March 2006

DRAFT REPORT

Regarding

MRS HELENA SERVICE

Code A

PREPARED BY: Dr M C Petch

AT THE REQUEST OF: Hampshire Constabulary

1.0 Summary of Conclusions

1.1 Mrs Service was aged 99 years at the time of her death and had a long medical history with evidence of heart disease by 1989, and heart failure by 1995. The average survival of patients with this sort of heart failure is 2 years and hence Mrs Service's terminal decline in 1997 was not unexpected. Once the decision had been made that she was not for resuscitation, as it was in the Queen Alexandra Hospital in May 1997, then palliative care with increasing doses of Diamorphine and Midazolam was appropriate. These drugs were administered in accordance with cardiological practice in 1997.

2.0 Instructions

- 2.1 This report has been prepared on the instructions of Dave Grocott, Detective Inspector, Operation Rochester, that is an investigation by the Hampshire Police Major Crime Investigation Team in to the deaths of a number of elderly patients at Gosport War Memorial Hospital (GWMH).
- **2.2** The questions posed by D I Grocott are as follows:

3.0 Issues

3.1 The essential issue in this case is whether the death of Mrs Service was accelerated by the treatment that she received at GWMH, and in particular the administration of Diamorphine subcutaneously by a syringe driver.

4.0 Brief Curriculum Vitae

4.1 I am Dr. Michael Charles Petch, MD (Cambridge University), Fellow of the Royal College of Physicians (London), Fellow of the American College of Cardiology, Fellow of the European Society of Cardiology. I am a Consultant Cardiologist at Papworth Hospital in Cambridgeshire. After training at Cambridge University, St. Thomas' and the National Heart Hospitals in London, I was appointed to my present post in 1977 and have been in active clinical practice since. My experience includes all aspects of clinical cardiology, cardiac pacing and coronary intervention, teaching, research, management, legal work, etc. I have published over 100 papers/chapters, most recently on the subject of heart disease and ability to work. I serve/have served on many National and European committees including the Department of Transport's Honorary Medical Advisory Panel on Driving and Diseases of the Cardiovascular System, in recognition of which I was appointed OBE in 2001.

5.0 Documentation

5.1 This report has been prepared from copies of the medical records (BJC/72) including those from the RNH Haslar relating to her admissions in 1989 and 1992, and those from Queen Alexandra Hospital, St Mary's Hospital, Willow Cottage Residential Care Home, and GWMH. The last are crucial to this investigation and have been identified for me by DI Dave Grocott. The handwriting also is not always easy to read. However, page 164 of 401 dated the 3rd June 1997, entitled "transfer to Dryad Ward" refers to Dr Jane Barton's notes. Pages 37 and 38 of 401 can be more reliably identified because page 37 has at the top "Hospital – GWM, Ward – Dryad". The nursing records cannot be attributed to GWMH since the heading reads "Portsmouth Healthcare NHS Trust". I am however reliably informed that pages 22 and 23 dated the 5th June 1997 relate to GWMH. In addition to the foregoing documentation, I have also seen the statement of Dr Jane Barton dated? 27th October 2005 which helpfully describes the standard of care available in GWMH in 1997.

6.0 Summary of Medical History

- 6.1 Mrs Service had a long medical history including a partial gastrectomy and cholecystectomy in 1981, and left cataract surgery in the same year. She suffered a stroke (left hemiparesis) necessitating admission to hospital between the 29th October and the 27th November 1984; in 1988 she suffered polymyalgia rheumatica and following treatment with Prednisolone developed diabetes mellitus which was considered to be iatrogenic; on the 15th August 1989 she suffered a fall with multiple rib fractures on the left side, for the first time her heart was mentioned she had developed an abnormal rhythm (atrial fibrillation) and her heart was noted to be enlarged on the chest X-Ray; on the 13th November 1992 she was again admitted to hospital with a chest infection; she was again admitted on the 29th December 1992 with a left sided weakness and kept in hospital until the 8th January 1993.
- 6.2 On the 13th January 1995 Dr Althea Lord describes her domiciliary visit and her findings of shortness of breath and heart failure. Mrs Service was therefore admitted to hospital for more intensive medical treatment which appeared to be successful.
- 6.3 By January 1996 Mrs Service had developed gout with painful swollen wrists. By that stage she was described as being profoundly deaf; by May 1997 Mrs Service had deteriorated physically with a recurrence of her heart failure, urinary infection, chest infection and a physical state that was such that the senior registrar felt that in the event of a cardiac arrest Mrs Service should not be resuscitated. She improved to some degree but was not sufficiently independent to go back to Willow Cottage. She was therefore transferred to Dryad ward GWMH.
- On admission to GWMH Mrs Service was seen by Dr Jane Barton. Her clinical note (page 164 of 401) and typed version (paragraph 20 of her statement) indicate that Mrs Service was not expected to live long. This was phrased as "needs palliative care if necessary. I am happy for nursing staff to confirm death".
- 6.5 The nursing records from the 3rd June 1997 describe her condition and at 02:00 state "failed to settle very restless and agitated. Midazolam 20mg given via syringe driver over 24 hours. On the 4th June 1997 the entry reads "condition appears to have deteriorated overnight remains restless. Seen by Dr Barton. Driver exchange with Diamorphine 20mg Midazolam 40mg at 09:20 at a rate of 50mls per hour. Rang Mr Tipping (nephew) to inform him of poorly condition", and on the 5th June 1997 "04:00 hours condition continued to deteriorate and died very peacefully at 03:45 hours. Nephew informed".
- 6.6 The prescription charts (pages 37 and 38 of 401) relate to the 3rd June 1997 and include Diamorphine 5 10mg IM under once only prescription and Diamorphine 20 100mg SC over 24 hours. This was administered starting on the 4th June 1997 at 09:20 hours as in the nursing records. Midazolam 20mg was also prescribed and given as was Bumetamide, Lisinopril, Allopurinol, Lanoxin, Aspirin, and Midazolam, but not the Hyoscine. This is in accordance with the Witness Statement of Dr Barton.
- 6.7 There is no record of a post mortem examination nor of any toxicology analysis. I have not seen a copy of the death certificate.

7.0 (1) Was Mrs Service's treatment for her congestive cardiac failure appropriate for 1997?

Yes.

(2) Given that despite her existing anti-failure therapy she remained breathless, and heart sounds revealed a gallop, what would have been considered reasonable treatment options (taking into account her age, circumstances, biochemistry etc.) in 1997.

Palliative Care

(3) Would uploads have a role for the relief of breathlessness due to chronic heart failure in 1997?

Yes.

(4) I opioids did have a role for the relief of breathlessness due to chronic heart failure in 1997, in what circumstances would they be used, in what dose and by what route?

When the decision had been taken curative treatment was no longer possible and by any parenteral route for example 2.5mg IM or IV, and 20mg SC initially. But tolerance would have developed and bigger doses would have been required.

(5) What is your opinion of Mrs Service's likely prognosis from her heart failure point of view?

Her heart failure was terminal i.e., a few days.

(6) What is your view on the prescription of Diamorphine 5 – 10mg IM prn for congestive cardiac failure?

Appropriate.

(7) What is your view on the prescription for Diamorphine 20 – 100mg SC/24h together with Midazolam 20 – 80mg SC/24h by syringe driver prn, in case she 'deteriorated and developed pulmonary oedema'?

Appropriate.

(8) What is your view on the subsequent administration of Diamorphine 20mg SC/24h and Midazolam 40mg/24h in order to 'reduce the pulmonary oedema and the distress and agitation from the drowning sensation of the pulmonary oedema'?

Appropriate and desirable.

8.0 Opinion

8.1 Mrs Service suffered from heart failure which was well advanced in 1997 and terminal by June of that year. She was receiving appropriate treatment to correct this including the diuretic Bumetamide to alleviate the congestion, Lisinopril which is one of the angiotensin converting enzyme inhibitor drugs which has been shown both to improve survival and alleviate symptoms in heart failure, and also Digoxin (Lanoxin) which improves the strength of cardiac contraction and slows the heart rate in atrial fibrillation such that symptoms are improved.

Her other drugs including Allopurinol to counter the gouty tendency, and Aspirin to reduce blood stickiness and prevent vascular complications.

- 8.2 Mrs Service remained unwell despite the corrective treatment outlined above. Opiates, notably Diamorphine, are standard drugs for the alleviation of shortness of breath and distress associated with pulmonary oedema, and are particularly helpful at night. The administration of Diamorphine has been standard practice for myself and other cardiologists for many decades and remains so. Intramuscular and subcutaneous administration is usual.
- 8.3 Mrs Service's prognosis was hopeless. The administration of Diamorphine 5 10mg IM would have been entirely appropriate and the prescription for Diamorphine 20 100mg SC/24 hours together with Midazolam is reasonable given the circumstances of the practice described by Dr Barton in her statement. There would have been a clear, if unwritten, understanding that the nurses should start with the smaller dose, namely 20mg which, given the erratic absorption of subcutaneous drugs, would amount to less than a milligram per hour. All opiates induce tolerance and with the passage of time the dose has to be increased. Hence the nurses would have been able to implement this without further reference to Dr Barton. This practice is in keeping with the recommendations in the British National Formulary (Volume 48 September 2004 page 225) which reads as follows: "chronic pain, by mouth, or by subcutaneous or intramuscular injection, 5 10mg regularly every four hours"; and in the section entitled "Prescribing in Palliative Care".... "Diamorphine can be given by subcutaneous infusion in a strength of up to 250mg per ml".

9.0 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 is 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.
- 1. 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.

11. 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.

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Signature: Co	de A	Date:	5	.4	06	