th October (36). His weight has now increased from 103 kgs on 27th September to 114 kgs by 14th October (61,63). However his Waterlow score remains at "high risk" for all his admission (71). A decision is made to transfer him for possible further rehabilitation, although the medical review on 13th October states in view of the medical staff and because of his oedematous limbs, he is at high risk of tissue breakdown. He is also noted to be in cardiac failure with low protein and at very high risk of self neglect and injury if he Code A He currently needs 24 hour hospital care (21).

3.12 On 14th October he is transferred to Draed Ward and the notes (179) say "for continuing care". The notes document the history of fractured humerus, his alcohol problem, current oedema and heart failure. No examination is documented. The notes state that he needs help with ADL, he is incontinent, Barthel 7, he lives with his wife and is for gentle rehabilitation. I am unable to read four words. The single word on the line above incontinence, two words after lives with wife (this may be a street address) and the word in front of gentle mobilisation.

3.13 The next medical notes (179) are on 16th October and state that he had declined overnight with shortness of breath. On examination he is reported to have a weak pulse, unresponsive to spoken orders, oedema plus plus in arms and legs. The diagnosis is "? silent MI, ? liver function" and the treatment is to increase the Frusemide. The nursing cardex for 14th October confirms he was seen by Dr Barton, that Oramorphine 10 mgs was given and he was continent of urine. On 15th October the nursing notes (265) state commenced Oramorphine 10 mgs 4 hourly for pain in left arm, poor condition is explained to wife. The evidence from Mr Wilson's wife (Gillian Kimbley) is that he looked dreadful and was incomprehensible at lunchtime on the 15th October, a very significant change from the morning of the 14th.

On 16th in the nursing cardex he is "seen by Dr Knapman am as deteriorated overnight, increased Frusemide". The nursing care plan (278), states for 15th October, settled and slept well, Oramorphine 20 mgs given 12 midnight with good effect, Oramorphine 10 mgs given 06.00 hours. Condition deteriorated overnight, very chesty and difficulty in swallowing medications. Then on 16th it states has been on syringe driver since 16.30 hours. From the analysis of the drug chart, Mr Wilson received the Oramorph at midnight on 15th and then 06.00 hours 10 mgs

Oramorph on 16th.

3.14 The next medical note is on 19th October which notes that he had been comfortable at night with rapid deterioration (179) and death is later recorded at 23.40 hours and certified by Staff Nurse Collins. The nursing cardex mentions a bubbly chest late pm on 16th October (265). On the 17th Hyoscine is increased because of the increasing oropharyngeal secretions (265). Copious amounts of fluid are being suctioned on 17th. He further deteriorates on 18th and he continues to require regular suction (266). The higher dose of Diamorphine on the 18th and Midazolam is recorded in the nursing cardex (266).

3.15 Two Drug Charts: (see table). The first is the Queen Alexandra drug chart (106-116). This records the regular laxatives, vitamins and diuretics given for his liver disease. The reducing dose of Chlordiazepoxide stops on 30th September for his alcohol withdrawal and the Trazodone started for his mild depression and night sedation. In terms of pain management Morphine, slow IV or subcutaneous 2.5 – 5 mgs written up on the prn side and 5 mgs given on 23rd September and 2.5 mgs twice on 24th September. Morphine is also written up IM 2 – 5 mgs on 3rd October and he receives 2.5 mgs on 3rd and 2.5 mgs on 5th. He is also written up for prn Codeine Phosphate and receives single doses often at night up until 13th October but never needing more than 1 dose a day after 25th September. Regular Co-dydramol starts on 25th September until 30th September when it is replaced by 4 times a day regular Paracetamol which continues until his transfer.

In summary, his pain relief for the last week in the Queen Alexandra is 4 times a day Paracetamol and occasional night time dose of Codeine Phosphate.

3.16 The second drug chart is the drug chart of the Gosport War Memorial Hospital (258-263). His diuretics, anti-depressant, vitamins and laxatives are all prescribed regularily. The regular Paracetamol is not prescribed but is written up on the as required (prn) part of the drug chart. This is never given. Regular prescriptions also contains Oramorphine 10 mgs in 5 mls to be given 10 mgs 4 hourly, starting on 15th October (261). 10 mgs is given at 10 am, 2pm and 6 pm on 15th, 6am, 10 am and 2 pm on 16th. A further dose of 20 mgs at night given at 10 pm is given at 10 pm on 15th October. Although these prescriptions are dated as given on the 15th October it is not clear if they were written up on the 14th or 15th.

3.17 On a further sheet of this drug chart (262) regular prescription has been crossed out and prn written instead. Oramorphine, 10 mgs in 5 mls, 2.5 – 5 mls 4 hourly is then prescribed on this sheet. It is not dated but it would appear 10 mgs is given at 2.45 on 14th October and 10 mgs at midnight on 14th October. Further down this page Diamorphine 20 – 200 mgs subcut in 24 hours from Hyoscine 200 – 800 micrograms subcut in 24 hours, Midazolam 20 – 80 mgs subcut in 24 hours are all prescribed. It is not clear what date these were written up. The first prescription is 16th October and the 20mls of Diamorphine with 400 micrograms of Hyoscine are started at 16.10. On 17th October, 20 mgs of Diamorphine, 600 micrograms of Hyoscine are started at 5.15 and the notes suggest that what was left in the syringe driver at that stage was destroyed (262). At 15.50 hours on 17th October, 40 mgs, 800 mgs of Hyoscine and 20 mgs of Midazolam are started and on 18th 60 mgs of Diamorphine, 1200 micrograms of Hyoscine (a new prescription has been written for the Hyoscine) and 40 mgs of Midazolam are started in the syringe driver at 14.50 and again the notes suggest the remainder that was previously in the syringe driver is destroyed.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Morphine	22/09	2-5 mgs IV/SC PRN 4 hourly	? (at QAH)	23/09 1540 5 mgs 24/09 0615 2.5mgs 24/09 0645 2.5mgs
Morphine	03/10	2-5 mgs I/M PRN 4 hourly	? (at QAH)	03/10 2319 2.5 mgs 05/10 0200 2.5 mgs
Codeine Phosphate	23/09	30mgs 6 hourly PRN	? (at QAH)	23/09 2 doses 30 mgs 24/09 3 doses 30 mgs 25/09 1 dose 30 mgs
CoDydramol	25/09	2 tabs 6 hourly Regular	? (at QAH)	25/09 3 doses 26/09 – 29/09 4 doses each day then stopped
Codeine Phosphate	8/10	15-30 mgs 4 hourly PRN	? (at QAH)	08/10 09/10 1 dose 12/10 each day 13/10
Paracetamol	30/09	TT 6 hourly Regular	? (at QAH)	30/09 – 06/10 Many missed doses until the 07/10 – 14/10. 4 doses a day
Paracetamol	14/10	1 gram 4 hourly, PRN	Barton (at GWMH)	Never given
Oramorphine	Undated but probably 14/10	2.5-5mls of 10 mgs in 5mls 4 hourly, PRN (regular crossed out)	Barton (at GWMH)	14/10 1445 10 mgs 14/10 2345 10 mgs

Oramorphine	15/10	10mgs 4 hourly regular	Barton	15/10 1000 10 mgs 15/10 1400 10 mgs 15/10 1800 10 mgs 16/10 0600 10 mgs 16/10 1000 10 mgs 16/10 1400 10 mgs No further prescription recorded by drug chart. But prescription not crossed off or stopped
Oramorphine	15/10	20mgs nocte Regular	Barton	15/10 2200 20 mgs
Diamorphine	Undated, possibly 16/10 but might well have been 14/10	20 – 200mgs S/C in 24 hours PRN (Regular crossed out)	Barton	16/10 1610 20 mgs 17/10 0515 20 mgs 17/10 1550 40 mgs 18/10 1450 60 mgs
Midazolam	Undated, possibly 14/10; or 16/10 or 17/10	20-80 mgs S/C in 24 hours PRN (Regular crossed out)	Barton	17/10 1550 20 mgs 18/10 1450 40 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Robert Wilson. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Robert Wilson, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 The principle underlying medical problem in Mr Wilson is his alcoholic liver disease. There is no doubt that he had hepatocellular failure based on Code A with evidence at least back to his admission in 1997 where he has evidence of portal hypertension giving him a significant ascites. He also at that stage had a low albumin and a persistently raised bilirubin, hall-markers of a poor medium to long-term prognosis.

4.3 The presenting problem on admission was his complex fracture of his left upper arm, which ideally would have had an operative repair. First he refuses this, and then by the time he agrees it his physical status has significantly deteriorated to a point that he was not fit for an anaesthetic. He gets continual pain from this arm throughout his admission. His admission treatment is strong opiate analgesia; this is then replaced by regular oral mild opiate

analgesia and finally by regular Paracetamol supplemented by mild oral opiate analgesia (Codeine Phosphate) at night. There is no doubt though that he does have continuing pain from this arm.

4.4 His health deteriorates for at least the first 7 – 8 days after his admission. He develops impaired renal function; there is evidence of change in mental state with comments on poor communication, sleepiness, irritability and restlessness, and "dysarthria". There are a number of possibilities for this. The first possibility is that he is having alcohol withdrawal, combined with the sedative effect of Chlordiazepoxide to prevent marked symptoms of alcohol withdrawal delirium. The psycho-geriatrician wonders if he has alcohol related dementia plus some depression. I believe it is very likely that he has early hepatic encephalopathy, a change in mental state that goes with hepatic failure. This includes disturbed consciousness with sleep disorder, personality change and intellectual deterioration. It is often precipitated by acute events including gastro-intestinal blood loss and drugs, in particular opiates. There is other evidence of major impairment to his liver function including a reduced platelet count, (suggesting an enlarged spleen due to portal hypertension), his bilirubin which is significantly higher than his previous admission and his persistent very low albumin. His haemoglobin does fall during admission. It is possible that he has had a small gastro-intestinal bleed at some stage but this is not pursued.

4.5 Despite all of this, there is a an improvement in his condition recorded in both his better functioning on the ward with the nursing staff, his greater alertness and communication improvement. The fact that his catheter can be removed and he becomes continent and that his overall measured functional status through the Barthel score improves to a point that Social Services will no longer place him in a nursing home, although he clearly needs nursing care. However, his weight dramatically increases by 11 kgs during his admission and this will be almost entirely fluid retention going to his abdomen, legs and potentially his chest. This is not adequately managed medically.

4.6 He is transferred on 14th October for ongoing assessment, possible rehabilitation and decisions about long-term care arrangements. No examination has been recorded on admission by the medical staff. Not even a basic clinical examination has been undertaken or if it has, was not recorded.

4.7 The only management that is really needed at this stage is to continue the management that was ongoing from the Queen

Alexandra Hospital while carefully addressing the fluid balance problems. However the regular oral analgesics that he was on are not written up regularly, no explanation is given for this. Strong opioid analgesia is written up and two doses of 10 mgs Oramorphine are given on the day of transfer, the 14th October. At the Queen Alexandra Hospital the single doses on the 3rd and 5th October had been at 2.5 mgs. Regular Oramorphine to a total dose of 50 mgs is then given on the 15th October. It is now being given regularly and it is not clear whether the original intention to give it regularly was from the admission on the 14th, though the prescription is clearly written and starts at 10 am on 15th. There is no documentation in the nursing or medical notes to suggest the patient was seen by a doctor on 15th when the decision to start the regular dose of Morphine appears to be made.

4.8 The decision to give Morphine on the 14th and then the regular Morphine, at this dose, on 15th October is crucial to the understanding of this case. "*.....the effects of hepatitis or cirrhosis on drug deposition range from impaired to increased drug clearance in an unpredictable fashion..... the oral availability for high first class drugs such as Morphine.....is almost double in patients with cirrhosis compared to those with normal liver function. Therefore the size of the oral dose of such drugs should be reduced in this setting" (Harrison).* In my view the decision to give the significant doses of Morphine on the 14th then the regular oral doses of high oral doses of strong opiates on 15th was negligent. The appropriate use of weaker analgesics had not been used, though these had apparently controlled his symptoms the previous week in the Queen Alexandra Hospital as he had not received strong opioid analgesia after the 5th October. The dose of Morphine used, particularly in the presence of severe liver disease, was very likely to have serious implications (see para 4.4).

4.9 By the 16th October there has been a very significant clinical deterioration overnight and Mr Wilson is examined by Dr Knapman. He is noted to be unwell and unresponsive to spoken orders. While it is possible that Mr Wilson has gone into heart failure due to his salt and water retention documented previously, his unresponsiveness is almost certainly, in my view, to be because of a direct cerebral effect of the Morphine or that he is being precipitated again into Hepatic Encephalopathy (see para 4.4). The situation may or may not have been still reversible on 16th October but he was probably now entering a period of irreversible terminal decline. However, it would still have been appropriate to have obtained senior medical opinion as to whether

other management should be considered. In my view, the failure to obtain senior medical opinion was poor clinical practice. This criticism could be made of Dr Knapman on the 16th October and certainly of Dr Barton on the 15th, as the patient was seen by Dr Barton on the 15th October (as suggested by her statement to the police). The situation was unrecoverable by the 17th October.

4.10 On the afternoon of the 16th he is started on a syringe driver. Although prescribed by Dr Barton there is nothing in the notes to document the decision to start is a medical or nursing decision. He is started on a syringe driver containing Diamorphine and Hyoscine. Diamorphine, Hyoscine (and Midazolam) are all compatible in the same syringe driver. Hyoscine is particularly useful for patients with a large amount of secretion as is documented in this case. The increase in dose of Hyoscine on the 17th was an appropriate decision. When starting Diamorphine in a syringe driver it is conventional to do it at a dose of 2 or 3 to 1 i.e. at most half the dose of Diamorphine in the syringe driver than was being given orally. On 15th October 50 mgs in total of Oramorphine was prescribed, it was reasonable to start 20 mgs in the syringe driver on 16th October. The dose of Diamorphine is increased on both 17th and 18th and Midazolam is started on 17th. Apart from comments about secretions in the nursing cardex, there is no rationale for the increase in dose of Diamorphine or the addition of Midazolam provided in either the medical or nursing notes. It is not clear whether the decision to increase the dose is a medical or nursing decision. I have indicated in section 3 that there are significant problems with the use of the drug chart in Gosport which seems to have been used in an irregular fashion.

4.11 It is my view the regular prescription and dosage of Oramorphine was unnecessary and inappropriate on the 14th and 15th October and in a patient with serious hepatocellular dysfunction was likely the major cause of the deterioration, in particular in mental state, on the 15th and the 16th October. In my view it is beyond reasonable doubt that these actions more than minimally contributed to the death of Mr Wilson.

5. OPINION

5.1 Mr Robert Wilson is a 71 year old gentleman with known Code A Code A liver disease who was admitted with a complex and painful fracture of the left upper humerus. His physical condition deteriorates at first in hospital, with alteration in mental state, renal impairment and subsequent gross fluid retention. He then starts to improve and is transferred to the Gosport War Memorial Hospital for further

assessment and possible rehabilitation or continuing care. He is started on regular oral strong opiate analgesia for pain in his left arm and rapidly deteriorates and dies within 5 days of admission.

5.2 There is evidence of poor medical practice at the Gosport War Memorial Hospital. In particular:

- The lack of a documented medical examination on admission to the Gosport War Memorial Hospital.
- The failure to continue his oral analgesic regime on admission.
- The decision to use strong opiate based analgesic on the 14th October and at a dose higher than previously needed in the Queen Alexander Hospital. In my view a negligent decision that formed a major contribution to the clinical documentation that occurred over 15th-16th October.
- The failure to realise the potential risks of using strong opiate analgesia in the presence of liver failure.
- The failure to document any reason for starting regular Oramorphine on the 15th October.
- The failure to investigate the possible causes of his deterioration on 15th and 16th October, or to consider that they might be reversible.
- The failure to ask for a senior medical opinion certainly on the 15th October and possibly on the 16th October (also see my generic report).
- The failure to document in either the medical or nursing notes the reasons for the decision to start the syringe driver on the 16th October.
- The failure to document any reason for the increased dose of Diamorphine and Midazolam in the syringe driver on the 17th and 18th, and whether that was a medical or nursing decision.

5.3 The use of the drug chart in the Gosport War Memorial is significantly deficient. In particular:

- The prescription of a large range of a controlled drug (see my generic report).
- The misuse of both the "PRN" and regular sides of the drug chart.
- The failure to cross out drugs on the regular side of the drug chart when no longer required.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.

6. 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.

Code A

Signature: Date: 9 July 2008

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Eva PAGE

Code A

Died: 03/03/1998

SUMMARY OF CONCLUSIONS

Mrs Eva Page, an elderly lady who was admitted to Queen Alexander Hospital in February 1998. She was subsequently transferred to the Gosport War Memorial Hospital with a terminal illness almost certainly a carcinoma of the lung on a background of other chronic diseases including stroke and cardiac disease.

Her investigations and management were appropriate to her condition while in the Queen Alexandra Hospital.

The use of the drug chart in the Gosport War Memorial Hospital was seriously deficient.

There is inadequate documentation of clinical review of the patient in particular on 3rd March and inadequate documentation regarding decision making to start the syringe driver. This represents poor medical practice.

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.

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?

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

3.1. Eva Page was an 88 year old lady at the time of her final admission to hospital on 6th February 1988.

3.2. She lived in a residential home for a number of years and was reported as being independent in 1995 (32). During 1995 she had been admitted to hospital with chest pain (28) left ventricular failure in atrial fibrillation (22) and Digixon toxicity (14). At the time of her

admission with Digixon toxicity she had also been noted to have a transient impairment of renal function (14).

3.3. Eva Page was admitted to hospital on the 30th March 1997 (10) with confusion, right sided weakness and a probable dysphasia caused by a probable stroke (90) (112), however she improved rapidly and her comprehension was good and she was much less confused by the time of her discharge back to her residential home on 6th May 1997 (116).

3.4. The next documented hospital admission was 6th February 1998 when she was admitted to Victory Ward from home (157) (medical notes 246). The notes document that she had several days of rapid deterioration but she had been depressed for the last few weeks, increasingly withdrawn and had been started on Sertraline, an anti-depressant (246). Investigations showed a modestly raised urea of 8.4 (247), a low albumin of 30 (247) and a white cell count of 13.

3.5. Further investigations showed an abnormal chest x-ray that was thought to be a very suspicion of a carcinoma of bronchus (248) confirmed by an x-ray report (240). A decision is made not to bronchoscope her (249) and on 15th February there is a discussion with the son about the diagnosis (249). She has a documented fall on the ward (250) and the medical notes confirm her continued confusion. There is a good summary in the notes on 19th February (252) confirming that she is sleepy but responsive, incontinent of urine and faeces and has a low MTS (252-3).

3.6. On 25th February she is confused with some agitation (254) and the medical notes document that she has started on Thioridazine because of her anxiety and distress.

3.7. The nursing notes confirm her rapid physical decline during her time after admission. Her Barthel falls from 13 on admission to only 4 on 23rd February (162). Her Waterlow score also rises from 11 to 20 on 21st February (164). She has very little food intake during her admission (204-217). There is continual evidence from the nursing notes of anxiety, fear and variable confusion (180, 183, 184). She is catheterised, leaking faeces, frightened and agitated on 23rd February (189).

3.8. On 27th February she is transferred to Dryad Ward (254). The notes document her diagnosis of Ca Bronchus made on a chest x-ray on admission; she is generally unwell and off legs; and needs help with eating and drinking, and has a Barthel of 0. The notes also state that the family have been seen and are aware of prognosis and that Dr

Barton is happy for the nursing staff to confirm death (255). Needs hoisting and opiates commenced.

3.9. On 28th February (255), Mrs Page is confused, agitated particularly at night but not in pain. Medical notes say for regular Thioridazine (412). The next medical notes are 2nd March: there has been "no improvement on the major tranquilisers. I suggest adequate opiates to control fear and pain". A further note on 2nd March by a different doctor says "spitting out Thioridazine, quieter – now on sub-cut Oramorphine". "Fentanyl patch started today. Agitated and calling out even when staff present". "Diagnosed carcinoma bronchus ?Cerebral metastases". Continue Fentanyl patches. The son is seen. The next note in the medical section is on 3rd March and states the patient continues to deteriorate and died peacefully at 2130 hours. Death verified and signed by the staff nurse.

3.10. Drug Cardex. The drug chart before transfer to the Gosport War Memorial Hospital (234) shows that Thioridazine 10mgs was given 3 times a day on 25th and 26th February.

3.11. The drug chart at Dryad (222-224) demonstrates that on the once only prescription side that Diamorphine 5mgs was given at 0800 and 1500 mgs – date not visible on photocopies. On the PRN part of the drug chart Thioridazine 25mgs sub-cut is written up on 27th February and prescribed on 28th February at 1300. Oramorphine 10 mgs of 10ml is written up on 27th February and a single dose of 5mgs given on 28th February. Fentanyl patch 25 mgs is written up on 2nd March and prescribed once on 2nd March at 0800. There is no documentation if this ever removed.

3.12. On the regular side of the drug chart, Digoxin, Frusemide, Ramipril, Sotalol and Sertraline are written up and then crossed off and never given. Thioridazine is written up on 28th February and prescribed twice a day on 1st and 2nd March. Heminevrin is written up on 28th February and given once in the evening on 28 February and once on 1st March. Diamorphine 20-200 mgs sub-cut in 24 hours is prescribed on the regular prescription part of the drug chart which has been crossed out and PRN written. Hyoscine 200-800 mcgs in 24 hours and Midazolam 20-80 mgs sub-cut in 24 hours are also written up in the same way. I could not identify which day these prescriptions were written but 20 mgs of Diamorphine with 20mgs of Midazolam were both started in a syringe driver at 1050 am on 3rd March.

3.13. All the prescribing of opiates on Dryad Ward appear to be in Dr Barton's handwriting.

Code A – February 22 2008

TABLE 1

Drug	Date Prescribed	Prescribed as	Prescriber	Given
Diamorphine 5mg	? Date	Once only	BARTON	0800 am ? date 1520 am ? date
Thioridazine 25mg	27th February	PRN	BARTON	1300 am 28th Feb
Oramorphine 10 mgs in 10 mls	27th February	PRN	BARTON	5mg 28th Feb
Fentanyl 25mgs x 5 days	2nd March	PRN	BARTON	0800 am 2nd March
Diamorphine 20 – 200 mg S/C in 24 hours	? Date	"PRN" Regular prescription crossed out	BARTON	20 mg 1050 am 3rd March
Midazolam 20 – 80 mg S/C in 24 hours	? Date	"PRN" Regular prescription crossed out	BARTON	20 mg 1050 am 3rd March

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1. This section will consider there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Eva Page, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2. Mrs Page was an elderly frail lady with multiple pathology having documented evidence of cardiac and cerebro vascular disease with intermittent confusion diagnosed previously.

4.3. The final admission seems to have been preceded by fairly rapid physical decline. The diagnosis of probable carcinoma of the lung was made on radiological grounds on her admission to the Victory Ward. This was an appropriate diagnosis and would explain her rapid physical decline. A decision was made not to bronchoscope which would have been extremely difficult and an unlikely to have changed management in any way. This was also appropriate.

4.4. The nursing cardex and medical notes confirm her rapid physical and mental deterioration after admission. The objective evidence from both her decreasing Barthel, increasing Waterlow dependency and her rapidly falling albumin are all signs of a rapidly deteriorating condition, and compatible with a diagnosis of carcinoma of lung.

4.5. Although it is not specifically mentioned in the medical notes it is clearly documented in the nurses' notes that before transfer the she is for palliative care (at 157).

4.6. It was decided to transfer to the Gosport War Memorial Hospital to be nearer her son. There is a good summary of her problems written in the notes shortly prior to transfer (252).

4.7. On admission to Dryad Ward there is a very basic summary of the condition and dependency of Mrs Page but in view of the clear understanding that she was for palliative care and the good summary in the notes just prior to transfer I do not think that this was an unreasonable summary.

4.8. During her stay in the Queen Alexander Hospital and the Gosport War Memorial Hospital she continues to be frightened, agitated and confused. She is started on a major tranquiliser (Thioridazine) before transfer and this continued after transfer. The continued notes on 2nd March suggests that this drug management regime which then included Heminevrin was not being successful. All these symptoms are compatible with someone rapidly deteriating with carcinoma of lung, and probably also indicate mild delirium. A psycogeriatric opinion would not be needed in these circumstances.

4.9. The medical notes on the 27th February (254) state that opiates have been commenced but it is not clear though from the drug chart what this is referring to unless she received two doses of Diamorphine on the 27th, however, the photocopy is inadequate (222) to determine if this was the case. She receives a single dose of 5mg Oramorphine on 28th February and the next opiate

documented in the drug chart is the Fentanyl patch on 2nd March (222).

4.10. There is no doubt in my mind that this lady was rapidly deteriorating and dying and that in view of her failure to get adequate palliation from a regular major tranquiliser for her continued distress and agitation that it was appropriate to start a regular opiate by a syringe driver. It was also evident that she was not able to take her tablets orally (255).

4.11. Clinically it is slightly surprising that she was started with Fentanyl as this is likely to take 24 hours to have a maximal affect and that it might have been more clinically appropriate to start a syringe driver on 2nd March.

4.12. Diamorphine 20mgs in 24 hours and Midazolam 20mg in 24 hours was then started on 3rd March. It is not clear if the patient was seen by a doctor on 3rd March. It is not clear when the prescription was written up and if the decision to start Diamorphine and Midazolam on 3rd March was a medical or nursing decision. It is also not clear from the notes whether the Fentanyl patch was removed. 20mgs of Diamorphine by subcutaneous infusion is equivalent to oral morphine at 10mgs every 4 hours. In my opinion this would be high but not an unreasonable dose in somebody where there was a good reason to start an opiate and there had been an inadequate response to the Fentanyl in the previous 24 hours. Midazolam is a sedative which can be suitable for a very restless patient and is usually initially given in a dose of 20 – 80 mgs in 24 hours although some believe the dose should be much lower (5 – 20 mgs) in older people but particularly the most frail.

4.13. In my view a dose of Diamorphine and Midazolam was on the high side but within written clinical guidelines such as the British National Formulary. However, if the Fentanyl patch was continued there would have been a risk of over sedation for example causing unnecessary respiratory depression. The medical notes are inadequate to make an assessment as to whether the doses that were given were appropriate to her condition or excessive.

5. OPINION

5.1. Mrs Eva Page, an an 88 year old lady was admitted to Queen Alexander Hospital in February 1998 subsequently transferred to the Gosport War Memorial Hospital with a terminal illness almost

certainly a carcinoma of the lung on a background of other chronic diseases including stroke and cardiac disease.

5.2. Her investigations and management were appropriate to her condition while in the Queen Alexandra Hospital.

5.3. The use of drug charts in The Gosport War Memorial Hospital is seriously deficient. In particular:

- The use of the regular side of the drug chart for a PRN prescription.
- The prescription of a large range of controlled drugs (in particular diamorphine) on a PRN basis.
- The failure to write dosages in words and figures as well as total dosages to be given.

5.4. There is inadequate documentation of medical review of the patient. In particular:

- The failure to record who made the final decision to start the syringe driver on the 3rd of March.
- The failure to record the clinical condition of the patient that led to that decision.
- The failure to document how the final starting dose of the drugs in the syringe driver was made, in particular why the dose used was chosen.
- The failure to record in the medical or nursing notes if the Fentanyl patch was removed or the reason for not removing it.
- The failure to document relevant medical or nursing assessments to check on possible side effects (for example oversedation) with the high starting dose of both Diamorphine and Midazolam used.

6. 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.

7. 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: 9 July 2008

3

Code A – March 21 2008

Code A

SUMMARY OF CONCLUSIONS

Code A lady with severe end-stage Alzheimer's disease who was certainly entering the terminal phase of her disease at the time of her admission with pyrexial illness, possibly a UTI, on 31 July 1998.

Her investigations and management in the Queen Alexandra Hospital were generally acceptable. It was appropriate to transfer her to the Gosport War Memorial Hospital.

The documentation of her medical care was inadequate and in my view unacceptable medical practice in the Gosport War Memorial Hospital.

The use of the drug chart in the Gosport War Memorial Hospital is also significantly deficient.

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.

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?

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence except for two unnumbered pages which are referred to as UN).

3.1. Code A lady at the time of her death in the Gosport War Memorial Hospital on 21st August 1998.

3.2. Code A main problem was progressive dementia presumably of the Alzheimer's type. In 1992 her dementia was already known (243) and she was having problems with wandering (164). She started to

have respite care for her dementing illness in 1994 (189). Depixol was already started in 1995 (186). By 1996 she was having problems with aggressive behaviour (201) and was subsequently started on Carbamezepine as well as her major tranquilisers to help try and manage her behavioural problems (207). Eventually she ended up in a specialist psychiatric residential home by the summer of 1997. As she continued to have regular Depixol injections through 1998 although on 21st July the dose was reduced because of reported sleepiness (221). This appeared to be her last dose of Depixol, which was subsequently withdrawn by the psycho-geriatric team on 6th August (222). This was as a result of a visit by the community psychiatric nurse, part of the psycho-geriatric team, who saw the patient on Daedalus Ward. The psycho-geriatric team also either saw the patient or contacted the ward on 12th August (222).

3.3. From a medical as opposed to psychiatric perspective there had been a number of problems including rectal bleeding in 1993 and 1994 and known diabetes, controlled by diet since at least 1995 (381). She had a previous pneumonectomy many years before for possible tuberculosis. In 1995 she had problems with an oesophageal stricture (201) and was put on long term Omeperazole.

3.4. On 31st July 1998 she was admitted as an emergency to the Queen Alexander Hospital. The letter from the admitting GP (69) states that she had had a urinary tract infection and had fallen the night before and was now refusing fluids. Medical clerking (85-86) notes that Code A Code A was pyrexial but there were no other specific abnormalities apart from conjunctivitis noted on examination. The diagnosis was of a urinary tract infection which had not responded to oral antibiotics.

3.5. Various investigations are undertaken but her blood tests are normal (87) and a sample of urine from her catheter grows nothing (101). Her blood glucose is appropriately requested, she is thought to be diabetic but was never measured or reported (91). She is known to have a long term catheter (24, 86). There is no biochemical evidence of dehydration with a normal sodium urea and creatinine (91).

3.6. The nursing notes also document her admission pyrexia and undertake a nutritional assessment which show that she is at high risk (33, 34). She is also noted to be almost completely dependent with a Barthel score of 1 on 31st July and a 2 on 5th August (22). The temperature chart shows that she becomes apyrexial by 1st August (39).

3.7. On the 3rd August she is apyrexial and is on subcutaneous fluids but had 500 mls of oral intake the previous day. The plan was to stop the subcutaneous fluids (88).

3.8. The nursing notes demonstrate that she has settled by 1st August (24) and also comments that she is sleeping well on 3rd August (23).

3.9. The next medical notes are on the unnumbered sheets where Code A Code A is seen by a consultant, Code A on 4th August. However, this history sheet is marked GWM. It is difficult to be certain but I assume this was added when the patient was transferred to the Gosport War Memorial Hospital on 6th August because Mrs Code A must have been seen on 4th August in the Queen Alexander Hospital.

3.10. Code A refers as diagnosis – see problem sheet, I believe this is the sheet (83) which summarises the problems as dementia, urinary tract infection, dehydration and catheterised. Code A notes summarise the very severe dementia and dependency and the current functional status. The plan is then made to continue the oral antibiotic, to continue the subcutaneous fluids (although it had already been decided the day before to stop these) (88) and states the overall prognosis as poor and that Code A is now too dependent to return to her residential home. She is therefore to be transferred to Deadalus Ward for continuing care, observation and possible placement, although she does ask that her bed is kept at the residential home for a further period. Code A confirms the do not resuscitate status of Code A (UN) previously made by the medical team in the Queen Alexander Hospital (88).

3.11. Code A is transferred on 6th August. There is a very brief note in the medical notes that she is to continue the Augmentin. There is no evidence that she is on subcutaneous fluids at that time or that any subcutaneous fluids are given at the Gosport War Memorial Hospital.

3.12. On 10th August, the consultant, Code A reviews Code A and notes that she has improved a little and that she is now eating and drinking better but remains very confused and highly dependent. The request is that the residential place is given up, and a plan is made to review in a month's time the possibility of a long term nursing home placement.

3.13. The next medical note is on 21st August in Code A handwriting which states marked deterioration over the last few days. Subcutaneous analgesia commenced yesterday, family aware and happy. Someone has written in a different handwriting "syringe driver" on the photocopied page.

3.14. The final note is on 21st August at 1830 where charge nurse confirms death. The family were present.

3.15. Nursing notes at the Gosport War Memorial state that on admission that she is for assessment and observation (115) and document that she has a Waterlow score of 15 on admission which is high risk (123) and "does have pain at times" (117). Although the signature is unreadable in the medical notes, the nursing contact record (125) confirms that it was a Code A who admitted Code A into the Gosport War Memorial Hospital on 6th August. The contact record also states that on 17th August that her condition has generally deteriorated over the weekend, the Code A seen and aware that Code A condition is worsening, agrees active treatment not appropriate and to use syringe driver. Code A is in pain. The notes also comment that there is some food and fluid intake up until 18th August (129).

3.16. There is a single drug chart (57-64) that goes from her admission on 31st July to 21st August.

3.17. The PRN side, a Promazine syrup 25mgs orally is prescribed as is magnesium hydroxide neither of which are given. Haloperidol 2.5 – 10 mgs subcutaneously is also prescribed and single dose of 2.5 mgs is given at 2045 on 1st August in the Queen Alexander Hospital.

3.18. Regular prescriptions of Prozac, Co-danthramer, Zopiclone, Lactulose and Augmentin are written up. Zopiclone and Co-danthramer certainly continue until 15th August and the Augmentin until 9th August.

3.19. Diamorphine 20 – 200 mgs subcut in 24 hours is written up on the daily review prescriptions part of the drug chart together with Hyoscine 20 – 80 micrograms subcut in 24 hours and Midazolam 20 – 80 mgs subcut in 24 hours although there is nothing to say which days the prescriptions was written up. However, Diamorphine 30 mgs and Midazolam 20 mgs appear to have both been started at 1350 in a syringe driver on 20th August and the same does re-prescribed on 21st August.

Code A – March 21 2008

TABLE 1

Drug	Date Prescribed	Prescribed as	Prescriber	Given
Diamorphine 20 – 200 mgs	No date	Daily review prescriptions	Code A	30 mgs 20/08 30 mgs 21/08
Midazolam 20 – 80 mg	No date	Daily review prescriptions	Code A	20 mgs 20/08 20 mgs 21/08

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1. This section will consider there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2. Code A was a very elderly lady with severe end-stage Alzheimer's disease. This disease is documented in the notes for at least 6 years with increasing behavioural problems requiring both pharmacological intervention and specialist residential care.

4.3. She also had a number of medical problems in particular her oesophageal stricture and diabetes although this diagnosis was completely ignored in her final admission. Although her admission to Queen Alexander is presented as an acute UTI there had probably been a longer period of deterioration. The GP's letter documents weight loss and her dose of Depixol had been reduced 10 days earlier because of sleepiness. However, there is no doubt she was pyrexial on admission and her condition had significantly deteriorated to the point where she could not be managed in the residential home.

4.4. She was appropriately investigated and treated with antibiotics and subcutaneous fluids in the Queen Alexander Hospital and becomes apyrexial. She is seen by a consultant Geriatrician who makes an adequate assessment and arranges for Code A to be transferred to the Gosport War Memorial Hospital for a period of observation to determine a final outcome.

4.5. The consultant states the prognosis is poor, this usually means that the expected outcome is the patient is not going to leave

hospital and really is in the terminal phase of their illness. Although it is quite appropriate to have a plan that should that not be the case a long term nursing placement might be needed as she was not far too dependent to return to her residential home. I believe this was all appropriate management.

4.6. The patient is transferred to Gosport War Memorial on 6th August and the admission clerking is unacceptably brief. Indeed it is not clear the admitting doctor, a Code A saw the patient although the nursing cardex does refer to "clerked in". It is impossible from the notes to make a judgement of the clinical status of Code A on arrival.

4.7. However, she is reviewed by Code A on 10th August who does an assessment and this would suggest that she is now clinically stable as Code A remarks "eating and drinking better". The plan is to review progress in a month's time.

4.8. There is nothing further in the medical notes until the day of her death, the 21st August which states a marked deterioration over the last few days. Her syringe driver had been started the day before.

4.9. There are clues in the nursing records that deterioration must have started several days before, for example in the contact record on 17th August (125) states her condition has generally deteriorated over the weekend, however, there is no evidence at all that this lady was seen by the medical staff, or if they did, no record has been written in the notes. However, it is also impossible to tell from the notes whether the nursing staff informed the medical staff that there had been any change in condition.

4.10. A syringe driver is started on 20th August. There is absolutely no documentation as to the clinical reason to do this. There is one comment in the nursing notes about pain at times (117) but no evidence from the drug chart of any other analgesia apart from the syringe driver is needed or used. In my view the failure to document any medical reasons for her deterioration or why she was started on a syringe driver is unacceptable medical practice. I cannot exclude the possibility that she needed symptom palliation during her last few days but there is no evidence that I can find in the medical or nursing notes to justify use of the syringe driver.

4.11. Diamorphine 30 mgs in 24 hours and Midazolam 20 mgs in 24 hours were started on 20th August. The prescriptions are not dated so it is impossible to tell when they were originally written, it is also impossible to tell who made the final decision to start the Diamorphine on 20th August or indeed who chose the starting dose of 30 mgs when 20 mgs was the lowest dosed prescribed.

4.12. 30 mgs of Diamorphine by subcutaneous infusion is equivalent to oral morphine at 15 mgs every 4 hours. In my view this is an unnecessarily high dose for someone who has received no previous opiate analgesia or indeed any other analgesia. Midazolam is a sedative which can be suitable for a very restless patient and is usually initially given in a dose of 20 mgs in 24 hours although some believe the dose should be much lower (5-20 mgs in older people, in particularly the most frail). There is nothing in the notes to explain why it was thought that both Midazolam and a high dose of Diamorphine were required in this patient. In my view the doses of Diamorphine and Midazolam were unacceptably high as a starting dose from the evidence available in the notes. There would have been a very significant risk of over sedation, for example causing respiratory depression, impaired conciousness and a possibility of shortening her life by some hours or days.

5. OPINION

5.1. Code A lady with severe end-stage Alzheimer's disease who was certainly entering the terminal phase of her disease at the time of her admission with pyrexial illness, possibly a UTI, on 31 July 1998.

5.2. Her investigations and management in the Queen Alexandra Hospital were generally acceptable. It was appropriate to transfer her to the Gosport War Memorial Hospital.

5.3. The documentation of her medical care was inadequate and in my view unacceptable medical practice in the Gosport War Memorial Hospital. In particular:

- The lack of a documented medical assessment on admission.
- The lack of any medical records after 10th August until the day of her death.
- The lack of any description of why she was deteriorating sometime after 10th August.
- The failure to explain why a syringe driver was required for symptom control.

- The lack of any written justification of the doses of Diamorphine and Midazolam actually used in the syringe driver.
- Any observations to look for possible side effects of the high doses of Diamorphine and Midazolam used.
- Inability to tell from the notes who made the final decision to start the syringe driver and the dose to be used.

5.4. The use of the drug chart in the Gosport War Memorial Hospital is also significantly deficient. In particular:

- The prescription of a large range of a controlled drug (in particular, Diamorphine) in the "daily review prescriptions" side of the drug chart.
- The failure to write dosages of controlled drugs in words and figures as well as the total dosages to be given.
- The failure to date the prescriptions of Diamorphine, Hyoscine and Midazolam.

6. 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.

Code A - March 21 2008

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.

7. 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.

Code A

Signature: Date: 9 July 2008

4

Code A – April 1st 2008

Code A

SUMMARY OF CONCLUSIONS

Code A lady with known bowel disease, cardiac disease and chronic abdominal pain who was admitted with severe left hemiplegia , probable myocardial infarction and continued myocardial ischemia.

She has a difficult and complex admission to the Haslar and was lucky to survive immediate admission.

There is some evidence of poor medical practice in Haslar.

Documentation and management of her medical care was inadequate and in my view unacceptable medical practice in the Gosport War Memorial Hospital.

The use of the drug chart in the Gosport War Memorial Hospital is also significantly deficient.

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.

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?

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence. For the three volumes: number / 1, number / 2 and number / 3)

3.1. Code A lady at the time of her death in the Gosport War Memorial Hospital on 22 May 1999. She had a long past medical history including diverticular disease diagnosed in 1982 (24/1), appendisectomy in 1967, various arthritic pains, atrial fibrilation from 1994 (854/2), asthma needing inhalers and a gastric ulcer in 1994 (753/2).

3.2. However as a result of abdominal pain she undergoes a Sigmoid colectomy in 1995. This is complicated by what is eventually found to be an colo-vaginal fistula and she undergoes a further laparotomy (135-36/1) after which she is very ill and needs a period of time in the intensive care unit. However, she does eventually return home although continues to get chronic abdominal pain with normal investigations (113/1) including a normal CT (121/1) and is finally referred to the pain clinic for her chronic abdominal pain although she does not receive the appointment before her final admission to Hasler.

3.3. 26th April 1999 she is admitted acutely to Hasler Hospital through the A&E department for both the onset of a left hemiplegia together with constant chest pain (114-117/1). The medical notes document her stormy admission (174-205/1). On 28th April she has chest pain with both EGC and cardiac enzyme abnormalities (179/1) suggesting an acute myocardial infarction and is admitted to the coronary care unit. Subsequently she has probable aspiration pneumonia on 30th April (183/1) and possibly a further MI, certainly with more chest pain on 5th May (192/1).

3.4. Nursing notes confirm her serious condition. On 5th and 6th May she is agitated and distressed needing doses of Diamorphine. On 6th May she is seen by Code A (194/1) who finds her extremely unwell and certainly not fit for rehabilitation or transfer to the Gosport War Memorial Hospital. She has more chest pain on 10th May (197/1) and the family are seen on 12th May and the poor prognosis is explained (200/1). On 12th May she is reviewed by Code A (67/1) who notes she has a dense flaccid hemiplegia and very dysarthric speech although she can obey simple commands. She is tolerating naso-gastric feeding but because of her recent chest pain was certainly not stable for transfer yet.

3.5. The nursing notes said that she was stressed and agitated on 15th May (95/1) and required subcutaneous Diamorphine, however, on 16th May (98/1) she slept well without it. On 17th May she is very demanding and continually disturbing other patients with calling out. On 18th May she has general aches and pains despite regular Co-codamol, although on 19th May (91/1) she is settled and slept all night. Her blood tests confirm her poor health with a very low albumin of 23 and a raised white cell count of 16 (201/1) on 13th May. She remains pyrexial on 17th May with crepitations at her left base and an albumin of 22 and a white cell count of 14 (203/1).

3.6. She is transferred after discussion with the Gosport War Memorial Hospital (GWMH). But the transfer letter written on the 19th (69/1)

fails to mention that she is receiving regular Co-dydramol, although it does state she is on Diamorphine 5 mgs subcutaneous PRN for pain.

3.7. The drug chart from Haslar appears on pages (71-72/1) and (550-560/2). She is written up for Diamorphine 2.5mg IV 4hourly PRN on the 1st May, changed to 5mg SC PRN from the 13th May and receives 12 doses in total between the 5th of May and the 16th May. She is also written up for Co-codamol 2 tablets QDS on the 26th April and receives regular doses until the 29th April. Co-dydramol is started on the 17th May and continues until the 19th. According to the drug chart no drugs of any sort are given on the morning of the 20th May, the day she is transferred.

3.8. The medical receiving notes on 20th May (20/3) comprise a brief summary starting with "transfer to Daedalus Ward 555K". It documents that she had a left dense hemiplegia, her past medical history and her current Barthel. Her examination is recorded. So there is no other medical note and the next note is a nursing note on 22nd May verifying death by a nurse. I do not understand the 555K note.

3.9. The nursing cardex records her transfer at 1340 on 20th May. It records her NG feeding and slurred speech but Code A appeared quite alert and aware of her surroundings (26/3). A Barthel is recorded at 1 (32/3), a Waterlow of 25 (30/3) and an abbreviated mental test score of 4 out of 10 (33/3). The nursing contact sheet starts on 21st May (34/3) at 1130. It is possible that the contacts sheet for the 20th May is missing. This sheet records that "now on regular (4 hourly Oramorphine 10 mgs in 5 mls)". At 1800 she has been "uncomfortable despite 4 hourly Diamorphine. Code A seen and care discussed, very upset, agreed to commence syringe driver at an equivalent dose to Oramorphine with Midazolam, aware of poor outlook but anxious that medication given should not shorten her life. At 1945 commenced syringe driver". On 22nd May condition deteriorating, very bubbly, on Hyoscine 800 mgs added to 20 mgs of Diamorphine and 20 mgs Midazolam. With Hyoscine increased to 1600 is very bubbly at 1020 (35/3).

3.10. The handling profile (42/3) under the client risk factor 'pain' states "abdominal pain". The nursing care plan of 20th May (58/3) documents problems with the nasal gastric tube and the night care plan (60/3) states that on 20th May, Oramorphine 2.5 mls given as per cardex, complaining of pain in stomach and arm.

3.11. The drug chart has Oramorphine in 10 mgs in 5 mls, oral 5 mgs 4 hourly enough to start on 21st May, however, only two doses are given at 1000 and 1400 and the other doses are omitted. It also has

Oramorphine 10 mgs in 5 mls for 10 mls nocte to start on 21st May also written as a regular prescription but again this is never given. Oramorphine 10 mgs in 5 mls orally 2.5 – 5 mls 4 hourly as required is written up on 20th May, 5 mgs are given on 4 doses as documented in Table 1. Diamorphine 20 – 200 mgs S/C in 24 hours is written up on 20th May on the as required part of the drug chart and started at 1920 on 21st May, 0830 on 22nd May and restarted again with the increase of dose of Hyoscine at 1030 on 22nd May. Midazolam 20 – 80 mgs subcut in 24 hours in written up on 20th May as required and 20 mgs is started at 1920 on 21st May at 0800 on 22nd May and again restarted at 20 mgs at 1030 on 22nd May.

TABLE 1

Drug	Prescribed as	Prescriber	Given Doses
Diamorphine 2.5 mg IV PRN 01/05 changed to: 5mg SC PRN 13/05	As required	?	05/05 x1 06/05 x2 08/05 x2 09/05 x1 10/05 x1 12/05 x1 13/05 x1 15/05 x2 16/05 x1
Oramorphine 10 mgs in 5 mls For 10mls nocte to start 21/05	Regular	Code A	Never given
Oramorphine 10 mgs in 5 mls Oral 5 mls 4 hourly to start 21/05	Regular	Code A	21/05 1000 10mgs 21/5 1400 10mgs (other doses not given)
Oramorphine	As required	Code A	20/05 1430 5 mgs

Code A – April 1st 2008

10 mgs in 5 mls Oral 2.5 – 5 mls 20/05 4 hourly	(PRN)		20/05 20/05 21/05	1830 2245 0735	5 mgs 5 mgs 5 mgs
Diamorphine 20 – 200 mgs S/C in 24 hours 20/05	As required (PRN)	Code A	21/05 22/05 22/05	1920 0830 1030	20 mgs 20 mgs 20 mgs
Midazolam 20 – 80 mgs S/C in 24 hours 20/05	As required (PRN)	Code A	21/05 22/05 22/05	1900 0800 1030	20 mgs 20 mgs 20 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1. This section will consider if there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2. Code A at the time of her final admission to the Gosport War Memorial Hospital although she had long standing cardiac and gastrointestinal problems and had been very seriously ill needing intensive care during 1995. She also had chronic unexplained abdominal pain and with recent negative investigations she had been referred to a chronic pain clinic for management.

4.3. However, her acute admission was with a severe and dense left sided stroke on 26th April. She had also had constant chest pain that day and when she had further chest pain on 28th April, it seems likely that she had a definite myocardial infarction simultaneously with her stroke. She then suffered from probable

aspiration pneumonia and was extremely ill for several days including having further chest pain.

4.4. Nursing and medical notes document that the family is seen and indeed the medical staff think that it is likely that she is going to die. Certainly she is restless and distressed and in my view probably clinically unstable certainly until 17th May as she still had abnormal signs in her chest, pyrexial and had a raised white count with a very low albumin. There is to be no doubt that her prognosis was extremely poor both from the likelihood of surviving or even getting significant improvement from her stroke.

4.5. During her admission to Hasler she is written up on the PRN side of the drug chart for 2.5 ms IV then 5 mgs SC PRN of Diamorphine. This would be a standard regime for people suffering myocardial infarction with recurrent cardiac pain. The drug is given on a number of occasions in Haslar sometimes for pain and sometimes for non-specific distress, judging from the nursing cardex. It would be perfectly appropriate to use this dose of Diamorphine if she was getting recurrent pain as it would not be possible to intervene in other ways because of her stroke. It seems likely that a clinical management decision (not recorded) was made on the 17th May to stop using Diamorphine and restart a regular oral analgesic, Co-dydramol, given via the NG tube. No further doses of Diamorphine are given in Haslar after 00.10 early on the morning of the 16th May.

4.6. She is seen on two occasions by Geriatricians, who both think she was unstable at that time and not yet suitable for transfer. I would strongly agree. Indeed there is then a further a discussion before it is agreed that she will go to the GWMH. In my view she was likely to be still unstable and it will have been clinically prudent to keep her for another week in Haslar. There can be no doubt that she is getting continued pain. She is written up for 6 hourly Co-dydramol which she received 4 times a day for the 2 days before her transfer to GWMH.

4.7. The drug chart appears to show poor prescribing practice at Haslar as the dose of Diamorphine is not written in words as well as figures nor is the total dose to be given written on the drug chart. There is no evidence she was given her regular medication, including oral analgesia, on the morning of her transfer and the Co-dydramol is not mentioned on the transfer letter.

4.8. There is a summary of the clinical problems functional status upon arrival at GWMH but it is not clear from the notes whether the

patient was examined, and if she was, the examination was not recorded. There is no medical assessment on whether or not she is pain, and if she is in pain why she is pain, nor of her clinical status upon arrival in particularly as she had been so ill recently. In my view this is poor clinical practice.

4.9. She is not written up for the Co-dydramol that she was on regularly at Haslar although it was not mentioned in the transfer letter. On the PRN part of the drug chart doses of Oramorphine are written up orally and a large range of Diamorphine and Midazolam is written up as required There is no documentation in the medical notes at Gosport War Memorial Hospital as to why these drugs were written up upon admission without apparently a clinical assessment of her pain or clinical status. Nor is there any explanation of why no other analgesics apart from strong opiates were prescribed. One note in the nursing cardex refers to abdominal pain which of course may have been the same pain that she had for many years prior to her admission. In general the Diamorphine she had received at Hasler had been for chest pain and further angina. There is no evidence in the medical or nursing cardex that she has any acute cardiac problems or angina in GWMH. In my view this management was poor clinical practice

4.10. She receives her first dose of Oramorphine at 1430, only 45 minutes after the nursing cardex records her arrival and then receives a further 3 doses until the morning of 21st. It is not clear whether it was a nursing or medical decision to actually give the Oramorphine.

4.11. On 21st May a decision is made that she is dying and she should be for symptom control with a syringe driver. Including the two doses given on the morning of 21st May she had received in total 40 mgs of Oramorphine in a 24 hour period. In these circumstances and assuming the patient was still distressed then it would be reasonable to start with 20 mgs of Diamorphine in a syringe driver over 24 hours. However, in my view it is unacceptable clinical practice to give the doses of Oramorphine in the first 24 hours after her arrival and start the syringe driver without making and recording a clinical assessment in the medical notes.

4.12. There are significant irregularities with the drug charts. Oramorphine has been written up on the regular side of the drug chart but not actually prescribed with no note to say why. A large range of Diamorphine is written up on the PRN part of the drug

chart before it is required and it is not written in words or figures nor is the total dose written.

4.13. Midazolam is a sedative which can be suitable for very restless patients and is usually given initially in a dose of 20 mgs in 24 hours although some people believe the dose should be much lower (5 – 20 mgs in older people, in particular the most frail). There is nothing in the notes to explain why it was thought that both Midazolam and Diamorphine were required in this patient. In my view the regular doses of Oramorphine and then the syringe driver together with the 20 mgs of Midazolam would have given a risk of over sedation for example causing respiratory depression in this lady who already had severe heart, lung and neurological disease.

5. OPINION

5.1. Code A lady with known bowel disease, cardiac disease and chronic abdominal pain who was admitted with a severe left hemiplegia, probable myocardial infarction and continued myocardial ischemia.

5.2. She has a difficult and complex admission to the Haslar and was lucky to survive immediate admission.

5.3. There is some evidence of poor medical practice in Haslar. In particular:

- Use of the drug chart in Hasler with the failure to write controlled doses of drugs in word and figures as well as the total dosages to be given.
- The apparent failure to give her regular medication, including oral analgesia, on the morning of her transfer to the GWMH.
- The failure to document the regular Co-dydramol in the transfer letter.
- The early transfer of a patient who had been seriously ill and clinically unstable to the short period before transfer.

5.4. Documentation of her medical care was inadequate and in my view unacceptable medical practice in the Gosport War Memorial Hospital. In particular:

- Lack of a documented medical assessment on admission.
- Lack of any recorded assessment of her clinical condition and in particular her source of pain.

- Starting regular opioid analgesia within an hour of admission and a syringe driver within 24 hours of admission ,without any medical records of justification for either regular strong opioid analgesia or a syringe driver .
- The failure to prescribe any analgesia other than the strong opiate analgesia on admission to the GWMH.
- The lack of a written justification requiring both Diamorphine and Midazolam in the syringe driver.

5.5. The use of the drug chart in the Gosport War Memorial Hospital is also significantly in deficient. In particular:

- The failure to give regularly the drugs prescribed on the regular side of the drug chart without explanation in medical or nursing notes.
- Prescription of a large range of a controlled drug in the "as required" side of the drug chart.
- The failure to write dosages of controlled drugs in words and figures as well as the total dosages to be given.

6. 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.

7. 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.

Code A

Signature: Date: 9 July 2008

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Version 4 of complete report – June 05 2008 – Code A

SUMMARY OF CONCLUSIONS

Code A

Code A lady admitted to the Haslar Hospital on 19th March 1999 following a fall. She undergoes an operation for a proximal femoral fracture and then transferred to the Gosport War Memorial Hospital on 26th March 1999. She is known to have become increasingly frail with poor eyesight, depression and mild memory impairment.

In the Gosport War Memorial Hospital she is in continual pain for which no definite diagnosis is made. She develops a wound infection and then deteriorates rapidly and receives pain relief and palliation for her terminal decline, including subcutaneous Diamorphine and Midazolam and dies on 13th April 1999.

However there were failings in the medical care provide to Code A also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital

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.

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence; 'M' in front are the microfilm notes).

3.1 At the time of her death in 1999 Code A was a Code A lady. She had been previously noted to have a stress fracture of her right hip, not needing operative intervention in 1981. (M38). She was also noted to have Paget's disease in her pelvis in 1988 (M39). She had a probably myocardial infarction in 1989 (M6). In 1997 she had been seen by a Code A, a Consultant Psycho-Geriatrician, for depression (144). He also noted poor eyesight (145). At that time she was on an anti-depressant and was noted

to have a normal mini-mental test score of 27/30 (148). She was followed up by a Community psychiatric nurse over the following year who believed that she was now showing evidence of memory impairment (152) (158).

3.2 Code A was admitted to the Haslar Hospital on the 19th March1999 following a fall, was diagnosed as having a proximal femoral fracture, treated by an operation "a dynamic hip screw", on 20th March 1999 (20). The notes for Haslar are not currently available to me, the only information is the hand written one page summary that says post operatively she can be mobilised from bed to chair with two nurses and can walk short distances with a Zimmer frame. It noted she has been incontinent at night and has a small sore on the back of her right leg, which is swollen. This letter states that the only medication she is on is Paracetamol prn. The only nursing information from Haslar is an admission assessment and pressure sore assessment on 19th March (64 & 66).

3.3 The next medical notes we have until her death, are written on a single page from Gosport Hospital (24). This states that the patient was transferred to Dryad Ward on 26th March, with a history of a fractured neck of femur and no significant past medical history. The medical notes state she was not weight bearing, she was not continent, tissue paper skin. The medical plan was "sort out analgesia".

3.4 The next medical note is on the 7th April, "still in a lot of pain and very apprehensive. MST increased to 20 mgs bd yesterday, try adding Flupenthixol. For x-ray of right hip as movement still quite painful – also about 2" shortening right leg."

3.5 The next medical note is 12th April, "now very drowsy (since Diamorphine infusion established) reduced to 40 mgs per 24 hours, if pain recurs increase to 60mgs". Able to move hips ? (illegible) pain, patient not rousable. Final note is dated 1.15 am 13th April. Died peacefully.

3.6 Nursing notes from Code A admission on 26th March continually refer to pain. The first night she has difficulty in moving, Oramorphine is given (80). The admission care plan mentions she was experiencing a lot of pain and movements (84). The desired outcome is "to eliminate pain if possible and keep Code A comfortable, which should facilitate easier movement and mobilisation". 27th March, "is having regular Oramorphine but still in pain" (84). 28th March (84) "has been vomiting with Oramorph, advised by Code A Code A to stop Oramorph is now having Metoclopramide three times a day and Co-dydramol".

3.7 On 29th (85) pain needed to be reviewed and on 31st March 10 mgs bd of MST (Morphine slow release tablets) is documented. "Code A walked with the Physiotherapist but was in a lot of pain". She was still having pain

on 1st and 3rd April (85).

3.8 On 4th April (86) it is noted that the wound is now oozing serous fluid and blood. On 7th April, it is documented that she was seen by Code A who thought the wound site was infected and started Code A on Metronidazole and Ciprofloxacin (both antibiotics) (107). On the 8th April, her MST is increased to 20 mgs bd, on 9th it is documented that she should remain on bed rest until Code A had reviewed the x-ray of the hip.

3.9 Code A clinically deteriorates significantly on the 11th April. She is now very drowsy and unrousable at times and refusing food and drink (107). The wound looks red and inflamed and feels hot (107). As recorded in the nursing notes Code A is seen by Code A (107), and a decision is made to commence a syringe driver. There is no record in the medical notes.

3.10 The patient is seen by Code A on the afternoon of the 12th (108) the Diamorphine dosage is reduced. Early morning of 13th April, death is confirmed (108).

3.11 Dependency is also confirmed by a Waterlow score of 32 on the 26th March (i.e. very high risk for pressure sores) (92) and a Barthel of 6/20 on 29th March (94) and 5/20 on 10th April (94).

3.12 Drug management in Gosport concentrating on the use of analgesia:

3.13 At the point of admission Oramorphine 10 mgs in 5 mls (2.5 – 5 mgs 4 hourly prn) is written up on the "as required" part of the drug chart. Two doses in total are documented to have been given on 31st March and the 11th April.

3.14 On the regular prescription Oramorphine 2.5 mgs 4 hourly and 5 mgs at night is written up, first dose given by 10 am on 26th March (125). This is then changed to 5 mgs four hourly with 10 mgs at night up until 28th March, then the Oramorphine is then discontinued and Co-dydramol 2 tablets 6 hourly written and prescribed from 28th March – 1st April (125).

3.15 Metoclopramide 10 mgs three times a day is written up continuously from 28th March to 11th April, but is only actually given to the patient intermittently. Morphine slow release tablets 10 mgs bd (MST) are written up on 31st March and given to 6th April. MST 20 mgs bd is written up on 6th April and given to 11th April. A double dose of MST (one 10 mgs and one 20 mgs) is given on the morning of the 6th April.

3.16 Ciprofloxacin 500 mgs bd is written up on 7th April and continued until 11th April and Metronidazole 400 mgs bd is also written up on 7th April and given

to 11th April. (134)

3.17 Finally, Diamorphine 20 – 100 mgs is written up on 12th April. 80 mgs in a syringe driver started at 8 am and according to the drug chart "dose is discarded at 16.40 hours and reduced the dosage to 40 mgs in 24 hours". The pump is discontinued at 1.30 am on the patient's death on 13th March. Midazolam 20 – 80 mgs is written and is prescribed. 20 mgs put in the syringe driver at 8 am. It appears this was increased to 40 mgs at 16.40 hours and discontinued at 1.30 am on 13th April.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Oramorphine	26/03	10 mgs in 5 mls 2.5 – 5 mls oral PRN	Code A	31/03 1320 5 mgs 11/04 0715 5 mgs
Oramorphine	26/03	10 mgs in 5 mls 2.5 oral 4 hourly Regular	Code A	27/03 1515 5 mgs 27/03 1800 5 mgs Then crossed off
Oramorphine	26/03	10 mgs in 5 mls 5 mgs oral nocte Regular	Code A	27/03 2200 10 mgs Then crossed off
Oramorphine	27/03	10 mgs in 5 mls 5 mgs oral 4 hourly Regular	Code A	27/03 0600 10 mgs 27/03 1000 10 mgs 27/03 1400 10 mgs 28/03 0600 10 mgs 28/03 1000 10 mgs 3 doses missed with no explanation. Crossed off.
Oramorphine	27/03	10 mgs in 5 mls 10 mls oral nocte Regular	Code A	27/03 2200 20 mgs Crossed off
Co-dydromol	27/03 or 28/03 (?)	TT 6 hourly oral Regular	Code A	Regular doses 4 x a day until 1200, 31/08 when no further doses given. Crossed off
NEW CHART				
Morphine MST	31/03	10 mgs bd Oral Regular	Code A	Started 31/03, 0930 and given regularly until last dose 06/04, 0800 crossed off
Morphine MST	06/04	20 mgs bd Oral Regular	Code A	Started 06/04, 0800 given regularly until last dose 11/04, 2000. Never crossed off
NEW CHART				
Diamorphine	12/04	20 – 200 mgs SC in 24 hours Regular	Code A	12/04 0800 80 mgs 12/04 1640 changed to 40 mgs
Midazolam	12/04	20 – 80 mgs SC in 24 hours Regular	Code A	12/04 0800 20 mgs 12/04 1640 changed to 40 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 It is difficult to provide a comprehensive opinion in the absence of the Haslar notes and the very sparse nature of the Gosport notes.

4.3 Code A a very elderly lady of Code A, had a number of chronic conditions including poor eyesight, depression, mild memory impairment, ischaemic heart disease, previous fracture of her right hip and known Paget's disease of her pelvis. She had a fall at home resulting in a further proximal femoral fracture and required a dynamic hip screw. This would have been a more complex procedure because of the previous fracture and the possibility that there was Paget's disease in her femur. However, from the one page summary from Haslar, it would appear that she was making reasonable progress at the point of transfer to Gosport. The prognosis in a Code A lady with her previous problems, that she would be likely to return to independent existence at home, would already be extremely low.

4.4 The problem documented in Gosport on the point of admission is continued pain, this is difficult to reconcile with the one page summary from Haslar, which says that Code A is purely on intermittent Paracetamol. There are various possibilities. She may have been undertreated for pain in Haslar, she may have had a dislocation in the ambulance transferring her (this does occur), she may have been starting to develop infection in the wound or she may have had some other orthopaedic problem that was not picked up between leaving Haslar and arriving in Gosport. I was also unable to find any report of the x-ray that was taken at Gosport on 7th April.

4.5 The medical assessment undertaken in Gosport was inadequate. There is no record of a significant history or general examination being performed, or if it was it was not recorded. No assessment or explanation at all is sought for why this lady is in pain, particularly if she had not been in pain in Haslar. The major gaps in the written notes particularly on admission represent poor clinical practice.

4.6 However, it was appropriate to provide pain relief to a patient with unresolved pain. Normally this would be done in a stepwise fashion, starting with the milder pain killers, such as the Paracetamol, she was already on in Haslar. Then to stronger oral medication (such as moderate opioids) and then to stronger opioid analgesia. However, she is started on a regular dosage of stronger opioid analgesia immediately from the point of her admission into Gosport. The reason for this is not documented and represents poor clinical practice.

4.7 The nursing notes document that her pain does not settle and is considerably interfering with her attempts at rehabilitation. She is then troubled with vomiting and the opioid analgesia is in fact stopped and replaced with oral co-dydramol (a moderate oral opioids). Her vomiting does apparently settle but her pain continues, so she is restarted on a strong opioid analgesia on 31st March.

4.8 She is seen by a consultant on 7th April, who is appropriately concerned that there is continuing pain and arranges for an x-ray. The failure to follow up this investigation is poor medical practice There is no record of the result of this x-ray in the notes. However, there appears to be a working assumption that she may have a wound infection and following Code A intervention is appropriately started on antibiotics. On 11th April there is a rapid deterioration in her condition. This is documented in the nursing notes but there is no medical note made on the 11th April. The nursing notes suggest that she was seen by Code A on 11th April, and a decision was made to start a syringe driver. However, I do wonder if this is incorrect and that she was seen early in the morning of 12th April as a syringe driver starts at 8am and not on the 11th April. No medical note is made by Code A on either the 11th April or the 12th of April, this is poor medical practice.

4.9 In view of the clinical deterioration on 11th April, despite the patient receiving appropriate antibiotics, I believe it was appropriate to start a syringe driver as she was drowsy and unrousable at times, as there is no doubt in my view that Code A was now dying. The likeliest cause is an unresolved infection in the wound and in her hip but the original cause of the pain remains undiagnosed. The opportunity for any possible remediation is well past at this stage. Diamorphine is then written up, prescribed at 80 mgs per 24 hours. The prescription in the notes was 20 – 200 mgs of Diamorphine in 24 hours and it is not clear whether Code A Code A or the nurse in charge choose the dose of 80 mgs. At that time Code A was on 20 mgs twice a day (i.e. 40 mgs total) of Morphine Sulphate, slow release although received 45 mgs in total on the 11th April. Diamorphine subcutaneously is usually given at a maximum ratio of 1 – 2 (i.e. up to 20 mgs Diamorphine in 24 hours for 40 mgs of Morphine) (Wessex Guidelines). However, her pain was not controlled and it would have been appropriate to give a higher dose of

Diamorphine. Conventionally this would be 50% greater than the previous days, (Wessex Guidelines). Some people might give up to 100%. Thus a maximum starting dose of Diamorphine of 40 mgs in 24 hours would seem arguable. Code A was prescribed 80 mgs which in my view was excessive, thus poor and negligent medical practice. This was reduced to 40 mgs after the intervention of the consultant Code A Code A some 8 hours later. This was an appropriate intervention.

4.10 Midazolam was also added to the infusion pump on 12th April. Midazolam is widely used subcutaneously in doses from 5 – 80 mgs for 24 hours and is particularly used for terminal restlessness. The dose of Midazolam used was originally 20 mgs for 24 hours which is within current guidelines. This was increased to 40 mgs later in the day, which although remains within current guidelines, many believe that elderly patients may need a lower dose of a maximum 20 mgs in 24 hours (Palliative Care. Chapter 23 in Brocklehurst Text Book of Geriatric Medicine, 6th edition, 2003). There is no assessment or justification for this decision in the medical notes, nor is it possible to tell if this is a medical or nursing decision. Morphine is compatible with Midazolam and can be used in the same syringe driver.

4.11 As Code A is thought to have been excessively sedated and the dose of Diamorphine is reduced on 12th April, thus the decision to increase the dose of Midazolam at the same time seems inexplicable. Code A dies on the 13th April.

The prediction of how long a terminally ill patient will live is virtually impossible and even palliative care experts show enormous variation (Higginson I J and Costantini M. Accuracy of Prognosis Estimates by 4 Palliative Care teams: A prospective cohort study. BMC Palliative Care 2002 1:1.)

4.12 In my view the dose of Diamorphine used on 11th was inappropriately high, however, I cannot satisfy myself to the standard of "beyond reasonable doubt" that this had the definite effect of shortening her life in more than a minor fashion of a few hours. I understand the cause of death on the death certificate was Cerebrovascular Accident. There is nothing in the medical notes to substantiate this diagnosis which is misleading and probably inaccurate.

5. OPINION

5.1 Code A presents a common problem in geriatric medicine. A very elderly lady with a number of chronic conditions is becoming increasingly frail and has a fall leading to a proximal femoral fracture. The prognosis after such a fracture, particularly in those patients with impairments of daily living before their fracture is generally poor, both in terms of mortality or in

terms of morbidity and returning to independent existence. Up to 25% of patients in such a category will die shortly after their fracture from many varied causes and complications.

5.2 However there were failings in the medical care provide to Code A in particular:

- The failure to undertake a clinical assessment of Code A on admission to Gosport War Memorial Hospital.
- The failure to make any diagnosis or assessment of the cause of pain on admission and until 7th April.
- The prescription on admission, without explanation, of strong opioid analgesia, when apparently she had only need Paracetamol in Hasler.
- The failure to follow up the xray undertaken on the 7th April.
- The failure to document the reason for starting the syringe driver.
- The failure to explain in the notes the decision to start with 80 mgs of Diamorphine in the syringe driver, in my view a negligent decision.
- The failure to explain the decision to increase the dose of Midazolam at the same time as the Diamorphine is reduced on the 12th April.
- The failure to record a reason to give 2 doses of MST on the morning of the 6th April.
- Reporting the cause of death as 'Cerebrovascular Accident', without any clinical evidence.

5.3 There are also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital, in particular:

- The failure to give regularly prescribed dose of Oramorphine, without explanation.
- The failure to cross off the MST from the regular drug chart on the 11th April.
- The use of the regular side of the drug chart for variable doses of drugs given in the syringe driver.
- The failure to write dosages of controlled drugs in words and figures as well as the total to be given.

6. 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.

7. 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: 9 July 2008

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Version 5 of complete report June 05 2008 – Code A

SUMMARY OF CONCLUSIONS

Code A

Code A presents an example of a common, complex problem in geriatric medicine. A patient with one major progressive and end stage pathology (a dementing illness) develops a second pathology, has surgery, has a complication after that surgery, has more surgery and gradually deteriorates and dies.

However there were significant failings in the medical care provided to Code A Code A as well as deficiencies in the use of the drug chart at the Gosport War Memorial Hospital.

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.

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence, the numbers with 'H' in front are the Haslar notes).

3.1 Code A was a Code A lady and in 1998 was admitted as an emergency on 29th July 1988 to the Haslar Hospital (H39).

3.2 She had had a progressive dementing illness documented as short term memory loss in 1988 (435), a mental test score of 4/10 in 1994 (443) and a mental test score of 0/10 in 1996 (451). She was admitted to the Glen Heathers Nursing Home in 1994 (202) and was moderately dependent with a Barthel of 11/20 at that time (200). She was seen by a psycho-geriatrician, Code A who in 1998 found that she had end stage dementia (473). The nursing home noticed that she was wandering and very frail in July 1998 (563). The nursing home notes document multiple falls.

3.3 On admission to the Haslar Hospital, a fractured neck of femur is diagnosed and she is treated with a right hemi-arthroplasty (H50). Recovery is complicated by agitation. She is seen by Code A on 3rd August (23) who notes her long standing dementia. He finds her pleasant, co-operative, with little discomfort on passive movement and she should be transferred to the Gosport War Memorial hospital to see if it was possible to remobilise her (466,467).

3.4 Her drug charts in Haslar Hospital show that no regular pain killer is given during her first admission (H110), although Diclofenac was prescribed but not given. She does receive intravenous morphine 2.5. mgs on 31st July, then single doses on the 1st and 2nd August (H114). She then receives regular Co-codamol orally, although it is written up Prn, until 7th August. After this date there appears to be no further painkillers given.

3.5 The nursing cardex in Haslar (H152, H167) does not mention any pain during her recovery.

3.6 She is transferred to Gosport War Memorial Hospital on 11th August and seen by Code A (29) who notices her previous hysterectomy in 1953, her cataract operations, her is deafness and that she has "Alzheimer's Disease". She records that her impression is of a frail demented lady who is not obviously in pain. Despite the statement in the notes, there is no other evidence of a clinical examination, or any record, if it was undertaken. There is also no mention of pain in the medical notes until after her hip dislocation. She mentions that her Barthel score is 2 (heavily dependent), she transfers with a hoist. She also states "I am happy for nursing staff to confirm death".

3.7 The next medical note on 14th August and states that sedation/pain relief has been a problem, screaming not controlled by Haloperidol and very sensitive to Oramorphine (29). Fell out of chair last night, right hip shortened and internally rotated, daughter aware and not happy. Is this lady well enough for another surgical procedure? She has an x-ray that notes the hip is dislocated and is transferred back to the Haslar Hospital.

3.8 The nursing notes for this first admission to Gosport War Memorial Hospital state that she had a Barthel of 3/20 on admission (40). Is highly dependent with a Waterlow score of 27 (41). The nursing care plan for the 12th (49) mentions that Haloperidol was given because she woke from sleep very agitated. It mentions that on the 13th August Oramorphine is given at 21.00 (50). It mentions an x-ray needed the following morning. On 14th August pain is mentioned in the right leg in the nursing cardex (50). I find no other mention of pain in the nursing cardex.

3.9 Oramorphine 10 mgs in 5mls (62) is written up prn on admission to Gosport Hospital, two doses are given on 11th August, one dose 12th August, one dose 13th August in the evening (as confirmed in the nursing cardex) and

one dose on 11th August in the morning (as confirmed in the nursing cardex). Also on the prn side of the drug cardex on admission to Gosport on the 11th August, Diamorphine 20 – 200 mgs is prescribed subcutaneously but never given. Hyoscine 200 – 800 mgs and Midazolam 20 – 80 mgs in 24 hours subcutaneously are both written up on 11th August. Neither of these two drugs are given until her subsequent return from Haslar.

3.10 On 14th August she is transferred back to Haslar where a dislocation of a hip is confirmed by x-ray (H67) and is reduced under sedation (H67). She has an uneventful recovery and is transferred back to Gosport War Memorial on 17th August. Discharge summary mentioning Haloperidol, Lactulose, Co-codamol and Oramorphine 2.5 – 5mgs for pain (H79), although the Oramorphine was never given in Haslar.

3.11 Code A writes in the notes on the 17th August after her re-admission to the Gosport War Memorial Hospital to continue Haloperidol and only give Oramorphine if in severe pain (30), and that she wishes to see the Code A again. There is no record of any assessment of Code A 's mental or physical state on transfer except a statement 'now appears peaceful'. Yet the nursing cardex 17th August says patient distressed and appears to be in pain (45). In the afternoon of 17th August, states, "in pain and distress, agree with Code A to give her Code A Oramorphine 2.5 mgs in 5 mls". It is possible Code A only saw the patient after she had been given Oramorphine. Due to the pain, a further x-ray is ordered and no dislocation is seen (46) (75).

3.12 On 18th August, Code A notes the patient is still in great pain, nursing is a problem, she suggests subcutaneous Diamorphine, Haloperidol and Midazolam and that she will see the daughters. The nursing cardex records the decision to pain control by syringe driver (46). She then receives Diamorphine 40 mgs daily in a syringe driver, with Haloperidol 5 mgs and 20 mgs Midazolam until her death on 21st August 1998.

3.13 An unusual feature of the original Gosport War Memorial Drug Chart (64) is that Oramorphine 2.5 mgs 4 hourly was written up on the regular prescription side on the 11th August, together with 5 mgs at night regularly. It then has the letters prn against both of these prescriptions which make no sense(62).

Drug	Date prescribed	Prescribed as	Prescriber	Given		
Oramorphine	11/08	10 mgs in 5 mls 2.5 – 5 mls 4 hourly Oral PRN	Code A	11/08	?	10 mgs
				11/08	1145	10 mgs
				12/08	0815	10 mgs
				12/08	2050	10 mgs
				14/08	1150	10 mgs
				17/08	1300	5 mgs
				17/08	?	5 mgs
				17/08	?	5 mgs
				17/08	2030	10 mgs

				18/08 ? 10 mgs 18/08 0400 10 mgs
Diamorphine	11/08	20 – 200 mgs S/C in 24 hours PRN	Code A	Never given
Midazolam	11/08	20 – 80 mgs S/C in 24 hours PRN	Code A	18/08 1145 20 mgs 19/08 1120 20 mgs 20/08 1045 20 mgs 21/08 1105 20 mgs
"PRN" Oramorphine	12/08	10 mgs in 5 mls 2.5 mgs oral 4 hourly Regular	Code A	Never given or crossed off
"PRN" Oramorphine	12/08	10 mgs in 5 mls 5 mgs oral nocte Regular	Code A	Never given or crossed off
Diamorphine	18/08	40 – 200 mgs S/C in 24 hours Regular	Code A	18/08 1145 40 mgs 19/08 1145 40 mgs 20/08 1045 40 mgs 21/08 1105 40 mgs
Haloperidol	18/08	5 -10 mgs S/C in 24 hours Regular	Code A	18/08 1145 5 mgs 19/08 1145 5 mgs 20/08 1045 5 mgs 21/08 1105 5 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 Code A was suffering from the terminal stage of a dementing process, probably Alzheimer's disease. This is reflected in the comments earlier in 1998 by a consultant psycho-geriatrician that she had end stage disease and the well-documented progression of this over many years. Despite this though, she was still able to get around in the nursing home and as is often the case, even with the best forms of monitoring, having multiple falls.

4.3 As a result of one of these, she suffers a fractured neck of femur. Sadly this is very common, it is also common for the original fall to lead to a partial fracture which is not diagnosed and then only subsequently sometimes hours, sometimes days later, does it become a clinically

obvious fractured neck of femur. Patients with dementia and fractured neck of femur are often missed in hospitals as well as in nursing homes, even by the most astute of staff.

4.4 She has a successful hemi-arthroplasty in Haslar, receives pain relief but does not need any pain relief for the 3 days on 7th – 10th August. She remains highly dependent though with a Barthel of 3/20. Although she is described as weight bearing in Haslar, the Barthel describes no mobility at all as does the fact that a hoist is needed for transfer at Gosport War Memorial. Many patients with severe dementia, never walk again after a fractured neck of femur and indeed the mortality rate in the months after a fractured neck of femur is extremely high, particularly in the very elderly and those with mental impairment.

4.5 However, she survives the first operation and is seen by Code A Consultant Geriatrician who believes that she should be transferred to Gosport War Memorial to see if any mobility can be regained. This is not unreasonable; it may make her new placement in a nursing home easier if she is able to have some increase in independence.

4.6 When she is transferred to Gosport War Memorial Hospital she is seen by Code A who fails to record a clinical examination apart from a general statement she is a frail and demented lady. However, she does state she is not obviously in pain. Despite this, she has written up her drug charts for both low dose of Oramorphine and a high dose of Diamorphine. I can find no clinical justification for these decisions in the notes. If she was worried about pain and feared that it would be hard for the nursing staff to get hold of the doctor, then it would be reasonable to write up a prn of a mild pain killer such as Paracetamol and possibly doses of weak Opioid if simple analgesia did not work. Code A also writes up on the regular prescription side a significant dose of Oramorphine, although this has prn put next to it. I believe all this prescribing to be very poor, and in my view negligent, medical practice.

4.7 In paragraph 15 of Code A police statement (12 June 2001) she states "Given my assessment that she was in pain I wrote a prescription for a number of drugs on the 11th August, including Oramorph and Diamorhine". I can find nothing in the notes to support this statement.

In the same report (paragraph 22) Code A states referring to her readmission on the 17th August that "I was not aware that she had been having intravenous Morphine at the RHH until shortly before her transfer". I can find no evidence to support this statement in the Hasler notes. The only intravenous Morphine she received in Hasler was around the time of the first operation, the last dose given on 2nd August.

4.8 Oramorph is actually given by the nursing staff on 11th, 12th and 13th, certainly prior to the definite diagnosis of the dislocation. I can find no justification for giving the drugs in the medical or nursing notes. The comment on the 14th August that pain relief has been a problem, probably relates to the dislocation after the fall on the 13th. If no reason can be documented or proven, then this is certainly very poor drug prescribing and management. Indeed to prescribe a controlled drug without a clinical indication must be considered negligent in my view.

4.9 She is identified as having had dislocation of hip by the 14th August. This probably resulted from the documented fall and is not uncommon in frail older people after a fractured neck of femur repair. The Oramorphine that had been given might have contributed in part to this, though she was also on major tranquillisers and suffering from severe dementia. All of which makes such an outcome more likely.

4.10 She then returns to Haslar Hospital. The dislocation is reduced under intravenous sedation, and she is then returned back to Gosport War Memorial. She is never right from the moment she returns. She is now documented to be in significant pain. No cause for this pain is suggested in the notes. In my view it would have been appropriate for Code A to discuss Code A with the surgical team at Haslar Hospital, or with her consultant, to decide if anything further should be done at this stage. Unfortunately, not only is the mortality high after a single operation in a patient with end stage dementia but having a further operation is often an agonal event. The cause of her pain remains unexplained and when seen on the 17th by Code A is "now appears peaceful". It is possible Code A Code A only saw her after she had been given Oramorphine, if this is the case it would be poor medical practice, as she would not have been reassessed as to the medical cause of her pain and distress.

However it seems to me that it would be not unreasonable at this stage if nothing more can be done medically, to provide palliative care and pain relief. Diamorphine is specifically prescribed for pain and is commonly used for pain in terminal care. Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. Diamorphine subcutaneously after oral morphine, is usually given at a maximum ratio of 1 – 2 (i.e. up to 10 mgs Diamorphine in 20 mgs of Oramorphine). The maximum amount of Oramorphine she had received in 24 hours was 45 mgs prior to starting the syringe driver pump. Thus if her pain was not controlled, it would be appropriate to give a higher dose of Diamorphine and by convention this would be 50% greater than the previous days (Wessex Guideline) but some people might give up to 100%. A starting dose of Diamorphine of 20 – 40 mgs in 24 hours would seem appropriate. Code A was prescribed 40 mgs, which in my view is just within prescribing guidelines yet seem high for someone who had been identified as "sensitive to Oramorph" by Code A on the 14th

August (29).

4.11 Midazolam is widely used subcutaneously in doses from 5 – 80 mgs for 24 hours and is particularly used for terminal restlessness. The dose of Midazolam used was 20 mgs for 24 hours which is within current guidance, although many believe that elderly patients may need a lower dose of 5 – 20 mgs per 24 hours (Palliative Care. Chapter 23 in Brocklehurst's Text Book of Geriatric Medicine 6th Edition 2003).

4.12 It was documented that Code A is peaceful on this dose in the syringe driver and a rattly chest is documented in the medical notes on 21st prior to her death (30).

4.13 I understand the post mortem and the cause of death said:
1a Bronchopneumonia.
In my view the correct Death Certificate would have said:
1a Fractured Neck of Femur
2 Severe dementia.
There is no doubt that after people have been dying over a number of days, if a post mortem is performed, then secretions and changes of Bronchopneumonia are often found in the lungs as the very final agonal event. This allows clinicians to put the phrase "Bronchopneumonia" on the death certificate.

5. OPINION

5.1 Code A presents an example of a common, complex problem in geriatric medicine. A patient with one major progressive and end stage pathology (a dementing illness) develops a second pathology, has surgery, has a complication after that surgery, has more surgery and gradually deteriorates and dies.

5.2 However there were significant failings in the medical care provided to Code A, in particular:

- The failure to undertake a clinical examination, or to record it if it was undertaken on admission to the Gosport War Memorial Hospital.
- The PRN prescription of strong opioid analgesic on admission to the Gosport War Memorial Hospital without any explanation.
- The use of strong opioid analgesia on the 11th, 12th and 13th of August without any explanation. A decision that might have contributed to her hip dislocation.
- The failure to write up milder analgesic PRN on first admission to the Gosport War Memorial Hospital.
- The possible evidence that Code A was only reviewed medically after receiving further doses on Oramorphine on her readmission to the Gosport War Memorial Hospital on the 17th August.

- The failure to ask for specialist advice as to the cause of the continuing pain after the re-operation and second admission to the Gosport War Memorial Hospital.

5.3 There were deficiencies in the use of the drug chart at the Gosport War Memorial Hospital, in particular:

- The prescription of a large range of PRN Diamorphine on the PRN side of the drug chart.
- The "PRN" Oramorphine on the 'Regular' side of the drug chart, which is never given or crossed off.
- The prescription of a large range of a controlled drug (Diamorphine) on the regular side of the drug chart.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.

6. 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.

7. 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.

Code A

Signature: Date: 9 July 2008

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Version 4 of complete report June 04 2008 – Code A

SUMMARY OF CONCLUSIONS

Code A

Code A gentleman with a number of chronic problems, in particular, gross (morbid) obesity. He is known to have had leg ulcers and is admitted with a common complication of severe cellulitis. His immobility and infection leads to significant and serious pressure sores in hospital. He develops a probable gastric or duodenal ulcer (again common in patients who are seriously ill), which continues to bleed slowly, then has a massive gastro-intestinal haemorrhage in the Gosport War Memorial Hospital which is eventually the cause of death.

However there were failings in the medical care provided to Code A and also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital.

1. INSTRUCTIONS

To examine the medical records and comment upon the standard of care afforded to the patient in the days leading up to his 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 his 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.

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

3.1 Code A gentleman in 1999 was admitted as an emergency on the 6th August 1999 to Portsmouth Hospitals NHS Trust following an attendance at A&E (40,42).

3.2 Code A had suffered from gross (morbid) obesity for many years, he had also had venous leg ulceration for at least five years (44), he was hypertensive and had a raised prostatic specific antigen, suggesting prostatic pathology. (8)

3.3 Following a fall at home he was completely immobile on the floor and two ambulance crews were needed to bring him to accident and emergency (42). He was currently receiving District Nursing three times a week for leg ulcer management (255). He had become increasingly immobile

complicated by the fact that Code A who lived with him and provided care was being investigated for breast cancer. The admission clerking showed that he not only had leg ulcers but he had marked cellulitis, was pyrexial and in atrial fibrillation. Cellulitis was both in his groin and the left lower limb (45). He was totally dependent needing all help (143) with a Barthel of 0 (163). His white cell count was significantly raised at 25.7 (48), his liver function tests were abnormal with an AST of 196 and his renal function was impaired with a urea of 14.9 and a creatinine of 173 (47). These had all been normal earlier in the year. He was treated with intravenous antibiotics (45) in a special bed (187).

3.4 He appeared to make some progress and on 9th August his cellulitis was settling (48). A Haemolytic Streptococcus sensitive to the penicillin he had been prescribed was identified (225). On 11th August the nursing cardex (134) stated that there appeared to have been a deterioration of his heel ulcers with a "large necrotic blister on the left heel". His haemoglobin on 12th August (211) was 13.5.

3.5 On 13th August white count was improved at 12.4 (50,52), his U's and E's were normal and the notes recorded a planned transfer to the Gosport War Memorial Hospital on 16th August.

3.6 Later on the 13th black bowel motion is noted but the doctor who examines him records a brown stool only. It is not clear whether he has had a gastro intestinal bleed (52). On 16th August no comment is made on the possible gastrointestinal (G.I) bleed, but on 20th August his haemoglobin is noted to be 12.9 (53) no further black stools have been reported so he is planned for transfer on 23rd August. Albumin at this stage is now reduced at 29 (190).

3.7 On 17th August sacral sores are now noted in the nursing cardex (118) which by the 20th are now recorded as "deep and malodorous" (125).

3.8 He is transferred to the Gosport War Memorial Hospital on 23rd August (54). A brief history and examination is undertaken which notes that there was a history of possible melaena, the clinical examination recorded suggests that he is stable. Blood tests are requested for the next day. The drug chart (168) suggests that his weight is 148 kgs but it is not clear if this is an estimate or a measurement. He is very dependent with a Barthel of 6 and a Waterlow score of 18, putting him in high risk. His haemoglobin on 24th is 12 (207). The nursing cardex on the 24th notes the multiple complex pressure sores on both the buttocks and the sacrum (96-100).

3.9 On 25th August the nursing cardex reports that he is passing blood rectally and also vomiting (62, 82).

3.10 On 26th August Code A is asked to see him and records that he is clammy and unwell. (55) The notes suggest that he might have had a myocardial infarction and suggests treating him with Diamorphine and Oramorphine overnight. It records that as an alternative there might be a G.I. bleed but this is recorded as unlikely because he has not had haematemesis. It also notes that he is not well enough to transfer to an acute unit and he should be kept comfortable, including "I am happy for the nursing staff to confirm death". His Clexane (an anticoagulant given to prevent pulmonary embolus) is now stopped. The nursing cardex (62) on the same day records further deterioration throughout the day with pain in his throat and records a verbal request for Diamorphine. A full blood count is taken (this fact is not recorded in the notes) but the result is filed in the notes recording a haemoglobin markedly reduced at 7.7 (205). It also states "many attempts were made to phone Gosport War Memorial Hospital but no response from switchboard". These significant results are not commented on at any stage in the nursing or clinical notes.

3.11 On 27th August (63) the nursing notes record some improvement in the morning but discomfort in the afternoon especially with dressings. On 28th August both the medical (55) and the nursing records (63) are noted to be very poorly with no appetite. Opiates are to continue over the weekend. 29th August he is sleeping for long periods (63) and on 30th he is still in a very poor clinical condition but eating very small amounts of diet. He is re-catheterised the same day (55).

3.12 On 31st he is recorded as passing a large amount of blood rectally (83) and on the 1st September (55 and 64) he is reviewed by a consultant Code A Code A who notes that he is continuing to pass melaena stool, there are pressure sores across the buttocks and posterior aspects of both thighs, he is now significantly confused. Code A records that he should be for TLC only and that Code A is now aware of the poor prognosis. Nursing notes (64) note that the dose of drugs in the syringe driver should be increased; the previous doses were not controlling his symptoms. The nursing notes of the 2nd September (62) record the fact the Diamorphine is again increased on the 2nd to 90mgs and on 3rd September he dies at 13.50 in the afternoon (55, 64).

3.13 Drug Chart review: There are two drug charts. Chart 1 (174-178) confirms his original admission to Portsmouth Hospital Trust in particular the appropriate use of the antibiotics, Penicillin, Flucloxacillin and the prescription of the anticoagulant Clexane. This goes from 6th August – 23rd August. Paracetamol is the only analgesic given in Portsmouth.

3.14 The second drug chart (168-172) goes from his admission to the Gosport War Memorial Hospital on 23rd August to his death on the 3rd September. The once only part of this drug chart on 26th August states Diamorphine IM 10 mgs verbal message given 18.00 hours. Then apparently two days later on 28th August, Diamorphine IM 10 mgs signed Code A This is never given, this may be a retrospective attempt to legitimise the prescription given verbally 2 days before.

3.15 On the 'as required' part of the drug chart only Gaviscon and Temazepam are written up. On the regular side of the drug chart Doxazosin, Frusemide, Clexane (until 25th August) Paracetamol, Magnesium, Metoclopramide and Loperamide are all written up. Though some of these drugs like the Magnesium appear to have been given in a "as required" fashion. Oramorphine (171) though written up regularly is never given. Diamorphine 40 – 200 mgs subcut in 24 hours is prescribed on the 26th (171) and appears to have been given as 40mgs on 30th, 31st, 1st changed to 60 mgs on 1st September and 90mgs on 2nd September. The drug chart is extremely confusing (171) as these prescriptions have not been properly put in the day and date boxes required, and the nursing staff appear to be putting two days of prescribing into a single day box. Midazolam 20 – 80 mgs subcut in 24 hours is written up and Midazolam is probably given 20 mgs on the 30th and 31th August, 40mgs on 1st September, changed to 60mgs on 1st September and given 80mgs on 2nd September.

3.16 On the next regular page of the drug chart (172) Oramorphine 10-20mgs 4 hourly is written up and is signed up to have been given for 4 doses daily on 27th, 28th and 29th August, with two further doses in the morning of the 30th August. I cannot tell from the drug chart whether 10mgs or 20mgs is actually given. Oramorphine is written up 20mgs at night and given on 26th, 27th, 28th and 29th August. Hyoscine is written up but never given, although it is prescribed as a regular prescription.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Diamorphine	'verbal message'	10 mgs I/M start Once only part of drug chart	Code A	26/08 1800
Diamorphine	28/08 (?)	10 mgs I/M start Once only part of drug chart	Code A	Never given
Oramorphine	26/08	10 mgs 4 hourly oral Regular	Code A	Never given Never crossed off
Oramorphine	26/08	10 mgs in 5 mls 10 - 20 mgs oral Regular	Code A	27/08 4 doses 28/08 4 doses 29/08 3 doses 30/08 2 doses to 10am (Actual dose given never recorded)

Oramorphine	26/08	10 mgs in 5 mls 20 mgs nocte Regular	Code A	26/08 2200 27/08 2200 28/08 2200 29/08 2200 Never crossed off
Diamorphine	26/08	40 – 200 mgs S/C in 24 hours Regular	Code A	Not given until 30/08 30/08 1445 40 mgs 31/08 1545 40 mgs 01/09 1545 40 mgs changed to: 01/09 1915 60 mgs 02/09 1540 90 mgs
Midazolam	26/08	20 - 80 mgs S/C in 24 hours Regular	Code A	Not given until 30/08 30/08 1445 20 mgs 31/08 1545 20 mgs 01/09 1545 40 mgs changed to: 01/09 1915 60 mgs 02/09 1540 80 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 Mr Packman had a number of chronic diseases prior to his terminal admission. The most serious was his gross (morbid) obesity which led to severe immobility and non-healing leg ulcers.

4.3 He then develops an infection (cellulitis) of his leg ulcers which has spread to his groin causing his high white count, his pyrexia, then his total immobility requiring appropriate admission to the Portsmouth Hospitals NHS Trust. On admission he is recognised to be at high risk of pressure sore development and appears to have been put on a special bed. He is put "not for resuscitation" on the 11th August. This would have reflected the medical futility of trying to undertake resuscitation, but would have had no implication for any other medical treatment or decision.

4.4 He appears to make reasonable progress from the point of view of his cellulitis and is treated with appropriate antibiotics, however is noted to have developed buttock and sacral pressure sores by 17th August which are in a serious condition by 20th August.

4.5 In the meantime, a black stool is noted on 13th August and the question of whether this is melaena (blood leaking from the upper gastro-intestinal tract which turns black when passing through the gastro-intestinal tract) and whether he has a gastric or duodenal ulcer. Normally this would be investigated with an endoscopy. However this would be quite a major procedure on such a dependent gentleman. Although in retrospect it is easy to say that this was the first bleed, it would not have been clear at the time, the lack of further melaena and the fact that haemoglobin does not significantly fall over the next week, suggests that conservative management was appropriate. However, he is not put on any prophylactic anti-ulcer medication and his anticoagulant is continued. In retrospect both of these decisions may have contributed to his subsequent problems.

4.6 He is transferred to the Gosport War Memorial Hospital on 23rd August. The prognosis for a patient with gross obesity, who is catheterised, and who has recent deep and complex pressure sores is terrible. In my experience such patients often deteriorate despite the best efforts of staff and die in hospital. He is clerked on admission and appropriate investigations carried out including haemoglobin which is now 12. Although by itself this is a normal haemoglobin his level of haemoglobin has very slowly drifted down and again in retrospect suggests that he was starting to bleed slowly.

4.7 On 25th August the nursing staff note that he is passing blood rectally and he is vomiting, although the medical staff do not appear to have been asked to seem him, or if they do, no notes are written and no examination is undertaken. However on the 26th August he is seen when he is unwell, very cold and clammy. Code A suggests the likeliest diagnosis is a myocardial infarction, although appropriately she does think of a gastro-intestinal bleed. No examination is recorded in the notes, nor are some simple and appropriate investigations undertaken (for example an ECG), to try and differentiate these two problems. However a blood count is sent to the laboratory and haemoglobin has now fallen to 7.7. Code A has had a massive gastro-intestinal bleed, this is now a re-bleed and in itself would be a marker of significant risk of death. Proven re-bleed needing more than 4 units of blood would in a previously fit patient over 65 be an indication for an emergency operation. However as the laboratory cannot inform the hospital of this result, no-one would appear to have brought it to medical or nursing attention.

4.8 Despite this there is an important decision to be made on the 26th August. Whatever the cause, Code A identifies that the patient is seriously ill and the acute problems whether a G.I. bleed or a myocardial infarction would not be appropriately managed in a community hospital.

Code A makes the decision that the patient is too ill for transfer and should be managed symptomatically only at Gosport. In my view this is a complex and serious decision that should be discussed with the consultant in charge of the case as well as with the patient and their family if possible. I can find no evidence of such a discussion in the notes. It is my view however, that in view of his other problems it is within boundaries of a reasonable clinical decision to provide symptomatic care only at this stage. The chances of surviving any level of treatment, including intensive care unit and surgery were very small indeed.

4.9 Code A deteriorates further in the evening and is prescribed a single dose of Diamorphine as a result of a verbal request. In paragraphs 5.13 – 5.16 I have identified significant failings in the way the drug chart has been used and written up. Controlled drugs are given on at least one occasion based on a verbal request and the prescription apparently written 2 days later. Regular drugs are written up and never given. The drug chart is used in a most irregular fashion and I do not believe that the standards of medical prescribing or nursing delivery meet the expectations of regulations on the prescription in the use of controlled drugs.

4.10 From the 26th August Code A is slowly deteriorating and after a single dose of Diamorphine, then from the evening of 26th August, receives regular Oramorphine, then Diamorphine, and Midazolam until his death. Both Oramorphine and Diamorphine while specifically prescribed for pain are commonly used to manage the stress and restlessness of terminal illness. Diamorphine is compatible with Midazolam and in itself is particularly used to terminal restlessness, and can be mixed in the same syringe driver. It is very difficult to assess the actual starting dose of Oramorphine from the notes and he appears to receive either 60mg or 100mg in total on the 27th. Calculating the dose would be complicated in this case due to his the massive obesity which might well effect the oral dose required, together with his serious pressure sores which might have been extremely painful on being dressed. However, there is no documentation in the notes to justify the decision as to why opioid drugs are actually started, or the choice of starting dose, nor is any pain problem or assessment mentioned. Indeed it is not clear if the decision to start the syringe driver is a medical or nursing decision. This lack of documentation is poor medical practice.

He appears subsequently to have been started on 40mgs of Diamorphine in 24 hours together with 20mgs of Midazolam. The dose of s/c Diamorphine is usually given in a ratio of 1:2, so 30mg might have been the equivalent of the dose of 60mg of Oramorphine. However I can find no evidence in the notes that there were any significant side effects from

the Oramorphine or the Diamorphine, and his symptoms do seem relatively well controlled as described in the nursing notes.

4.11 He is reviewed by a consultant Code A on 1st September where it has now become absolutely clear that it is a gastro-intestinal haemorrhage which is causing his death on top of his other problems. Code A is happy with the management and later in the day the Diamorphine is increased as the previous dose is aparently no longer controlling his symptoms. However, the dose of Midazolam is increased from 20 mgs to 60 mgs over 28 hours between 30th August and the 1st September. It is not clear if this is a medical or nursing decision and no record is made in the notes. This is poor medical practice. Further increase of 50% in dosage occurs on 2nd September and he dies the following day.

4.12 In my view a death certificate should read:
1a Gastro-intestinal haemorrhage
2 Pressure sores and morbid obesity

The police report states that the cause of death on the death certificate was 'myocardial infarction'. If so this was inaccurate and misleading.

5. OPINION

5.1 Code A was a Code A year old gentleman with a number of chronic problems, in particular, gross (morbid) obesity. He is known to have had leg ulcers and is admitted with a common complication of severe cellulitis. His immobility and infection leads to significant and serious pressure sores in hospital. He develops a probable gastric or duodenal ulcer (again common in patients who are seriously ill), which continues to bleed slowly, then has massive gastro-intestinal haemorrhage in the Gosport War Memorial Hospital which is eventually the cause of death.

5.2 However there were failings in medical care provided to Code A in particular:

- Gastro-intestinal haemorrhage is suspected in Portsmouth but although never disproven he is continued on an anticoagulant.
- The failure to have a medical assessment, or to record one if it happened, after a gastro-intestinal bleed is recorded by the nursing staff on 25th August.
- The failure of Code A on the 26th August to undertake investigation to exclude the first diagnosis made (myocardial infarction) and the failure to review the investigation that was undertaken, the full blood count.
- The apparent failure of the Gosport War Memorial Hospital switchboard to answer calls.

- The failure to ask for senior medical opinion at the time of a complex and serious medical decision on the 26th August.
- The failure to document any reason for both starting regular opioid medication and possible high starting dose of Oramorphine on the 27th August.
- The failure to document any reason to start the syringe driver on the 30th August and whether that was a medical or nursing decision.
- The failure to record any need for the 300% increase in Midazolam dosages between 31st August and the evening of 1st September.
- Writing myocardial infarction not gastro-intestinal haemorrhage as the cause of death on the death certificate.

5.3 There are also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital, in particular:

- The prescription of Diamorphine by verbal message.
- The regular prescription given for regular Oramorphine, which is never crossed out.
- The failure on 29th August to give a regular dose of Oramorphine, without explanation.
- The failure to give Diamorphine and Midazolam for the 26th, when written up as a regular prescription.
- The failure to cross off the regular dose of Oramorphine on the 30th August.
- The failure to record any of the actual doses of Oramorphine given between 27th and 30th August.
- The use of the regular side of the drug chart for variable doses of drugs given in the syringe driver, and the failure to rewrite prescriptions when changing doses.
- The failure to write dosages of controlled drugs in words and figures as well as the total to be given.

6. 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.

7. 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: 9 July 2008

8

SUMMARY OF CONCLUSIONS

Code A

Code A was an Code A year old gentleman with a long recurrent history of severe depression resistant to treatment. This was complicated by drug induced parkinsonism and subsequent mental and physical frailty and dependency. His admission to the Gosport War Memorial Hospital Mental health beds on the 29th November and subsequent transfer to a medical bed on the 5th January 1997 was the end point of these chronic disease process. He continues to deteriorate and dies on the 24th January 1997.

However there were significant failings in the medical care provided to Code A and also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital

1. INSTRUCTIONS

To examine the medical records and comment upon the standard of care afforded to the patient in the days leading up to his 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 his 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.

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence, M = microfilm notes)

3.1 Code A had a very long history of depression as clearly set out in a summary (13). In 1959 he had reactive depression, it occurred again in 1967. In 1979 he had agitation and in 1988 agitated depression.

3.2 He had a further long admission with agitated depression in 1992 (8) complicated by an episode of cellulitis (30). This culminated in an admission to long-term residential care in January 1993 (34). He had further admissions to hospital under the care of the psychiatric team including June 1993 (37) when some impaired cognition was noted. In 1995 there was a home visit for further psychiatric problems (42).

3.3 In 1995 (44) there was a change in behaviour; loss of weight and increased frailty was noted. He was falling at the residential home. He was expressing grief, frustrations and aggression. At this time his psychiatric medications included Diazepam, Temazepam,

Thioridazine, Sertraline, Lithium, and Codanthrusate for constipation. His other problems were hypothyroidism and Parkinsonism with a tremor. (Note: this was not Parkinson's disease but tremor, rigidity and akinesia which looks similar to Parkinson's disease but is actually as a result of long-term anti-psychotic medication).

3.4 On 29th November 1995 he was admitted under the psychiatrist Code A Code A (46) to Gosport War Memorial Elderly Mental Health beds. His mental test score was documented at 8/10 (50). He was discharged back to residential home on 24th October (46) with a continued diagnosis of depression (56). However, his very poor mobility and shuffling gate was noted (57).

3.5 On 13th December 1995 he was re-admitted (62) to mental health beds at the Gosport War Memorial under Code A stating "everything is horrible", he was verbally aggressive to the staff and was not mobilising and staying in bed all day. He felt hopeless and suicidal. (62).

3.6 On 22nd December, diarrhoea started and he also had chest symptoms. It was thought he had a chest infection, and was treated with Erythromycin, (64). On 27th December he was "chesty, not himself", and his bowels were causing concern. The physiotherapist noted that he had signs in his chest (65). A second course of a different antibiotic (Cephalosporin) was prescribed (81). The nursing cardex documents that he started becoming faecally incontinent on 20th December and then had further episodes of diarrhoea (140). It is also noted that by 1st January (147) he was drowsy with very poor fluid intake.

3.7 On 2nd January 1996 Code A, consultant geriatrician was asked to. see (66) and on 3rd January he was noted to be clinically deteriorating with poor food intake (66), albumin of 27 (67). An abdominal x-ray on 27th December describes possible "pseudo-obstruction" (116). This is a condition when the large bowel fails to work and starts to dilate, usually in patients who have multiple illnesses including Parkinsonism, electrolyte imbalance, infections, antibiotics and other drugs. Prognosis is often poor and depends on resolving the underlying causes.

3.8 On 4th January 1996 Code A is seen by Code A Consultant Geriatrician who noted severe depression, total dependency, catheterisation, lateral hip pressure sores and hypoproteinaemia. (67). He states that the patient should be moved to a long-stay bed at the Gosport War Memorial Hospital and that his residential home place should be given up as he was unlikely to return. On 5th January he is transferred to Dryad Ward for "long-term care" (151). Code A also states (5M) " Code A is aware of the poor prognosis".

3.9 Medical notes after transfer (13M and 15M). On 5th January a basic summary of the transfer is recorded, no clinical examination is either undertaken or recorded.

On the 9th January increasing anxiety and agitation is noted and the possibility of needing opioids is raised. The nurses cardex on 9th said that he is sweaty and has "generalised pain" (25M). On 10th January a medical decision is recorded "for TLC". In the medical discussion (13M) with the wife also apparently agrees "for TLC". I am not sure of the signature of 10th January in the medical notes (13M). The nursing cardex records they commenced Oramorph and that Code A is

aware of the poor outcome (25M).

3.10 On 15th January the nursing notes document that a syringe driver has been commenced (25M) and by the evening the patient is unresponsive (26M). However on 16th January there is some agitation when being attended to and Haloperidol is added to the syringe driver (26M). On the 17th the patient remains tense and agitated, (27M) the nursing cardex states that Code A attended, reviewed and altered the dosage of medication. The syringe driver is removed at 15.30 hours and the notes say "two drivers" (27M).

3.11 The next medical note is on 18th January, eight days after previous note on 10th January. This states further deterioration, subcut analgesia continues .... try Nozinan. On 20th January the nursing notes state that Code A was contacted regarding the drug regime and there was a verbal order to double the Nozinan and omit the Haloperidol (28M). This is confirmed in the medical notes on 20th January (15M). The medical notes on 21st January state "much more settled", respiratory rate of 6 per minute, not distressed and on 24th January the date of death is verified by Staff Nurse Martin in the medical notes (15M).

Note: Nozinan is a major tranquilliser similar to Chlorpromazine but more sedating. It is usually used for patients with schizophrenia and because of its sedation is not usually used in the elderly, though it is not completely contraindicated. Used subcutaneously in palliative care for nausea and vomiting at a dose of 25 - 200 mgs for 24 hours although British National Formulary states that 5 - 25 mgs for 24 hours can be effective for nausea and vomiting with less sedation.

3.12 Drug Chart Analysis:

On 5th January at transfer (16M), Code A is written up for the standard drugs that he was on in the mental health ward including his Sertraline and Lithium (for his depression) Diazepam (for his agitation) Thyroxine for his hypothyroidism. The drug chart also had Diamorphine 40 - 80 mgs subcut in 24 hours, Hyoscine 200 - 400 micrograms subcut in 24 hours and Midazolam 20 - 40 mgs subcut in 24 hours. Midazolam 80 mg subcut in 24 hours written up but not dated and never prescribed. (18M)

3.13 On 10th January, Oramorph 10 mgs per 5 mls is written up for 2.5 mls four hourly and prescribed on the evening of 10th and the morning of the 11th. On the 11th Oramorph 10 mgs per 5 mls is written up to be given 2.5 mls 4 hourly 4 times a day with 5 mls to be given last thing at night. This is then given regularly between 11th and up to early morning on 15th January. This is a total daily dose of 30 mgs of Morphine (19M). The Lithium and Sertraline are crossed off after the 10th January.

3.14 Diamorphine 80 - 120 mgs subcut in 24 hours is written up on 11th January "as required" as is Hyoscine 200 - 400 micrograms in 24 hours, Midazolam 40 - 60 mgs in 24 hours. 80 mgs of Diamorphine together with 60 mgs of Midazolam are then started by syringe driver on the morning of the 15th January and re-started on both the mornings of the 16th and 17th January. (18M). On 16th January Haloperidol 5 mgs - 10 mgs subcutaneous for 24 hours is written up, prescribed over 24 hours on both 16th and 17th, 1 am not clear if this was mixed in the other syringe driver or was the "second pump" referred to in the nursing cardex. (20M and 27M)

Diamorphine 120 mgs subcut in 24 hours is then prescribed on 18th January, together with Hyoscine 600 mgs subcut in 24 hours. The drug charts (20M) show this starting on the morning of 17th January and at 08.30 hours. If this correct there may have been up to three syringe drivers running, one with Diamorphine 80 mgs, one with Diamorphine 120 mgs in and one with the Haloperidol. The reason for this confusion needs clarification, but is possibly a nursing error with the drug chart.

The subsequent drug charts all appear to be missing for the final 6 days, however the nursing notes (27M, 28M and 29) suggest that there was a fairly constant prescription of 120 mgs of Diamorphine 24 hours, Midazolam 80 mgs 24 hours, Hyoscine 1200 mgs, Haloperidoi 20 mgs and Nozinan 50 mgs. On the 20th there was no Haloperidol and the Nozinan was increased 100 mgs a day. This is still the prescription on 23rd January (27M).

Drug	Date prescribed	Prescribed as	Prescriber	Given
Oramorphine	10/01	10 mgs in 5 mls 2.5 mls, 4hrly oral Regular	Code A	10/01 2200 11/01 0800 (never crossed out)
Diamorphine	?	40 mgs S/C in 24 hours Regular	Code A	Never given or crossed off
NEW DRUG CHART				
Midazolam	?	20 - 40 mgs S/C in 24 hours Regular	Code A	Never given or crossed off
Diamorphine	11/01	80 – 120 mgs S/C in 24 hours PRN	Code A	15/01 ? 80 mgs 16/01 0815 80 mgs 17/01 ? 80 mgs
Midazolam	11/01	40 – 60 mgs S/C in 24 hours PRN	Code A	15/01 ? 60 mgs 16/01 ? 60 mgs 17/01 ? 60 mgs
Midazolam	? 16/01	80 mgs S/C in 24 hours PRN	Code A	Never given
Oramorphine	11/01	10 mgs in 5 mls Oral 2.5 mls 4 hourly Regular	Code A	Regular doses 4 times a day until 0600 on 15/01 No further doses Not crossed off
Oramorphine	11/01	10 mgs in 5 mls Oral 5 mls nocte	Code A	11/01 – 15/01 2200 No further doses Not crossed off
Diamorphine	18/01	120 mgs S/C in 24 hours	Code A	"17/01" 0830 120 mgs (probably 18/01)

4. TECHNICAL BACKGROUND AND EXAMINATION OF THE FACTS IN ISSUE

4.1 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 Code A. Also if the actions or omissions by the medical team, nursing staff or attendant GP's contributed to the demise of Code A in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 In particular I will discuss a) whether Code A had become terminally ill and if so whether symptomatic treatment was appropriate and b) whether the treatment provided was then appropriate.

4.3 Code A has an unfortunate long history of depression, which had become more difficult and complex to manage and increasingly distressing in terms of his agitation related to his depressive symptomatology.

4.4 He had many treatments including high levels of drug treatment over many years and many episodes of electro convulsive treatment (ECT).

4.5 The complex and unresolved psychiatric problem led to a requirement to move to a residential accommodation in 1993. However he had further relapses and problems in 1995. A change occurred by September 1995 where the residential home was now noticing weight loss, increasing frailty and falls. Although a subsequent admission only came to the conclusion that he was depressed I have no doubt that his terminal decline was starting from that time.

4.6 By October 1995 he had extremely poor mobility and a shuffling gate. When re-admitted in December is aggressive, essentially immobile and extremely mentally distressed alongside his increasing physical frailty.

4.7 It is impossible in retrospect to be absolutely certain what was causing his physical as well as his mental decline. It may be that he was now developing cerebrovascular disease on top of his long standing drug induced Parkinsonism together with his persistent and profound depression agitation. It is not an uncommon situation for people with long standing mental and attendant physical problems, to enter a period of rapid decline without a single new diagnosis becoming apparent.

4.8 His deterioration is complicated by a probable chest infection (64, 81), which does not respond particularly well to appropriate antibiotic and physiotherapy treatment. He also has bowel complications attendant on all his other medical and drug treatment (116).

4.9 Code A psychiatric service asked Code A Consultant Geriatrician, to see the patient on 2nd January and he is actually seen on 4th January 1996. Code A Code A describes a very seriously ill gentleman. His comments that a long-stay bed will be found at the Gosport War Memorial and that he is unlike to return to his residential bed, reflect the fact that it was probably in his mind that this gentleman was probably terminally ill.

4.10 Code A is then transferred to Dryad Ward and is apparently seen by Code A Code A. A short summary of his problems is written in the notes but no physical examination, if undertaken, is documented. The lack of an examination, or record of an examination, if undertaken, would be poor clinical practice.

4.11 It remains clear from the nursing record that he remains extremely frail with very little oral intake on 7th January (25M). When seen again by Code A on 9th, there is the first note suggesting that Opiates may be an appropriate response to his physical and mental condition.

4.12 It is my view that this gentleman by this stage had come to the end point of a series of mental and physical conditions and that his problems were now irreversible. The decision that he was now terminally ill and for

symptomatic relief seems to have been made appropriately with both the family and the ward staff and there was no disagreement with this decision.

This is indicated in the medical notes by the comment "for TLC" (13M) together with the statement that it was discussed with Code A "for TLC" (note TLC. tender loving care). Beyond the statement in the medical notes that the patient was "for TLC" there is no specific justification given for the Oramorph, in particular, to be started. The notes are at best very sparse making a full assessment of Code A mental and physical state extremely difficult. In particular, there is a failure to offer any detailed assessment of the pain, agitation or distress he was in that would allow an objective view on his symptoms and prognosis. The lack of documentation is likely to mean that these detailed assessments did not take place.

4.13 On the 10th Oramorphine was started. Oramorphine and Diamorphine are particularly used for pain in terminal care. The nursing notes document that he had some pain; but most of his problems appeared to be restlessness, agitation and mental distress. However, despite the evidence of serious pain, morphine like drugs are widely used and believed to be useful drugs in supporting patients in the terminal phase of the restlessness and distress that surrounds dying. I would not particularly criticise the use of Oramorphine in conjunction with his other psychiatric medication at this stage. The decision is to stop non-palliative drugs like Sertraline was reasonable.

4.14

In my previous report for the police (31st Jan 2005) I wrote in paragraph 6.14:

"The Drug Chart analysis (para. 5.12) described Diamorphine, Hyoscine and Midazolam all written up to be prescribed with a dosage range. This is quite common clinical practice, the aim of which is to allow the nursing team to have some flexibility in the management of a patient needing symptom control at the end of their life without having to call a doctor to change the drug charts every time a change in dosage is needed to maintain adequate palliation."

As this could be misunderstood I wish to make it clear that this refers to the practice of allowing on the PRN side of the drug chart a small dosage range of a drug to be available for breakthrough pain or distress, as is normal in palliative care practice. It is not to support either (a) writing up large dosage ranges of drugs, or (b) the use of PRN side of the drug chart for prescription for syringe driver, both of which are poor medical practice.

4.15 The dose of Oramorph given from the early morning of 15th January was 30 mgs of morphine a day (see paragraph 3.13) (19M). On the 15th a syringe driver is started containing 80 mgs Diamorphine and 60 mgs of Midazolam. If a straight conversion is being given from Morphine to Diamorphine then you normally as a maximum halve the dose i.e. 30 mgs of Oramorphine might be replaced by 15 mgs of Diamorphine (Wessex protocol). If you are increasing the dose because of breakthrough agitation or pain then it would be normal to increase by 50% each day, some clinicians might increase by 100%. This would suggest that the maximum dose of Diamorphine to replace the stopped Oramorphine would be 30 mgs of Diamorphine in 24 hours. Starting 80 mgs of Diamorphine is approximately three times the usual expected dose. No justification is

provided in the notes for starting at approximately 3 times the dose.

I believe the dose of Oramorph originally prescribed between 11th and 15th January was appropriate if Code A was terminally ill by that stage. However, no justification is given within the notes for originally writing up the higher than usual doses of Diamorphine and Midazolam on 11th January, the same time as the Oramorph was started, nor indeed is any rationale made in the medical or nursing notes on the decision to commence the syringe driver on the 15th January. This lack of medical documentation is poor clinical practice, and without justification of the dosage used is likely to have been negligent clinical practice. Although the nursing cardex suggests it was Code A decision to start the syringe driver on the 15th (25M), nothing is recorded in the medical notes.

4.16 Midazolam was also started at a dose of 60 mgs per 24 hours. The main reason for using this is terminal restlessness and it is widely used subcutaneously in doses from 5 - 80 mgs per 24 hours for this purpose. Although 60 mgs is within current guidance, many believe that elderly patients need a lower dose of 5 - 20 mgs per 24 hours. This would again suggest that the patient was being given a higher starting dose of Midazolam then would usually be required for symptom relief. Where clinicians significantly deviate from standard clinical practice, it is poor clinical practice not to document that decision clearly.

The nursing notes documented anxiety, agitation and generalised pain for which the Midazolam and the strong opioids (Oramorph and Diamorphine) were started. Midazolam is often used for the restlessness of terminal care and although Oramorphine and Diamorphine are usually used for severe pain, in clinical practice it is often used as well for the severe restlessness of terminal care. One study of patients on a long stay ward (Wilson J.A et.al. Palliative Medicine 1987:149-153) found that 56% of terminally ill patients on a long-stay ward receive opioid analgesia. Hyoscine is also prescribed in terminal care to deal with excess secretions which can be distressing for both patient and carers. I believe this was appropriately prescribed and given.

4.17 Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. Based on the evidence suggesting unusually high dosage of these medications being used I have considered whether there was evidence in the notes of any drug complications, in particular whether giving three times the normal starting dose for both Diamorphine and Midazolam together caused excessive sedation or other side effects that might be considered negligent. I was only able to find two pieces of evidence. The first was a statement in the nursing notes (26M) that by the evening that the syringe driver was started, the patient was unresponsive. The aim of palliative care is to provide symptom relief not possible over sedation leading to unconsciousness. However, this did not continue and Code A was noted to be more alert and agitated again on the 16th.

Secondly on the 21st January (15M) a respiratory rate of 6 per minute is noted suggesting some possible respiratory depression.

4.18 A further drug, Nozinan, a sedating major tranquilliser is added to the drug regime, 50 mgs a day on the 18th January and increased to 100 mgs a day on the 20th January. Though this is within the therapeutic range in

palliative care, 25 - 200 mgs a day when it is used for nausea and vomiting, the BNF advises 5 - 20 mgs a day and that the drug should be used with care in the elderly because of sedation.

The rationale for starting Nozinan appears to be the fact that the patient had become unsettled on Haloperidol (a different sort of major tranquilizer) and Nozinan is more sedating that Haloperidol. A verbal order to increase the dose of Nozinan from 50 to 100 mgs is documented in the medical notes (M15). This suggests that the 100 mgs was not actually written up within the Drug Charts, which if true, would be poor clinical practice. The absence of the drug charts makes this harder to determine.

4.19 The prediction of how long a terminally ill patient would live is virtually impossible and even palliative care experts show enormous variation (Higginson I.J. and Constantini M. Accuracy of Prognosis Estimates by 4 Palliative Care Teams: A prospective cohort study. BMC Palliative Care 2002 1:21). The combination of the high doses of Diamorphine, the high doses of Midazolam and the high doses of Nozinan are in my view likely to have caused excessive sedation beyond the need the symptom control in this dying man. In my view the medication is likely, but not beyond reasonable doubt, to have shortened life. However, I would have expected this to have been by no more than hours to a few days had a lower dose of all, or indeed any, of the drugs been used instead.

5. OPINION

5.1 Code A was an 83 year old gentleman with a long recurrent history of severe depression resistant to treatment. This was complicated by drug induced parkinsonism and subsequent mental and physical frailty and dependency. His admission to the Gosport War Memorial Hospital Mental health beds on the 29th November and subsequent transfer to a medical bed on the 5th January 1997 was the end point of these chronic disease process. He continues to deteriorate and dies on the 24th January 1997.

5.2 However there were significant failings in the medical care provided to Code A Code A in particular:

- The failure to undertake a physical examination of the patient on admission to the medical ward at the Gosport War Memorial Hospital, or if it was undertaken, the failure to record in the notes.

- The prescription of a high dose of Diamorphine (40 – 80 mgs) on the PRN part of the drug char ton admission, without explanation.

- The failure to document a detailed assessment of his pain and distress in the notes prior to starting regular opioid treatment.

- The use of approximately 3 times the usual expected daily dose of Diamorphine when starting the syringe driver, together with a dose of 60 mgs of Midazolam, without any explanation in the notes, in my view negligent clinical practice.

5.3 There were also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital, in particular:

- The failure to cross off the regular prescription of Oramorphine and Diamorphine when rewritten on the 11th January and on the 15th January.

- The use of the PRN side of the drug chart to write up regular syringe driver medication for PRN use.

- The failure to date several prescriptions.

- Inaccurate information on the drug chart for the prescription of the Diamorphine on the 18th January.

- The failure to write dosages of controlled drugs in words and figures as well as total dosages given.

6. 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 1 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, 1 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. 1 will notify those instructing me if, for any reason, I subsequently consider that the report requires any correction or qualification.
9. 1 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.

7. 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.

Code A

Signature:

Date:9 July 2008

9

Version 6 of complete report - May 26 2008 – Code A

SUMMARY OF CONCLUSIONS

Code A

Code A was an Code A year-old lady admitted to the Haslar Hospital on 5th February 1996 following a fall and then transferred to Gosport War Memorial Hospital on 26th February 1996. She had long-standing problems with diabetes, a peripheral neuropathy, poor eyesight and registered blind. After admission she is found to be doubly incontinent, totally dependent with a probable quadriplegia, constant pains down her shoulders and arms and is found to have serious and unexplained abnormalities in various blood tests.

In the Gosport War Memorial Hospital, she fails to make any improvement, deteriorates with a bed sore that eventually becomes black and blistered. She receives pain relief and palliation for her deteriorating physical condition including subcutaneous Diamorphine and Midazolam and dies on 6th March 1996.

The expert opinion is:

> Code A provides an example of a very complex and challenging problem in geriatric medicine. It included multiple medical problems and increasing physical dependency causing very considerable patient distress. Several doctors, including Consultants, failed to make an adequate assessment of her medical condition.
>
> There are particular significant concerns about the medical management in the Gosport War Memorial Hospital, and significant failings in the use of the drug charts at Gosport War Memorial Hospital.

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.

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence, the numbers with 'H' in front are the Haslar notes, 'M' in front are the microfilm notes).

3.1 The Gosport notes record that Code A was an insulin dependent diabetes mellitus since the1940's (53). She is referred to the Diabetic Service because of more troublesome hypoglycaemia in 1984 (65). In 1985 she is known to have a mild peripheral neuropathy (73). Her weight in 1988 is 85 kgs (73) and in 1987 her weight is 89 kgs (77). By 1988 she has very poor eyesight (47M). She is also documented to have high blood pressure in 1986 (29).

3.2 Code A was admitted to Haslar hospital on 5th February 1996 through A&E having had a fall at home (H15, H16). She is recorded as having right shoulder tenderness (H25) is moving all four limbs and her cervical spine is thought to be normal, written as (CX spine√) (H16). The notes record that x-rays were taken of her skull and both shoulders (H24). In a subsequent neurological examination, she is noted to have reduced power 3/5, cannot move her right fingers and has an extensor right plantar (H24). A Barthel on the 5th (H631) is recorded as 5/20.

Her past medical history is noted as insulin dependent, diabetes mellitus for 54 years (age 29) appendicectomy and a hysterectomy. She is noted to have previous collapses in the past (H47) but without weakness, although her clerking in 1995 (H48) suggested that she might have had some sensory loss and a mild diabetic peripheral neuropathy. Her Barthel in 1995 was 14/20 (H495) and she was able to mobilise at that stage with a walking stick (H497). She had diabetes, eye disease, was registered blind in 1988 (H 97). She had hypoglycaemic episodes going back many years (H 71) and pneumonia in 1985 (H317).

On transfer to the ward, both her legs are noted to be weak 4/5 (H35) no sensory loss is noted. The notes also state she does not normally go upstairs and her bed is downstairs (H29). However, Code A stated that a large pool of blood was found at the top of the stairs (H23). She apparently goes out once a week with Code A and is forgetful but not confused (H39).

Following admission, she is seen by a physiotherapist (157) who notes pain in both shoulders, can only stand with two people and is now having to be fed, washed and dressed, when previously independent.

No further neurological examination is recorded by the Haslar medical team and she is referred to Code A on 13th February (H159). Code A actually sees her and confirms that she still has bilateral weakness of both arms and legs (H163) and finds that her left plantar is extensor (H163) confirmed in his letter (H253) but is not sure about the right plantar which has previously been found to be extensor.

The importance of this finding is that it suggests that she has a bilateral neurological event in the brain, brain stem or spinal cord somewhere above the thoracic spine.

Code A records "probable brain stem CVA"..... "she has had her neck x-rayed, I assume it was normal" (H167). I was unable to find any x-ray request recorded in the notes for a cervical spine, nor any reports of an x-ray of a cervical spine or indeed reports on the x-rays that were recorded as being requested (i.e. the skull and shoulder x-rays).

Code A notes her mild anaemia of 9.7 with an MCV of 76.5 (H17) and says that he will consider investigation into anaemia later (H164). Abnormal blood tests are also available in the notes on 9th February (H609) an albumin of 32, a Gamma GT 128 and Alkaline Phosphatase of 362. No investigations are done to determine whether these are a hepatic effect of her diabetes or other problems with the raised alkaline phosphatase potentially coming from a fracture.

Code A letter says Code A will be transferred for rehabilitation as soon as possible although his written notes say that "I'm not sure she will be able to get back home, but we'll try." She is transferred on the 22nd February 1996 to the Gosport War Memorial Hospital.

On the 20th February Code A is again seen by a physiotherapist (H165), her bilateral shoulder pain is again documented and she needs two to transfer. Reviewing her drug charts (H684 and H690) she receives regular analgesia comprising Co-proxamol and Dihydrocodeine all through her admission.

3.3 Code A is transferred on the 22nd February 1996 to the GWMH. The medical notes in Gosport (45M) 22nd February 1996 state that she "fell at home from the top to the bottom of the stairs and had lacerations on her head". It also states that she has severe incontinence and leg ulcers. Once in Gosport there is no apparent examination of the patient and no examination recorded. In some of the nursing cardex there is a series of assessments confirming that this lady is highly dependent. She has no mobility and bed rest is maintained all through her stay (100 -101). She has leg ulcers both legs (107 - 109). She is catheterised throughout, although there is no suggestion that she had a catheter prior to her admission to

hospital (111). She has a sacral bed sore noted; "a red and broken sacrum on 21st February" (115) and this progresses to a black and blistered bed sore on the 27th February (115). She is thought to be constipated on assessment, then continually leaks faeces throughout her admission (119).

3.4 Barthel is documented at 4/20 on 22nd February (165) (i.e. grossly dependent). Her mental test score is normal 10/10 on the same date (165). Lift handling score (171) also confirms high dependency.

3.5 Investigation tests reported on 23rd February 1996 find that she has a normal haemoglobin of 12.9 with a slightly reduced mean cell volume of 75.6 and gross thrombocytopenia (a low platelet count) of 36,000 (57M). The report on the film (58M) shows that this is a highly abnormal full blood count with distorted red blood cells and polychromasia. A repeat blood film is suggested. This is repeated on 27th February (57M) and thrombocytopenia is now even lower at 22,000. The urea is normal at 7.1 on 23rd February but has increased and is abnormal at 14.6 on 27th February (187). Her alkaline phosphatase is 572 (over 5 times the upper limit of normal) her albumin is low at 32 (187). No comment is made on any of these significantly abnormal blood tests in any of the Gosport notes, though the low platelet count is noted in nursing summary on 23rd February (151). The platelet count had been normal at 161 on admission to the Haslar (H17).

3.6 An MSU (59M) sent on 5th February showed a heavy growth of strep faecalis there are no other MSU or other blood culture results in the notes.

3.7 Medical progression (documented on pages 45M and 46M) is of catheterisation and treatment for a possible U.T.I on 23rd February. On 26th February, Code A records that the patient is not so well, also that Code A Code A "bottom was very sore needs Pegasus mattress institute, S/C analgesia if necessary". The family were seen regarding progress. Nursing cardex reports (153) a meeting with Code A occurred on the 24th February and state "Code A is happy for us just to make Code A comfortable". "Syringe driver explained".

3.8 The medical notes on 5th March say "deteriorated over the last few days..., in some pain, therefore start subcutaneous analgesia." On 6th March "analgesia commenced, comfortable overnight I am happy for the night staff to confirm death". It is then confirmed at 21.28 hours on 6th March.

3.9 The nursing care plan first mentions significant pain on 27th February (95) and describes pain on most days up until 5th March where the pain is uncontrolled and the patient is distressed, at which point a syringe driver is commenced (97). On 6th March pain is controlled.

3.10 **Drug management in Gosport.** I shall concentrate on the use of analgesia. Throughout the patient received appropriate doses of insulin, Co-amilofruse (a diuretic), Digoxin, Iron and steroid inhalers up unto the last twelve hours. She also received a course of Trimethoprim (an antibiotic) between 23rd and 27th February.

3.11 Morphine slow release (MST) (67M)was started at 10 mgs bd on the 24th February and is given until 26th February when MST 20 mgs bd (145)is started, this continues until the 3rd March. On 4th March Oramorph 30 mgs bd is written up and given during 4th March (139). On 5th March Diamorphine is written up 100 – 200 mgs subcut in 24 hours (137). 100 mgs is prescribed and started at 08.30 in the morning, together with Midazolam 40 mgs (137) (61M). Midazolam had been written up at 40 – 80 mgs subcut in 24 hours. Diamorphine and Midazolam pump is filled at 09.45 hours (61M) on 6th March together with another 40 mgs of Midazolam.

3.12 When admitted into hospital Dihydrocodeine PRN for pain had been written up together Hyoscine. Diamorphine 80 – 160 mgs subcut in 24 hours was written up on 26th February together with Midazolam 40 – 80 mgs in 24 hours subcut, but these drugs were never prescribed (141).

3.13 The notes document (for example page 65M) Code A was the consultant responsible for this patient although the patient only appears to have been seen medically at any stage by Code A and a different consultant Code A Code A saw the patient in the Haslar Hospital.

Drug	Date prescribed	Prescribed as	Prescriber	Given	
Dihydrocodeine	22/02	TT oral Qds, PRN	Code A	22/02 – 24/02 03/03	
Diamorphine	26/02	80 – 160 mgs S/C in 24 hours PRN	Code A	-	
Midazolam	26/02	40 – 80 mgs S/C in 24 hours PRN	Code A	-	
MST	24/02	10 mgs oral b.d Regular	Code A	24/02 25/02 26/02	2 doses 2 doses am only
MST	Probably 26/02	20 mgs oral b.d Regular	Code A	26/02 27/02 28/02 29/02 01/03 02/03 03/03	pm dose 2 doses 2 doses 1 dose 2 doses 2 doses 2 doses
NEW PRESCRIPTION CHART					
Oramorphine SR Tablets and MST (in	04/03	30 mgs oral b.d Regular	Code A	04/03 05/03	2 doses not given but prescription not

same prescription box)				crossed out.		
Diamorphine	05/03	100 – 200 mgs S/C in 24 hours Regular	Code A	05/03 06/03	0830 0845	100 mgs 100 mgs
Midazolam	05/03	40 – 80 mgs S/C in 24 hours Regular	Code A	05/03 06/03	0830 0845	40 mgs 40 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A. Also whether there were any actions or admissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A, in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 In particular I have discussed:
a) Her medical conditions
b) Whether she had become terminally ill during her admission
c) Whether the treatment that was then provided was appropriate.

4.3 Code A had a number of serious underlying medical conditions. The most serious of which was her insulin dependent diabetes mellitus going back to the 1940's complicated by hypoglycaemia's, which had led, to falls on previous occasions, peripheral neuropathy which may also contribute to falls and with a combination of diabetes and other processes she had become registered blind. She also had documented frailty prior to admission, for example, already having moved her bed downstairs with an exercise tolerance of 10 yards with a stick. Code A was documented to do her shopping (11). However, she was still living alone, was only documented to have stress incontinence (11) and was cognitively intact (MTS 10/10) (165).

4.4 She was then admitted to Haslar Hospital having had a fall, which was from the top to the bottom of the stairs. No explanation is given as to how she was at the top of the stairs, if she was already set up with her bed downstairs at home. Following this she is documented both at the assessment at Haslar Hospital and then on admission to Gosport Hospital as being severely dependent. She cannot use her arms properly, her hands and wrists are noted to be weak and she cannot stand and walk, she is so incontinent she needs a catheter and she has continual faecal leakage. Barthel is 4/10. I believe this lady was misdiagnosed and had quadriplegia from a high cervical Spinal cord injury secondary to her fall. This diagnosis appears to have been missed by all the doctors who saw her. Although the A&E notes in Haslar state

"cervical spine normal" (H18), presumably on clinical, not x-ray, grounds. Also Code A mistakenly believes she had her neck x-rayed and it was normal (H163). No-one checks this statement is correct.

4.5 Other on-going serious medical problems have also not been explained. She has a documented low platelet count on admission to Gosport, which on repeat is extremely low and at a level that makes life threatening bleeding at any time quite probable. The blood film is also highly abnormal which suggests that there is now some systemic illness going on, probably involving this lady's bone marrow. In the absence of infection or a likely drug culprit, then cancer involving the bone marrow would be a possibility. She also has a very rapidly rising alkaline phosphatase, which suggests either liver, or bone pathology. No other information is now available that would help me clarify this further.

I would have expected that these very abnormal blood tests would have been reviewed and commented on by the doctor in charge of the case. There is no point in undertaking investigations if the results are ignored. The blood results appear to be complex to interpret and I would have expected a clinical assistant or General Practitioner to have taken advice from the consultant in charge of the case as to their relevance and whether further action was required. If further discussion did take place or the results were properly looked at, this is simply not recorded in the notes.

4.6 Other evidence that this lady was frail and ill is provided by the pressure sore which appears to deteriorate during admission and a low albumin documented on admission.

4.7 In my view this lady received a negligent medical assessment in both Haslar and Gosport. In particular the cervical spine xrays, if undertaken, were not checked or reported in Haslar, she was not examined on admission to Gosport, or if she was it was not documented in the notes. Thus no medical explanation beyond the "possible brain stem CVA" is made. This would not explain all her physical symptoms, or her profound neurological deficit. Also no medical diagnosis was made for pain that she continually complained of down her arms, which again would fit with a high cervical Spinal cord fracture or similar injury. Also, no attempt was made to determine why this lady had a very low platelet count and rising alkaline phosphatase. Without making an adequate medical assessment it is impossible to plan appropriate management. The lack of an adequate medical assessment and adequate documentation make it very difficult to be certain as to what treatment should normally have been given.

4.8 There can be no doubt though that the family, Code A and the nursing staff all recognised this lady was seriously ill. Although the doctors fail to come to a diagnosis and therefore could not determine whether there was any treatable underlying problem. Evidence for this is that there was already discussion, within 2 days of admission, with the family about prognosis for recovery and how best to manage her illness. A syringe driver was already being discussed with the family on 24th February. Indeed all the markers of illness I have found, suggest this lady was very seriously ill.

4.9 Even if a high cervical Spinal cord fracture had been diagnosed, the potential for neurosurgical intervention in an elderly lady with diabetes is low and treatment with prolonged immobilisation has a very high mortality rate in itself. The unexplained low platelet count also suggests other significant serious pathology, which was never diagnosed, more complex in a patient who needing all care with leg ulcers and pressure sores. In my view, there were only two options by 24th February, **a)** to get a further specialist opinion or **b)** treat symptomatically and provide palliative care.

4.10 In view of the complexity of the medical problems, it would have been wise and appropriate to have obtained a further specialist opinion, probably from the consultant in charge of the case before deciding this lady was definitely terminally ill. I can see no evidence in the notes that this was considered.

It was appropriate though to provide pain relief for someone who was both in pain and distressed with loss of totally bodily function. To start MST at a normal low dose on the 24th February was appropriate.

4.11 If the pain was not resolved, increasing the dose to 20 mgs bd on both the 26th February adding the Oramorph 30 mgs bd on 4th March were all appropriate symptomatic responses.

4.12 An unusually large dose of Diamorphine (80 – 160 mgs subcut in 24 hours) is written up on the 26th February on the PRN section of the drug chart. Midazolam 40 - 80 mgs subcut is also written up PRN. Although never given, there is no justification in the notes for why such an apparently large dose of Diamorphine was written to be given if needed.

4.13 I have little doubt this lady was moving to a terminal phase of her illness by the 5th March. There had been no improvement in her quadriplegia, she remained faecally incontinent, the nursing cardex documents increasing pain, her platelet count has fallen further and her urea has doubled to 14.6 (187). At this stage a decision to start Diamorphine 100 mgs once a day subcutaneously and 40 mgs once a day Midazolam is

made.

4.14 Midazolam is widely used subcutaneously in doses from 5 – 80 mgs for 24 hours and is particularly used for terminal restlessness. The dose of Midazolam used was 40 mgs for 24 hours, which is within current guidance, although many believe that elderly patients may need a lower dose of 5 – 20 mgs per 24 hours. (Palliative Care. Chapter 23 in Brocklehurst Text Book of Geriatric Medicine, 6th Edition 2003).

4.15 The Diamorphine was specifically prescribed for pain and is commonly used for pain in terminal care, Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. The dose of Diamorphine actually prescribed was 100 mgs in 24 hours. At that time Code A was receiving 60 mgs a day of Oramorphine. Diamorphine subcutaneously is usually given at a maximum ratio of 1:2 (i.e. up to 30 mgs of Diamorphine in 24 hours for 60 mgs of Oramorphine). (Wessex Guidelines). However if her pain was not controlled and it would be appropriate to give a higher dose of the Diamorphine. Conventionally this would be 50% greater than the previous days; (Wessex Guidelines) some clinicians might give up to 100%. Thus a starting dose of Diamorphine of 45 – 60 mgs in 24 hours would seem appropriate. Code A Code A actually was prescribed a dose of 100 mgs of Diamorphine, in my view excessive.

4.16 Diamorphine is compatible with Midazolam and can be used in the same syringe driver. It is documented above though that she received a significant dose of Midazolam and an excessive, and in my view, inappropriately large dose of Diamorphine. Together these drugs are likely to have caused excessive sedation and respiratory depression. However there is no evidence in the notes to prove these complications occurred.

4.17 Code A is documented to be comfortable on the 6th and dies approximately 36 hours after the Midazolam and Diamorphine pumps were started.

The prediction of how long a terminally ill patient will live is virtually impossible and even Palliative Care experts show enormous variation (Higginson I J and Costantini M. Accuracy of Prognosis Estimates by 4 Palliative Care teams: A prospective cohort study. BMC Palliative Care 2002 1:1.)

4.18 The doses of Diamorphine used, in conjunction with a significant dose of Midazolam, was in my opinion excessively high. However, I can not find evidence to satisfy myself the standard of "beyond reasonable doubt", they had the definite effect of shortening her life in more than a minor

fashion of a few hours to a few days.

5. OPINION

5.1 Code A provides an example of a very complex and challenging problem in geriatric medicine. It included multiple medical problems and increasing physical dependency causing very considerable patient distress. Several doctors, including Consultants, failed to make an adequate assessment of her medical condition.

5.2 There are significant concerns about the medical management of Code A Code A in particular:

- The failure of doctors in both Haslar and Gosport to consider other possible neurological causes for her problems or to obtain expert neurological advice.
- The failure of doctors in Haslar to follow up the reports on the Cervical Spine xrays, if they were actually undertaken.
- The failure to examine or record the examinations of Code A on admission to the Gosport War Memorial Hospital, and therefore missing the opportunities to review her diagnoses.
- The failure to consider the implications of abnormal blood tests requested in the Gosport War Memorial Hospital.
- The failure of Code A to get further advice from her consultant on the 24th February.
- The prescription of a large range and a very large minimum dose of Diamorphine (80 mgs) on the PRN side of the drug chart on the 26th February.
- The lack of a through recorded assessment of pain before starting regular strong opioid analgesia or the syringe driver (see generic report).
- The use of Diamorphine at a dose of 100 mgs in 24 hours on the 5th March , in my view an excessive dose.

5.3 There are also significant failings in the use of the drug chart at Gosport War Memorial Hospital, in particular:

- The failure to cross out the regular prescription of MST when replaced by other medication.
- The prescription of a large range of controlled drugs on both the PRN and regular sides of the drug chart (see generic report).
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.

6. 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.

7. 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.

Code A

Signature: Date: 9 July 2008

10

Version 4 of complete report 15 May 2008 – Code A

Code A

SUMMARY OF CONCLUSIONS

Code A Code A-year-old lady with a number of chronic diseases, suffers a fall and a fractured neck of femur in August 1998. She is admitted to hospital and has operative treatment but develops post-operative complications including chest infection, chest pain and confusion at night and subsequently deteriorates and dies in the Gosport War Memorial Hospital.

In my view a major problem in assessing this case is the poor documentation in the Gosport Hospital in both the medical and nursing notes, making a retrospective assessment of her progress difficult. However, I believe the overall standard of medical care is the Gosport War Memorial Hospital to be negligent. The use of the drug chart was also significantly deficient.

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.

3. CHRONOLOGY/CASE ABSTRACT. (The numbers in brackets refer to the page of evidence, the numbers with 'H' in front are the Haslar notes).

3.1 Code A Code A-year-old lady in 1998, was admitted as an emergency on 5th August 1998 to the Haslar Hospital (H52).

3.2 In 1982 she had been diagnosed with osteoarthritis (211). In 1989 she was noted to have varicose leg ulcers (73) and in 1990 was documented as having gross lipodermatus sclerosis (239). In 1993 she had problems with left ventricular failure, atrial fibrillation, aortic sclerosis and during that admission had a bout of acute renal failure

with her urea rising to 25.7 (60). Her Barthel was 18 in 1993 (179).

3.3 In 1995 she was admitted with an acute arthritis and was noted to have a positive rheumatoid factor (30) and a positive ANF. She had mild chronic renal failure, which was noted to be worse when using non-steroidal anti-inflammatory drugs (31) her creatinine rose to 178 when Brufen was introduced (69). Her mental test score was 10/10 (70) but she did have some mobility problems and was seen by an Occupational Therapist and a Physiotherapist (93) (164).

3.4 In 1997 she was under the care of the Dermatologist with considerable problems from her leg ulcers and she was now having pain at night and was using regular Co proxamol (239). In 1998 she was seen by a Rheumatologist who thought she had CREST syndrome including leg ulcers, calcinosis, telangiectasia, and osteoarthritis, (353).

3.5 On 29th June 1998 she was admitted to the Gosport War Memorial Hospital under the care of her GP Code A (300). The medical clerking is virtually non-existent (75), simply saying that she was admitted for her leg ulcer treatment and her pulse, blood pressure and temperature being recorded. It was noted that she was having continual pain and Tramadol 50 mgs at night was added to her regular 3 times a day Co proxamol. (197) She was seen by a Consultant Dermatologist during this admission (76).

3.6 The nursing cardex showed that she was continent with no confusion (298) however; she was sleeping downstairs (299). Her Barthel was 12 (314) and her Waterlow pressure score was 16 (high risk). She appears to have been discharged home.

3.7 She was admitted to the Haslar Hospital on 5th August having fallen and sustained a fractured neck of femur. This is operated upon successfully. By the 8th she is noted to be short of breath and probably in left ventricular failure with fluid overload (H63). Her renal function has deteriorated from a urea of 16 and a creatinine of 119 on admission (H9) to a urea of 25 and a creatinine of 127 (H68) by the 10th. Certainly on the 10th she appear unwell (H17) and it was not clear if this was a possible myocardial infarction or a chest infection (H17). However a chest x-ray is thought to show a chest infection and she is treated with regular Augmentin, an antibiotic (H69). On 11th her white count is significantly raised at 18.8 (H96). She has a

mild anaemia post operatively of 10.5 (H92) her haemoglobin was normal on admission at 13.1 (H16).

3.8 On 13th August she is found to be brighter and sitting out and walking short distances with frame (H18) and this functional improvement continues, documented in the notes up to 17th August (H18). However, she is noted to have had an episode of chest pain on 15th August (H75). Initial cardiac enzymes were normal (H103) on the 16th August and non-diagnostic on the 10th August (H109). But there is no doubt that her ECG changes between her admission ECG (H86) and the ECG(s) on 13th August and 15th August (H80 and H78). This is not commented on in the notes.

3.9 The nursing cardex shows that she is unsettled most nights, for example, 10/8 (H166), 13/8 (H168), 16/8 (H170) and on the night before discharge from Haslar on 17th August she "settled late after frequent calling out". The nursing notes also show that she had a continuing niggling pyrexial and was still significantly pyrexial the day before discharge (H137). It also documents that on the day of transfer to the Gosport War Memorial Hospital, she has increased shortness of breath and oxygen is restarted (H171).

3.10 Her drug chart shows that she receives low molecular weight Heparin as a prophylaxis against deep venous thrombosis (Calciparine) from admission until discharge. Diamorphine 2.5 mgs IV is giving as a single dose on 5th August (H128). Co-proxamol is given from 5th – 8th August (H128) and then replaced by Paracetamol written up on the 'as required' part of the drug chart, which she receives almost every day, until the 16th August (H175). The discharge letter mentions her regular drugs of Allopurinol, Bumetanide, Digoxin and Slow K, but does not mention any analgesia (H44).

3.11 She is seen by Code A on 14th August (25-26). She notes that Code A Code A appetite is poor, is in atrial fibrillation and may have Sick Sinus Syndrome (an irregularity of cardiac rhythm). She has been dehydrated, hypokalaemic, and has a normochromic anaemia. She notes her leg ulcers and her pressure sores. She agrees to transfer her to the Gosport War Memorial Hospital and is uncertain as to whether there will be significant improvement.

3.12 She is admitted to Dryad Ward on 18th August (77) and the medical notes states that she had a fractured neck of femur and a past

medical history of angina and congestive cardiac failure. The rest of the medical notes, note that she is continent, transfers with two, needs help with ADL's, a Barthel of 6. The management plan is "get to know, gentle rehabilitation". The next line states "I am happy for the nursing staff to confirm death". The next and final line in the medical notes (77) is a nursing note from 21st August that Code A had died peacefully at 18.25 hrs.

3.13 The nursing care plan, on admission, noted her pressure sores (375), her leg ulcer care (377) and notes that she communicates well (387) but does have some pain (387).

3.14 On 18th August the nursing continuation notes state that she awoke distressed and anxious and was given Oramorphine (388), it states that she was very anxious and confused at times. On 19th August it said that she was comfortable at night, settled well, drowsy but rousable. Syringe driver satisfactory. On 20th August it stated continued to deteriorate. The nursing summary (394) states on 18th August, pleasant lady, happy to be here. On 19th August at 11.50 am she complains of chest pain and looks "grey around mouth". Oramorphine is given. She is noted to be very anxious and the doctor is notified. The pain is apparently only relieved for short period and she is commenced on a syringe drive.

On 20th August she continued to deteriorate overnight, the family have been informed and "very bubbly". On 21st August she deteriorates slowly.

3.15 Drug Chart Review: Admission on 18th August, Digoxin, Slow K, Bumetanide and Allopurinol are written up as per the discharge note from Haslar (369). On the 'as required' part of the drug chart (369) Oramorphine 10 mgs in 5 mls, 2.5 – 5 mgs is written up together with Temazepam. No Temazepam is given but 3 doses of Oramorph are given, one on the 18th August and two doses on 19th August.

3.16 On 19th August (368) Diamorphine 20 – 200 mgs sub cut in 24 hours is written up 20 mgs is started on 19th August, 20 mgs is started on 20th August, then discarded, and 40 mgs started, on 21st August 60 mgs is started. Hyoscine 200-800 micrograms subcut in 24 hours is also prescribed on 19th August. 400 micrograms is started on 20th August and replaced later in the day by 800 micrograms, which is continued on 21st August. Midazolam 20 – 80 mgs subcut in 24 hours is written up and 20 mgs prescribed on 20th August, replaced later in

the day by 40 mgs and finally by 60 mgs on 21st August.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Diamorphine	05/08	2.5 – 5.0 mgs IV/I/M PRN	? (at Hasler)	05/08 1300 2.5 mgs
Co-proxamol	06/08	T – TT oral hourly PRN	? (at Hasler)	06/08 2 doses 07/08 3 doses
Paracetamol	08/08	1 gram oral PRN	? (at Hasler)	1 or 2 doses most days 08/08 – 16/08
Oramorphine	18/08	10 mg in 5 mls oral 2.5 – 5 mls 4 hourly PRN	Code A	18/08 1415 5 mgs 19/08 0015 10 mgs 19/08 1150 10 mgs
Diamorphine	?	20 - 200 mgs SC in 24 hours Regular	Code A	19/08 1600 20 mgs 20/08 0915 20 mgs stopped and restarted 20/08 1630 40 mgs stopped and restarted 21/08 0735 60 mgs
Midazolam	?	20-80 mgs S/C in 24 hours PRN Regular	Code A	19/08 1600 20 mgs 20/08 0915 20 mgs stopped and restarted 20/08 1630 40 mgs stopped and restarted 21/08 0735 60 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A Code A Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 Code A had a number of chronic diseases prior to her terminal admission following a fractured neck of femur. She had cardiac disease with known atrial fibrillation, aortic sclerosis and heart failure, documented in 1993. She also had not just osteoarthritis but an auto-immune arthritis that was thought variously to be either rheumatoid arthritis or variant auto-immune arthritis (the CREST syndrome). She also had problems as a result of her long-standing varicose swelling of her lower limbs, with many

years of unresolved and very painful leg ulcers. Finally she had impaired renal function, developed mild acute renal failure when she was given on occasion, non-steroidal anti-inflammatory drugs.

4.3 She is admitted by her GP into a GP bed consultant ward in June 1998. Beyond measuring her blood pressure, there is no medical clerking and the medical notes are rudimentary at best. Significant information is available from the nursing cardex, which confirms that she is continent and there is no confusion. However, she does have some dependency with a Barthel of 12. Her pain relief is increased by adding Tramadol (an oral opiate like drug) to her Co proxamol and she is able to be discharged home, having been seen by the Dermatologist.

4.4 She subsequently has a fall and suffers a fractured neck of femur. She is admitted to the Haslar Hospital for operative repair. There is always a very significant mortality and morbidity after fractured neck of femurs in old people, particularly in those who have previous cardiac and other chronic diseases.

4.5 She is clearly unwell on 10th August, this is thought to have probably have been a chest infection and she is treated appropriately with antibiotics. However, her pyrexia never actually settles prior to discharge. She also suffers from at least one other episode of chest pain, again no diagnosis is come to in the medical notes, although her ECGs do appear to have changed during her admission, suggesting that this was either coronary event, including a possible heart attack or even a possible pulmonary embolus, despite her prophylactic anti-DVT therapy.

4.6 She is documented to be confused on many evenings, including the evening before transfer from Haslar to Gosport War Memorial Hospital. There may be multiple reasons for this, simply having an operation after a fractured neck of femur can cause acute confusion which is more obvious in the evenings. Chest infections and cardiac events can also cause acute confusion. She was on regular oral Co proxamol and Tramadol prior to her admission. The Tramadol was not continued and the Co proxamol was replaced after a few days with Paracetamol which she does receive on a regular basis for pain, although it is not clear whether this is pain from her leg ulcers or her chest. It is therefore possible that she is also getting drug withdrawal symptoms and this is a further contributing factor to cause her restlessness and confusion at night.

4.7 She is seen by Code A who does a thorough assessment and arranges for an appropriate transfer to Gosport War Memorial Hospital. Code A does not mention pain management as an issue. It is clear though from the notes that on the day of transfer she is still not right. She had been pyrexial the day before, she had been confused the night before transfer and she is more breathless needing oxygen on the day of transfer. It might have been wiser not to transfer her in this unstable clinical state.

4.8 When she is transferred to the Gosport War Memorial Hospital she is seen by Code A who fails to record a clinical examination, apart from a statement regarding her functional status, that she is catheterised, needs two to transfer and needs help with ADL and documents a Barthel of 6. An opportunity to assess her apparent unstable clinical state appears to have been missed. The nursing cardex states the Bartel is 9 (373) and that in the nursing cardex, she can wash with the aid of one and is independent in feeding.

4.9 The continuation notes of Code A (77) then mention rehabilitation with a statement about being happy for the nursing staff to confirm death. There are no further medical notes at all and in view of the subsequent changing clinical condition documented in the nursing cardex on 19th August and that the nurses contacted the doctor (394) this is a poor standard of care. It also makes it very difficult to assess whether appropriate medical management was given to Code A

4.10 On admission the regular drugs being prescribed at Haslar were continued but the Paracetamol and Tramadol she had received in the Gosport War Memorial Hospital only a month before were not prescribed, nor was any other milder analgesia such as Paracetamol. The only analgesia written up was Oramorphine on the 'as required' part of the drug prescription. While it is probably appropriate for somebody who might have been having episodes of angina and left ventricular failure while in Gosport to have a Morphine drug available for nurses to give, it is very poor prescribing to write up no other form of analgesia, particularly if a doctor is not on site. The nursing staff could have no alternative but to go straight to a strong opioid analgesia. On her first night she is documented as anxious and confused. This is then treated by giving her two doses of Oramorphine despite there being no record in the medical or nursing cardex that it was pain causing this confusion. It should be noted this was probably no different from her evenings in Haslar which did not need any specific medication management. She also had Temazepam available on the drug chart to be used as a night time sedative if needed. In

my view this is poor nursing and medical care in the management of confusion in the evening.

4.11 On 19th August an event happened at 11.50 in the morning with the nursing notes recording that she had marked chest pain and was grey around her mouth. This could have been a heart attack, it could have been a pulmonary embolus, it could have been another episode of angina, it could simply have been some non-specific chest pain. No investigations are put in train to make a diagnosis, she does not appear to have been medically assessed, or if she was it was not recorded in the notes and would be poor medical practice. However, if the patient was seriously distressed, it would have been appropriate to have given the Oramorphine 10 mgs that was written up on the 'as required' side of the drug chart. The first aim would be to relieve distress while a diagnosis was made.

4.12 Later on 19th August s syringe driver is started containing Diamorphine 20 mgs and 20 mgs of Midazolam. The only justification for this is recorded in the nursing notes (394) where it says pain is relieved for a short period. I am unable to find any records of observations, for example, pulse or blood pressure while the patient continues to have pain.

4.13 The syringe driver is continued the next day and Hyoscine is added and the dose of Diamorphine, Midazolam and Hyoscine all increase during the afternoon of the 20th and again when the syringe driver is replaced on 21st. Code A dies peacefully on 21st August.

4.14 Diamorphine is specifically prescribed for pain, is commonly used for pain in cardiac disease as well as in terminal care. Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. Diamorphine subcutaneously after oral morphine is usually given at a maximum ratio of 1 to 2 (up to 10 mgs of Diamorphine for 20 mgs or Oramorphine). She had received 20 mgs of Oramorphine on 19th and appears to have been in continuing pain so I think it is probably reasonable to have started with 20 mgs of Diamorphine in the syringe driver over the first 24 hours.

4.15 Midazolam is widely used subcutaneously as doses from 5 – 80 mgs per 24 hours and is particularly used for terminal restlessness. The dose of Midazolam used was 20 mgs for the first 24 hours, which is within current guidance, although many believe that elderly patients need a lower dose of 5 – 20 mgs per

24 hours (palliative care). (Chapter 23 in the Brocklehurst's Text Book of Geriatric Medicines 6th Edition 2003). The original dose of Diamorphine appeared to be for continued chest pain. It is unusual to use continuous Diamorphine for chest pain without making a specific diagnosis. It is possible the patient had had a myocardial infarction and was now in cardiogenic shock. In that case it would be very reasonable to use a syringe driver and indeed to add Midazolam and Hyoscine over the subsequent 48 hours. This can only be supposition without adequate documentation.

4.16 In my view it is impossible from the notes to determine the cause of death and a Coroner's Post Mortem should have been held.

5. OPINION

5.1 Code A year-old lady with a number of chronic diseases, suffers a fall and a fractured neck of femur in August 1998. She is admitted to hospital and has operative treatment but develops post-operative complications including chest infection, chest pain and confusion at night and subsequently deteriorates and dies in the Gosport War Memorial Hospital.

5.2 In my view a major problem in assessing this case is the poor documentation in Gosport Hospital in both the medical and nursing notes, making a retrospective assessment of her progress difficult. However, I believe the overall standard of medical care in the Gosport War Memorial Hospital to be negligent, in particular:

- The lack of any documented medical examination on admission, in a patient that appeared to be clinical unstable.
- The failure to prescribe milder oral analgesia on admission to the Gosport War Memorial Hospital.
- The use of Oramorphine for 'anxiety and confusion' on the first night in the Gosport War Memorial Hospital.
- The apparent failure to attend the patient when she developed chest pain and became unwell on the 19th August.
- The failure to attempt to make any diagnosis or assessment of the change in condition on 19th August.
- The decision to start a syringe driver on the 19th August without any record of the medical justification.
- The failure to record any justification for the decision to increase the doses of Diamorphine and Midazolam on the 20th and 21st August.

5.3 The use of the drug chart was also significantly deficient, in particular:

- The prescription of a large range of a controlled drug (see my generic report).
- The failure to date prescriptions on the regular side of the drug chart.
- The failure to cross out and rewrite prescriptions on the regular side of the drug chart when changing controlled drug dosages.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.

5.4 Without a proven diagnosis, it is possible that the combination of Diamorphine and Midazolam together with the Hyoscine in a syringe driver contributed in part to Mrs Code A death. However, I am unable to satisfy myself to the standard of beyond reasonable doubt that it made more than a minimal contribution.

6. 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.

7. 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.

Code A

Signature: Date: 9 July 2008

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SUMMARY OF CONCLUSIONS

Code A

Code A was Code A-year-old lady admitted to the Queen Alexandra Hospital following a crisis at home on the 9th October 1999. She has symptoms of confusion and aggression on a background of known chronic renal failure, IgA Paraproteinaemia, Hypothyroidism and a dementing illness. There was little improvement in the Queen Alexandra Hospital and she was transferred to the Gosport War Memorial Hospital on 21st October for continuing care.

In the Gosport War Memorial Hospital she deteriorates over the first two weeks in November and by 19th November is terminally ill. She receives palliation including subcutaneous Diamorphine and Midazolam and dies 21st November 1999.

However there were significant failings in the medical care provided to Code A as well as deficiencies in the use of the drug chart at Gosport War Memorial Hospital.

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.

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

3.1 In March 1998 (120) Code A was seen in a geriatric outpatient department with cellulitis, mild hypothyroidism, mild CCF, haemoglobin of 13 (317) and a creatinine of 90 (337).

3.2 In December 1998 she was seen in an orthopaedic clinic (102) and was found to be clinically fit for a knee replacement.

3.3 In March 1999 her haemoglobin was 12.8 (311) and her creatinine in February was 143 (325).

3.4 In April she was seen by a consultant geriatrician where she was found to be "moderately frail" although also noted to be "bright mentally" (84). Her weight was 58.8 kgs (144), her haemoglobin 11.5 (307) and a creatinine 151 (84).

3.5 She was referred to a renal physician and was also seen by a haematologist between June 1999 and September 1999. In June 1999 (60) her creatinine was 160, her haemoglobin 11.2 (297), her weight was 55.4 kgs (151). In July 1991 (50) the haematologist found 6% plasma cells and an albumen of 22 (52), immune paresis (70) and suggested a watch and wait approach. In September 1999 her renal physician noted that she had chronic renal failure with small kidneys and nephrotic syndrome with marked oedema. It was thought likely that this was on a background of progressive glumerulonenephritis (60) and she had an incidental IgA paraproteinaemia. Her Creatinine was 192 and her haemoglobin 10.5 (295).

3.6 On 9th October, she was admitted to the Queen Alexandra Hospital following a social crisis at home as Code A lived with her Code A Code A had cancer and Code A could no longer cope. There was a story of confusion and aggression, which was suggested, had become worse prior to her admission. The clinical diagnosis was of a possible urinary tract infection, with an underlying dementing illness. However, Code A was never documented to be pyrexial (256) and the mid-stream urine sample had no growth (367). There is no full blood count available in the notes for the 9th October. The admission clerking, which would be expected to be available, either before page 31 or around pages 157 and 158 also appears to be missing from the notes.

3.7 On the 12th October (31) she is noted to be distressed and agitated and undergoes a CT scan of her head, which shows involutional changes only (24). She receives a single dose of Haloperidol (160) (267). On the 13th October her haemoglobin is 10.8 with a white cell count of 14.5 (293).

3.8 On the 15th October she is noted to be wandering (166) on the same day she is assessed by Code A Clinical Assistant for the Mental Health Team

who noted the history of confusion and disorientation and a 10 months history of mental deterioration (28). She was confused and disorientated but no longer aggressive. She was now mostly co-operative and friendly but tended to get lost, he also noted she was deaf. Her Mini Mental Test Score was 9/30, indicating moderate to severe dementia and he suggested that she would need ongoing institutional care. On the 18th October her creatinine was 201 (171).

3.9 On 20th October, there is a letter of an assessment from a locum consultant geriatrician (20). Who notes that she can stand, may have had a urinary tract infection on top of her chronic renal failure and that she was quite alert.

3.10 She is then transferred to the Gosport War Memorial Hospital with a discharge summary (24) that states she has chronic renal failure, paraproteinaemia, multiple infarct disease and an Abbreviated Mental Test Score of 3/10.

3.11 On 21st October she is transferred to the Gosport War Memorial Hospital and is for "continuing care" (154). Her Barthel dependency is noted to be 8 with a Mini Mental Score of 9/30. Code A incorrectly writes that she has 'Myeloma' (154) in the notes.

3.12 On 25th October she is mobile unaided, washes with supervision, remains confused.

3.13 On the 1st November she is quite confused (155) and is wandering. On the 9th November investigations show haemoglobin of 9.9, white cell count of 12.6 (289) and a creatinine of 200 (349). An M.S.U reported on 11th November (363) shows no growth.

3.14 15th November she is noted to be very aggressive, very restless (155) and "is on treatment for a urinary tract infection". However, it is noted that the MSU from 11th November showed no growth. The medical note for the 15th is unsigned, I presume to be Code A

3.15 18th November (156) she is seen by the mental health team who note that in their view that "this lady has deteriorated and become more restless and aggressive, is refusing medication and not eating" but also noted "her physical condition is stable". She is put on the waiting list for Mulberry Ward. Creatinine on 16th November is 360 and a potassium 5.6 (349).

3.16 19th November there has been marked deterioration over night. The notes state "confused, aggressive, Creatinine 360, Fentanyl patch commences yesterday, today further deterioration in general condition needs subcut analgesia with Midazolam. Code A seen and aware of condition and diagnosis, hence make comfortable. I am happy for nursing staff to confirm death"

(156). The nursing notes (222) confirm marked deterioration over last 24 hours. "Chlorpromazine given IM. 9.25. Subcut syringe commenced Diamorphine 40 mgs and Midazolam 40 mgs, Fentanyl patch removed. Code A seen by Code A at 13.00 and situation explained to him. He will contact Code A regarding and inform her of Code A poor condition. 20.00 Code A visited and seen by Code A. Nocte: peaceful night syringe driver recharged at 07.25."

3.17 20th November the nursing notes (223) state, "condition remains poor, family have visited and are aware of poorly condition. Seen by Code A. Nocte: peaceful night extremities remain oedematous, skin mottling, syringe driver changed at 07.15. Dose of Diamorphine 40 mgs. Midazolam 40."

3.18 21st November. Nursing notes (223), "condition continues to deteriorate slowly. Asked to see at 20.30 hours patient died peacefully"

3.19 Barthel scores are recorded on 21st October 8; 31st October 16, 17th November 10; 14th November 10; 21st November 1 (202) Her weight on 21st October was 52.5 kgs (200).

Drug Chart analysis: 1 dose of Haloperidol was given in the Queen Elizabeth hospital on the 13th October (269). Drug chart at Gosport showed a single dose of Chlorpromazine given at 08.30 on 19th November (277) confirming the nurses' cardex.

The patient had received regular doses of Thioridazine (often given for confused behaviour) from the 11th November up unto 17th November (277). A small dose of prn 2.5 – 5 mgs Oramorphine had been written up on admission to Gosport but had never been prescribed. Hyoscine had also been written up and not prescribed.

Trimethoprim (for a presumed urinary tract infection) is prescribed on 11th November (277 & 276) and continued until 15th November. A 25-microgram patch per hour of Fentanyl is written up on the 18th November and a single patch is prescribed at 9.15 on 18th November (276). The evidence from the nursing cardex is that the Fentanyl patch is removed on the morning of the 19th (223) at 12.30 (275) 3 hours after the time the subcutaneous infusion was started.

A new drug chart is written up on 19th November for Diamorphine 40 – 80 mgs subcut in 24 hours and Midazolam 20 – 80 mgs subcut in 24 hours. The drug card (279) confirms that 40 mgs is put into the syringe driver at 09.25 19th, 7.35 on 20th and 7.15 on 21st and 40 mgs of Midazolam at each of those times. All other drugs had been stopped.

Drug	Date prescribed	Prescribed as	Prescriber	Given
Oramorphine	21/10	10 mgs in 5 mls	Code A	---

		2.5 – 5 mls PRN				
Fentanyl	18/11	25 µg Skin – 3 days Regular	Code A	18/11	0915	
POSSIBLE NEW DRUG CHART						
Diamorphine	19/11	40 - 80 mgs S/C in 24 hours Regular	Code A	19/11 20/11 21/11	0925 0735 0715	40 mgs 40 mgs 40 mgs
Midazolam	19/11	80 – 120 mgs S/C in 24 hours PRN	Code A	19/11 20/11 21/11	0925 0735 0715	40 mgs 40 mgs 40 mgs

4. TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 This section will consider whether there were any actions so serious that they might amount to gross negligence or any unlawful acts, or deliberate unlawful killing in the care of Code A. Also whether there were any actions or omissions by the medical team, nursing staff or attendant GP's that contributed to the demise of Code A in particular, whether beyond reasonable doubt, the actions or omissions more than minimally, negligibly or trivially contributed to death.

4.2 In particular I will discuss:
a) whether it was appropriate to decide on 19th November that Code A was terminally ill and if so whether symptomatic treatment was appropriate and
b) whether the treatment that was provided was then appropriate.

4.3 Code A had progressive mental and physical deterioration starting in January 1999. Before that she had had relatively minor medical problems, a normal haemoglobin and creatinine and was put on a waiting list for a knee replacement at the end of 1998. Orthopaedic surgeons do not generally list people for knee replacements if they look or are significantly frail. Such patients tend to make poor functional recoveries.

4.4 Code A physical deterioration can be marked by her slowly falling haemoglobin from 13 in 1998 (317) to 9.9 (289) in November 1999. Her albumin also falls and is documented at 22 in July 1999 (52) then extremely low at 18 (349) on admission to Gosport. At the same time her creatinine rises over the course of the year from 90 in 1998 to 160 in June 1999 and around 200 on admission to the Queen Alexandra Hospital in October 1999. The physicians, including the renal physician and the haematologist that she saw, all conclude this was a progressive problem with no easily treatable or remedial cause. The small kidneys shown on ultrasound usually suggest irreversible kidney pathology. I would agree with that assessment.

4.5 The history taken by the mental health team from Code A also describe mental deterioration and increasing confusion over the course of

the year. Such confusion is often missed in hospital appointments, although the comment that she did not bring her drugs or know what drugs she was taking in September 1999 (40) is a marker of probable mental impairment. The notes fail to come to any definitive diagnosis as to whether this is Alzheimer's disease or vascular dementia. This is difficult and cannot be criticised. It is probably more likely to be vascular dementia on its basis of its moderately rapid progression, and that she had another systematic illness going on identified by the renal physician as probable glomerulonenephritis.

4.6 When admitted to the Queen Alexandra Hospital with significant behavioural problems the original working assumption was that this was an acute event, caused by a probable underlying infection. However, no infection was ever demonstrated on the investigations ordered, and no pyrexia was identified, although the admission notes are missing. It is likely that her behaviour had gradually been deteriorating, the crisis then occurred with the social crisis in Code A Admitting patients acutely to hospital will often exacerbate confusion in an already underlying dementing illness.

4.7 The natural history of most dementia's is of some fluctuation on a downward course, both in terms of symptoms and progression of the underlying disease. When seen by the mental health team on 15th October (28), though her behaviour was not seriously disturbed at that time, they documented a mini-mental state examination of 9/30 indicating moderate to severe underlying dementia. The mental decline had been rapidly progressive over the same year, as had her physical decline. Although she received Haloperidol at Queen Alexandra, and Thioridazine at Gosport I think it is unlikely that any therapeutic intervention significantly altered the progression of either her mental or her physical deterioration.

4.8 On admission to Gosport Code A writes in the notes that the patient has Myeloma (a malignant disease) rather than the Paraproteinaemia (a pre-malignant condition) that has actually been diagnosed. She may have mistakenly believed that she had a progressive cancer as well as her dementia and renal failure. This (not uncommon mistake by non-specialists) might have influenced the management of care, by making Code A think the patient had an untreated malignant condition.

There is no physical examination of the patient on admission, or if there was, it is not recorded in the notes.

When transferred to the Gosport Hospital on 21st October, probably to await nursing home placement, she had a number of markers suggesting a very high risk of in-hospital death. She had been in hospital over two weeks, the longer you are in hospital the more likely you are to die in hospital. She had a possibility of delirium on top of a rapidly progressive dementing illness, again a marker of high in-hospital mortality and finally,

she had an extremely low albumin of 18, probably one of the strongest markers of a poor outcome. Serum albumin is an indirect marker of nutritional status, in particular a marker of protein metabolism. A low albumin and poor nutritional status makes a patient highly susceptible to infection, pressure sores and an inability to cope with the physiological stresses.

4.9 On 25th October she appears to be stable in the ward environment at Gosport, however, by the 1st November there has been a deterioration and she is noted to have become quite confused and is wandering again.

4.10 On admission under the routine drugs that were prescribed, it is noted that both Hyoscine and a dose of Diamorphine were written up prn. No explanation of this management decision is made in the notes, nor has any pain been recorded in the notes.

4.11 There are no medical notes between the 1st November and the 15th November at which time she is noted to be very aggressive and very restless, there must have been clinical deterioration over that period of time. Blood tests are sent on 9th November (289) and an MSU has also been sent and reported on 11th November (363) although this is normal. It is unlikely that these tests would have been done if there had not been a significant change in her condition. Indeed, it appears that she was put on antibiotics for a presumed (subsequently proved mistakenly) urinary tract infection. Either the tests and antibiotics prescription were undertaken without seeing the patient, or the patient was seen and no record was made in the notes. Both would be poor medical practice.

The drug chart analysis also demonstrates she was now receiving regular Thioridazine, an anti-psychotic medication which is often prescribed for significantly disturbed behaviour in older patients. The change in behaviour noted, the new medication started, the antibiotics prescribed (277,276) and the blood and urine tests carried out (289,363) all suggest a significant change in condition. Yet the lack of medical notes makes a proper assessment of the situation difficult and is poor clinical practice.

4.12 The simple investigations and pragmatic management does not work though. By 18th November she has deteriorated further, is very restless and confused and is now refusing medication. Further blood tests have been carried out on 16th November that now show that creatinine has almost doubled to 360 and her potassium is 5.6. She is now in established acute on chronic renal failure. A patient who is already frail and running with a creatinine of over 200 can extremely rapidly decompensate and become seriously ill. On 19th November there is further marked deterioration overnight.

4.13 There is no doubt this lady is now very seriously ill. The question that would have to be answered between the 15th and 19th,was this a further acute event that could be easily reversed. The straightforward investigations had been performed and the decision would presumably be to have to return the lady to the District General Hospital for further investigation and management, possibly even on a high dependency unit. The other possible decision to be made was that this was a progression of a number of incurable problems and actually she was terminally ill. In these circumstances the decision would then be to decide what form of symptomatic or palliative care was most appropriate.

Code A was seen by Code A on 15th and Code A may have seen her on the on 18th, the day Fentanyl was started. This should be clarified as no clinical note is made on the 18th. This is poor practice.

4.14 It may have been in the mind of the doctor who (possibly) saw her on 18th that she probably was terminally ill. Evidence for this is that she started her on a Fentanyl patch on top of the regular Thioridazine, which she was already receiving. However, the logic of starting the Fentanyl patch is not explained in the notes, and the psychiatric doctor who saw her the same day thought her physical condition "was stable". Further Fentanyl is a slow release opioid analgesic, which the BNF states it is not suitable for acute pain or when rapid changes in analgesia are required. The reason is that although Fentanyl 25 is the equivalent of 90 mgs of Morphine a day it will take several days to get to a steady state drug leve. However, the normal starting dose of Morphine for pain is 30 – 60 mgs a day thus the lack of explanation for the choice of Fentanyl, or the dose chosen, in a patient without documented pain is poor clinical practice.

4.15 It is my opinion, certainly by the 19th November, this lady was terminally ill and it was a reasonable decision to come to this conclusion. However, it is possible that her more rapid deterioration was due to the use of Fentanyl on top of her other medical problems. Equally not all clinicians would come to exactly the same conclusion and some might have referred her back to the DGH when a creatinine of 360 was noted on 16th November. However, on balance I believe that many clinicians would come to the same conclusion after a month in hospital.

4.16 Having made the decision that the lady was terminally ill, the next decision was whether or not to offer palliative care. Code A was reported as extremely restless and aggressive and in some distress. In my view it would now be appropriate to provide high quality palliative care.

4.17 She is then written up for Diamorphine and Midazolam by subcutaneous infusion and the Fentanyl patch prescribed the previous day is removed. There was a three-hour overlap in the prescription of these drugs but this is unlikely to have had a major clinical effect. There is also a discussion regarding her status with a member of her family. There appears to be no dissent as to the appropriateness of her proposed care with either the nurses or the family.

4.18 Two drugs are used, Diamorphine and Midazolam intravenous infusion pump. The main reason for using both was terminal restlessness. There is no doubt that Midazolam is widely used subcutaneously in doses from 5 – 80 mgs per 24 hours. The dose of Midazolam used was 40 mgs per 24 hours, which is within current guidance although many believe that elderly patients may need a lower dose of 5 – 20 mgs per 24 hours (Palliative Care. Chapter 23 in Brocklehurst's Text Book of Geriatric Medicine 6th Edition 2003).

4.19 The addition of Diamorphine is more contentious. Although there was serious restlessness and agitation in this lady, no pain was definitively documented and Diamorphine is particularly used for pain in terminal care. Diamorphine is compatible with Midazolam and can be mixed in the same syringe driver. However, despite the lack of pain Diamorphine is widely used, and believed to be a useful drug, in supporting patients in the terminal phase of restlessness. One study of patients on a long stay ward (Wilson J.A et al Palliative Medicine 1987; 149 – 153) found that 56% of terminally ill patients on a long-stay ward received opiate analgesia. The dose of Diamorphine actually prescribed was 40 mgs. The normal starting dose for pain, of morphine, is 30 – 60 mgs and Diamorphine subcutaneously is usually given at a maximum ratio of 1:2 (i.e. 15 – 30 mgs). Code A was prescribed on an unusually high starting dose of Diamorphine although probably equivalent to the dose of Fentanyl already started. There is no explanation of this decision in the notes.

4.20 24 hours later Code A is reported to be comfortable and without distress, she finally dies approximately 58 hours after starting the mixture of Diamorphine and Midazolam, and as far as can be deciphered from the notes, without distress.

4.21 The prediction how long a terminally ill patient will live is virtually impossible and even palliative care experts show enormous variation (Higginson I.J. and Costantini M. Accuracy of Prognosis Estimates by 4 Palliative Care teams: A Prospective Cohort Study. BMC Palliative Care 2002 1:1.) I believe that it is certainly possible; that without any treatment, considering her creatinine of 360 on 16th November, she would have been dead on the 21st November.

4.22 There is no explanation in the notes for the apparently high doses of drugs used to relieve her symptoms considering her age of 88 years and her previous lack of use of analgesia. It is possible that the medication did shorten her life by a short period of time but she was also out of distress for the last 58 hours.

5. OPINION

5.1 Code A presents an example of the most complex and challenging problems in geriatric medicine. This incluluded progressive medical and physical problems causing major clinical and behavioural management problems to all the care staff she comes into contact with.

5.2 However there were significant failing in the medical care provided to Code A Code A in particular:

- The failure to undertake a physical examination of the patient on admission to the Gosport War Memorial Hospital, or if it was undertaken the failure to record in the notes.
- The prescription of PRN Oramorphine in admission to the Gosport War Memorial Hospital in a patient with no recorded pain or condition likely to need Oramorphine.
- The failure to see the patient between the 1st – 15th November yet to order blood tests and antibiotics, or if she was seen, to make a record in the notes.
- The failure to make any medical notes or explanation on the 18th November as to why Fentanyl was started and why the dose chosen was used.
- The failure to provide any explanation for the use of Diamorphine and the choice of an apparently high starting dose in the syringe driver.

5.3 There was also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital, in particular:

- The 'Regular' prescription of Fentanyl is never crossed off the drug chart although replaced by the syringe driver.
- Prescribing a range of doses of both Diamorphine and Midazolam on the regular side of the drug chart.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages given.

6. 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.

Code A

Signature: Date: 9 July 2008

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Version 3 of complete report 21 May 2008 – Code A

SUMMARY OF CONCLUSIONS:

Code A

Code A 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.

Code A is an example of a complex and challenging problem 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.

However there are a number of areas of poor medical practice and also deficiencies in the use of the drug chart at the Gosport War Memorial Hospital.

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.

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

3.1 During the 1980's Code A 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.

3.2 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.

3.3 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. Code A 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.

3.4 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).

3.5 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). 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).

3.6 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.

3.7 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).

3.8 In June 1998 he is seen at the Code A by Code A 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 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. Code A 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 Code A never agreed with this diagnosis. Code A also feels that he is depressed (349).

3.9 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).

3.10 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.

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

3.12 On 20th July his care is discussed with Code A in the Day Hospital (111 and 113). It is thought 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.

3.13 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 urinary 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.

3.14 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). Code A 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).

3.15 He is seen by Code A 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 Code A 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.

3.16 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.

3.17 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). 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.

3.18 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 Code A (909) who thinks he may need admission on Monday when reviewed again. I have not found any medical notes relating to this.

3.19 On 21st September (642) he is again seen in the Day Hospital by Code A (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 Code A (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).

3.20 He is taken to Dryad Ward (645) and seen by Code A 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, Code A 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".

3.21 25th September Code A 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 Code A 1 – Bronchopneumonia, 2 – Parkinson's Disease, Sacral Ulcer".

3.22 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 Code A 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.

3.23 23rd September (868) it is recorded that he is chesty overnight and Hyoscine is added. Code A 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).

3.24 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 Code A saw Code A, confirming the medical notes (643).

3.25 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.

3.26 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.

3.27 Diamorphine is 20 –200 mgs subcutaneously in 24 hours is written up on (presumably) the 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.

3.28 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 then 80 mgs on the 24th. He receives another 80 mgs on 25th and 100 mgs written up in 24 hours on 26th (second drug chart 837).

3.29 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.

Drug	Date prescribed	Prescribed as	Prescriber	Given

Oramorphine	21/09	2-5 – 10 mgs Oral 4 hourly PRN	? ? Code A	21/09 1450 5 mgs 21/09 2015 10 mgs
Co-proxamol	14/09	2 tabs 6 hourly Regular	?	14/09 1200 (? in day 17/09 1200 hospital) 21/09 1800 Other doses missed
Diamorphine	? ?21/09	20 – 200 mgs S/C in 24 hours Regular crossed out and PRN written	Code A	21/09 2310 20 mgs 22/09 2029 20 mgs 23/09 0925 20 mgs "discarded" 23/09 2000 20 mgs 24/09 1055 40 mgs then 60 mgs
Midazolam	?21/09	20 – 80 mgs S/C in 24 hours Regular crossed out and PRN written	Code A	21/09 2310 20 mgs 22/09 2020 20 mgs 23/09 0925 20 mgs "discarded" 23/09 2000 60 mgs 24/09 1055 80 mgs
Diamorphine	25/09	40 - 200 mgs S/C in 24 hours Regular	Code A	25/09 1015 60 mgs 26/09 1150 80 mgs
Midazolam	25/09	20 - 200 mgs S/C in 24 hours Regular	Code A	25/09 1015 80 mgs 26/09 1150 100 mgs

4 TECHNICAL BACKGROUND / EXAMINATION OF THE FACTS IN ISSUE

4.1 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 Code A. Also if the actions or omissions by the medical team, nursing staff or attendant GP's contributed to the demise of Mr Code A in particular, whether beyond reasonable doubt, actions or admissions more than minimally, negligently or trivially contributed to death.

4.2 Code A 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.

4.3 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.

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

4.5 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 Code A He uses an electric wheelchair effectively and his Barthel is 17 but most of the help he currently needs is with dressing.

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

4.7 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).

4.8 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 Code A Code A 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.

4.9 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.

4.10 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 Code A 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).

4.11 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.

4.12 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 medical clerking that was undertaken on admission (66).

4.13 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.

4.14 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.

4.15 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.

4.16 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).

4.17 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).

4.18 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).

4.19 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 Code A 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.

4.20 Code A 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. Code A 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.

4.21 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.

4.22 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.

4.23 He is admitted to the ward, Code A 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 most doctors would automatically do that, if briefly, so that they know the baseline of the patient. As suggested Oramorphine is written up and Mr Code A receives two doses on 21st.

4.24 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 was not part of Code A management plan. It would be normal medical practice to write a comment on such management plan in the notes.

4.25 The nursing notes state that he remains agitated, pulling off his dressings later in the day (880). A decision is made late on the 21st , with the drugs written up (who decides?) to start him on Diamorphine 20 mgs with 20 mgs of Midazolam in a syringe driver. No justification for starting the syringe driver is made in the medical notes, which are inadequate with no entries on the 22nd and 23rd.

4.26 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.

4.27 By 22nd he is clearly delirious (867) and is now totally dependent with a Barthel of 0/20. There does not appear to have been very good communication with Code A 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 increased 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 without explanation in the medical notes.

4.28 After the pain on 24th there is no further distress noted in either the medical notes (645) or the nursing notes (869). However, the drug chart is rewritten and now allows a possible dose of Midazolam up to 200 mgs a day, outside of a normal prescription range..

4.29 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 either these changes in 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.

4.30 In my view from the information available in the notes, the dose of 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.

5. OPINION

5.1 Code A 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.

5.2 In my view many aspects of Code A medical care were managed appropriately. The use of a syringe driver as part of his terminal care was appropriate.

5.3 However, there are a number of areas of poor medical practice, in particular:

- The failure to make a medical note when seen by Code A on the 17th September.
- The failure to record in the medical notes the reason for the decision to start the syringe driver, and whether that was a medical decision.
- The failure to record reassessments on the 22nd and 23rd September.
- The failure to record in the medical notes the reason for a 4 fold increase in Midazolam to 80 mgs on the 24th September from 20 mgs on the 23rd September.
- The failure to record in the medical notes the justification for the increased dose of Diamorphine and Midazolam on the 25th and 26th September.
- The failure to record if doses changes were a medical or nursing decision.
- The prescription of a dose range up to 200 mgs a day of Midazolam.

5.4 There are also deficiencies in the use of the drug chart at the Gosport Warm Memorial Hospital, in particular:

- The failure to date prescription of Diamorphine and Midazolam on the first drug.
- The use of the regular side of the drug chart for 'PRN' prescription, when actually they should have been regular prescription anyway.
- The prescription of a large range of a controlled drug (see my generic report).
- The failure to cross out drugs on the regular side of the drug chart when no longer required.
- The failure to write dosages of controlled drugs in words and figures as well as total dosages to be given.

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.

Code A

Signature: Date: 9 July 2008