CONFIDENTIAL

A PROPOSAL FOR A CLINICAL REVIEW OF DEATHS AT GOSPORT WAR MEMORIAL HOSPITAL

Background

Gosport War Memorial Hospital is a small hospital that was part of Portsmouth Health Care NHS Trust. From April 2002, services were transferred to the local primary care trusts (Fareham and Gosport PCT, and East Hampshire PCT). The hospital has a total of 113 beds, with 3 wards admitting older patients for general medical care. Dryad ward has 20 beds, and patients are admitted under the care of a consultant, with some day-to-day care provided by a clinical assistant. Daedalus ward has 16 continuing care and 8 slow stream rehabilitation beds. Patients are admitted under the care of a consultant, and some day-to-day care is provided by a clinical assistant. Sultan ward has 24 beds, care being managed by the patient's own GP. Patients on Dryad and Daedalus wards must be of 65 years or older, registered with a local GP, have a Barthel under 4/20 and require specialist medical and nursing intervention. Patients on Daedalus ward must also require multidisciplinary rehabilitation, for example after a stroke.

Concern about deaths at the hospital were raised in September 1998, when police commenced investigations into an allegation that a patient had been unlawfully killed on Daedalus ward. In March 1999, the CPS decided that there was insufficient evidence to prosecute. In 2001, a further police investigation took place, and again the CPS decided that there was insufficient evidence to proceed. In January 2000 an Independent Review Panel found that whilst drug doses were high,

they were appropriate in the circumstances. A complaint was made to the Health Service Commissioner about drug use in May 2000, and in May 2001 the Commissioner investigated the death of a Mrs A, who had undergone an operation on a broken hip at another hospital and had been transferred to Gosport War Memorial Hospital in October 1998. Mrs A died of bronchopneumonia on the 3rd of December, and her son expressed concern about the excessive doses of morphine his mother had received during November, that she had not received reasonable medical and nursing care, and had been allowed to become dehydrated. The Commissioner noted that Mrs A had appeared to her son to be improving up to the time she had been transferred to Gosport War Memorial Hospital. The Commissioner accepted professional advice he had received, that Mrs A's medical management had been appropriate and that her nursing needs were systematically assessed and met. The pain relief was judged to have been appropriate and necessary for her comfort and the commissioner did not uphold the complaint. In March 2001, 11 families raised further concerns about the care and deaths of relatives in 1998, and 4 of these deaths were referred for an expert opinion. In February 2002, the police decided not to proceed with further investigations into these 4 deaths. Referrals were made to CHI, the GMC, NMC and the Portsmouth Healthcare NHS Trust and SERO.

CHI's report, published in July 2002, noted in particular insufficient local prescribing guidelines, lack of review of pharmacy data and lack of systems to monitor and appraise the performance of clinical assistants. CHI did not investigate the numbers of deaths among patients admitted to Daedalus and Dryad wards, but did undertake an independent review of anonymised medical and nursing notes of a random sample of patients who had died on Daedalus, Dryad and the Sultan wards between August 2001 and January 2002. It should be noted that this was a period in which the clinical assistant no longer worked at the hospital, and in particular excludes deaths that took place in 1998.

The case note review confirmed that the admission criteria for Dryad and Daedalus wards were being adhered to. CHI did investigate the amount of diamorphine, haloperidol and midazolam used on Daedalus and Dryad wards between 1997/1998 and 2000/01. These data indicate a decline in use of diamorphine and haloperidol on both wards after 1998/1999, with a relatively less marked decline in the use of midazolam in the later years.

The concerns, police investigations and GMC referral have focussed on the role of the clinical assistant involved, Dr Jane Barton. Dr Barton is a general practitioner at the Knapman practice in Gosport. It has been established that Dr Barton was employed for five sessions a week as a clinical assistant for the patients of Dryad and Daedalus wards from 1st May 1988 until her resignation on 5th July 2000. In this post, Dr Barton was accountable to the consultant physicians in geriatric medicine, and responsible for arranging cover for annual leave and sickness absence with her practice partners. The post was subject to the terms and conditions of hospital, medical and dental staff.

The Chief Medical Officer's note makes clear that there are other reasons for concern about the true explanation for deaths on Daedalus and Dryad wards, and that a satisfactory clinical review has yet to be completed.

Aim

1) To identify any excess mortality or clusters of deaths among patients who were on Daedalus and Dryad wards 1988-2000 and to identify initial evidence to explain any excess or clusters.
2) To determine whether the numbers of deaths among Dr Barton's general practice patients was higher than would have been expected.

Methods

a) The Hospital Wards

Information is needed about the numbers and causes of deaths on Daedalus and Dryad wards 1988-2000 (the observed deaths) and the numbers of deaths experienced in an appropriate comparison group (the expected deaths). One option would be to take the expected number of deaths from the deaths before and after Dr Barton's 12 years on the ward. However, this would be unlikely to be satisfactory because the completeness of the data relating to the years before 1988 can be questioned, and because over such a long period there would almost certainly have been changes in the categories of patients admitted to the wards.

The use of other community hospitals that admitted similar patients throughout the period in question to calculate the expected number of deaths would provide an alternative approach. The identification of suitable comparison hospitals does present some problems, but provided care is taken in selecting the comparison group, this approach is likely to offer a more reliable estimate of the numbers of deaths expected.

The identification of deaths on hospital wards by the Office of National Statistics presents some difficulties. The completeness of ascertainment would depend on the policy of the local registrar in recording information about place of death, and the consistency with which such a policy had been followed. Since it is highly unlikely that a complete list of deaths on the wards could be identified through the Office of National Statistics, an alternative is required. This problem would also present problems to the collection of data about mortality rates from other community hospitals selected for calculating an expected mortality rate.

Information held centrally in the hospital information system (HES) is reasonably reliable, and includes NHS Trust, hospital site code and speciality. Information on consultant code is not validated. HES is available at national level, and from about 1989 local systems for collecting data improved. It is not possible to be sure about the date from when information about deaths in Gosport War Memorial Hospital recorded in HES can be relied upon since the improvement of information systems took place at different rates in different regions, although we have reason to suspect that the system in the Portsmouth area was upgraded in 1989. If this is correct, reasonable data would be available from the early 1990s.

A third way of identifying all deaths will be the records kept by the hospital itself. The type of records kept by the hospital, and the period over which they have been retained, have not yet been investigated since such an inquiry of the hospital would signal the intention to undertake a review. Codes (for admissions, discharges, deaths) are sometimes used inconsistently in hospital systems at ward level, and caution would be needed in drawing conclusions from such data.

Given these considerations, the following method is proposed. A suitable group of approximately 10 comparison community hospitals will be identified. It is possible to assess the quality of data held centrally in the HES, and therefore only hospitals with good quality data will be included. The HES will be used to identify deaths in Gosport War Memorial Hospital and the comparison hospitals. The deaths will be classified by speciality in order to identify those patients likely to have been cared for on the wards in question, and by the clinical assistant. Deaths in the comparison hospitals will be included if the same speciality (geriatric medicine) were involved, but other specialities will be excluded. These data will enable a comparison to be made between the number of deaths observed and the number expected. Various formulations of the comparator group will be used in analyses in order to assess the sensitivity of the investigation to the choice of comparisons.

The analysis will also take account of certified causes of deaths, whether the certificate was issued by the clinical assistant, patient age and sex, and date of death.

We will explore the possibility of checking samples of HES data for the included hospitals through searches of hospital information systems. It should be noted, however, that is is not possible to predict how many hospitals will have retained data in easily retrievable form relating to the period in question. The information surviving at Gosport War Memorial Hospital will be investigated. This has two purposes. The first is to check the completeness of data identified through HES, and the second is to explore the availability of additional information about the circumstances of death. Such information, if available, could help to explain the findings of the analysis. For example, a review of ward logs or registers, or even samples of clinical records, could highlight any changes in the duration of in-hospital stay between admission and death, use of opiate and sedative medication, and other relevant clinical details.

Since the names of the deceased in the comparison hospitals would not be required, research ethics approval should be straightforward for this aspect of the review. Review of hospital systems could also be undertaken without identification of patients by name, and although discussion with district research ethics committees would be required, approval would probably be readily obtained. Research ethics approval would be required with regard to the deaths in Gosport War Memorial Hospital, since the entries in the death register would be required in order to confirm who had signed the death certificate, and to review any ward logs, registers or other records.

Options

- Use of HES data to undertake a comparison of observed to expected deaths among patients of Gosport War Memorial Hospital under the care of specialists in geriatric medicine. This would be supplemented by assessment of samples of data held by hospitals to check the

completeness of the data. If it proves possible to have reasonable confidence in the data, and the findings are reassuring (i.e. the number of observed deaths does not exceed those expected), the review of deaths in the hospital could conclude here.

- Review of information held by Gosport War Memorial Hospital. Should the findings of the review of HES data be inconclusive or suggest that more deaths than expected had occurred, information systems, logs, registers and records held by the hospital will be identified and those available reviewed.

b) The General Practice

Dr Barton is a general practitioner, and if concerns about her management of older patients in the hospital have been raised, questions might be asked about her management of patients in general practice. Since serious concerns have been raised about the care provided by this doctor, there is a strong argument for obtaining data to enable a reliable conclusion to be drawn.

Information about the patients registered with the practice (the denominator) would be obtained from the relevant Strategic Health Authority (SHA) or PCT, the period over which such data would be available being dependent upon the SHA's policy. Should data relating to before 1993 have been preserved, consideration will be given to the feasibility of extending the investigation to these years. However, this is unlikely, and it should also be noted that the National Death Register has been computerised from 1993, and therefore searches for deaths after this date are performed more easily. From past experience, the retrospective reconstruction of practice registers is a laborious process, and would be dependent on the local cooperation and involvement of the PCT or SHA. A hand search of the National Death Register prior to 1993 could be undertaken to identify death certificates issued by Dr Barton in earlier years.

In the analysis of deaths from 1993, the rate of deaths in the practice will be related to relevant comparative rates such as the local district rate, rates in similar districts, and the national rate. The proportion of deaths in the practice that had been certified by Dr Barton will be identified, and the characteristics of the patients concerned will be described. The analysis will determine whether there were more deaths than expected, and whether Dr Barton issued certificates for a high proportion of the deaths.

Options

- Review of deaths in the practice, and those certified by Dr Barton, beginning in the year from which data about the practice register can be obtained (possibly 1993). This analysis will show whether the numbers of deaths in the practice population was higher than expected, and whether Dr Barton signed more death certificates than would have been expected.
- A review of all death certificates issued by Dr Barton from the time she joined the practice. This would require a hand search of the National Death Register for years prior to 1993

Notes

1. We have not made enquiries of staff at Gosport War Memorial Hospital, the PCTs or the SHA about the data that may be available, or the likelihood of cooperation in obtaining data.
2. Research Ethics Approval will be needed. This will be required from the local Research Ethics Committee (Portsmouth) and also the ONS Ethics Group.

Timescale

It is difficult to confidently predict the time required to complete this review, since it is not yet clear how much information will be available, nor how many patient deaths may be involved. Nonetheless, a report of the findings would be required within a short period as possible. We

estimate that the analysis of deaths at Gosport War Memorial Hospital would require approximately 6 months. Since the reconstruction of Dr Barton's practice register will require local cooperation and time, we estimate that this aspect of the investigation would require 9 months.

Estimates of the Costs

The estimate does not include the costs that would be incurred by the ONS. These costs are not yet available. The costs cover all the options listed above with one qualification: it is not known how much data will be available at Gosport War Memorial Hospital. The estimate assumes that little relevant data will exist, but if a substantial amount of data are available and need to be reviewed, additional costs would be incurred.

		£
1.	Research Associate RA1A pt 7 4 months, incl NI & SA (Paul Sinfield)	8501
2.	Professor Baker	4000
3.	Statistics support (Professor D Jones)	2000
4.	Expenses (travel, office costs etc)	2500
5.	IT support	800
6.	Overheads (60% of staff costs)	8700
	Total	26501

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