The People's Inquiry: One Year On

Evidence presented by Dr Philip Howard (PH) consultant physician, Epsom & St Helier NHS Trust.

Tuesday 16 December
Central Hall, Storeys Gate, London SW1H 9NH

Present:

Roy Lilley (Chair; RL); Dr Louise Irvine (LI); Dr John Lister (JL); Professor Sue Richards (SR); Polly Toynbee (PT), Frank Wood (FW).

RL:
You know our purpose – a year on, we want to see how much better things are. So perhaps you'll cheer us up?

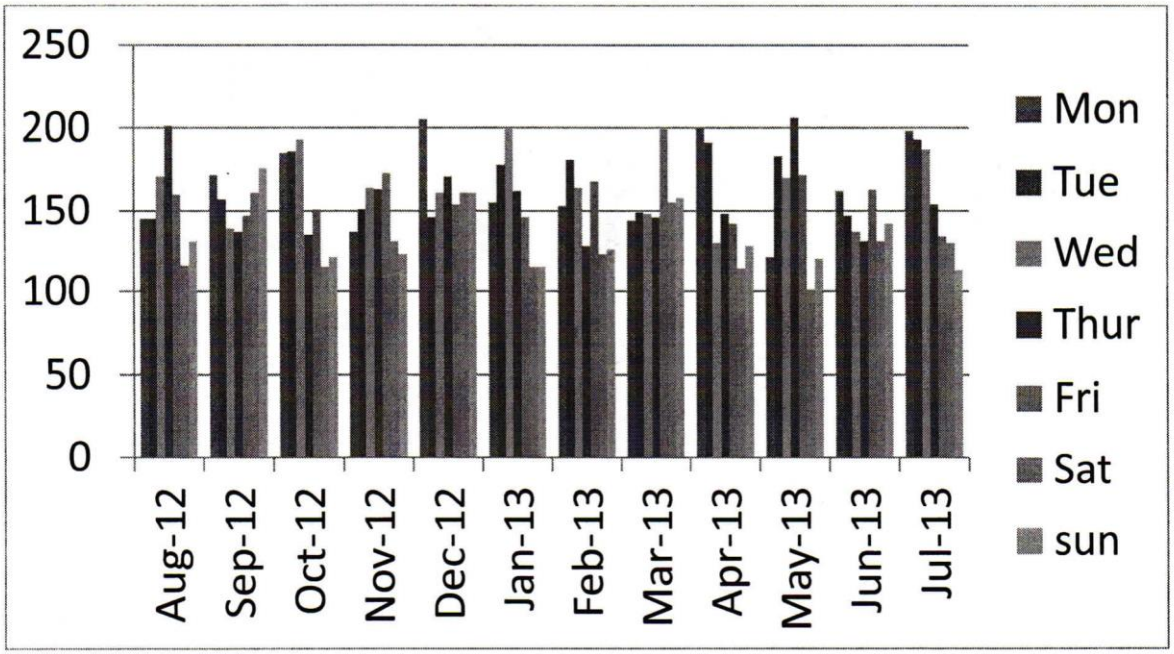
PH:
I have to say that entirely agree with Dr Sandhu's powerful presentation that gives you a very clear idea about what is happening at the coal-face, a picture with which many of us are familiar. That's in North-West London, and I'm going to present some information for South-West London, where the picture has I think been somewhat different. There was under BSBV [the Better Service, Better Value plan abandoned by CCGs earlier in 2014] a proposal to close maternity, close emergency paediatrics and A&E at St Helier Hospital.

That didn't happen, and it didn't happen largely because of the influence of the unions and more especially – and to my surprise – patients and the public. We never had a consultation to close the hospitals and in January of this year BSBV was disbanded. Although I suspect that the aim to save £370 million by 2018-19 will resurface.

I'm going to present to you an audit on mortality. I chose a full year from 1 August 2012 to 31 July 2013. What I wanted to do was to look and see how we perform at St Helier in relation to a hard end point, namely death, as an outcome measure. Because it had been suggested that hospitals are not safe at weekends and at night and on the back of that there had been and perhaps still will be in the future changes to reorganised services, to have more consultants – I think the proposal is 180 extra consultants in South-West London, at a cost at least £14 million. That's just for the consultants, to say nothing of the other services. I think the cost must be well in excess of that. And also to bring in 7-day working.

As a consultant, having worked at St Helier for over 20 years I actually wanted to know how we were performing. And whether this view that we were unsafe was in fact true. This audit goes up to 31 July. It was finished and presented locally around the time that *Dr Foster Hospital Guides* came out. Dr Foster said that at Epsom and St Helier we rank 29th out of 143 trusts in England in terms of safety. We are one of the few hospitals in the country – I think there are eight – which don't show an excess mortality at weekends.

Figure 1 shows the admissions throughout that year. The days are on the right.



ADMISSIONS DURING WEEKDAYS AND AT WEEKENDS

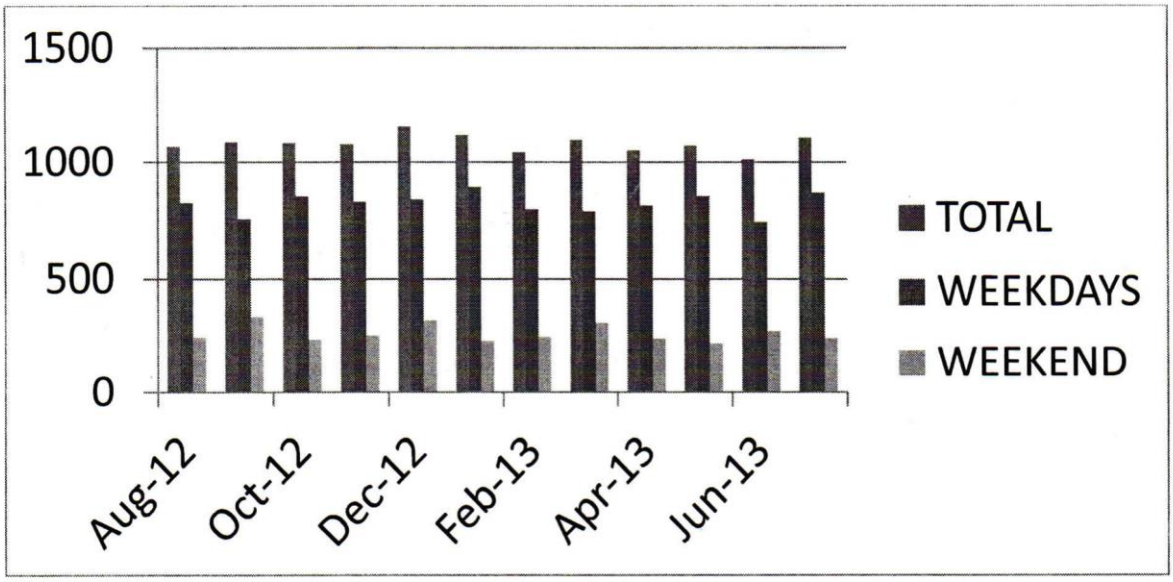


Figure 1 Admission by day and month over one year for Epsom and St Helier Hospital, 01/08/12 to 31/08/13

The first and obvious thing is that there doesn't seem to be a fall in the summer and an increase in the winter.

Figure 2 shows that the overall admissions are about 1000-1200 per month. I think that's partly because the winter-bed pressures persist throughout the year. We adapt our admissions to the emergencies to some extent. But what surprised me was that we didn't see an enormous increase in admission over winter and a fall in the summer. The other thing if you just simply look at those graphs is that there is a fall in the number of admissions on Saturdays and Sundays compared with weekdays.

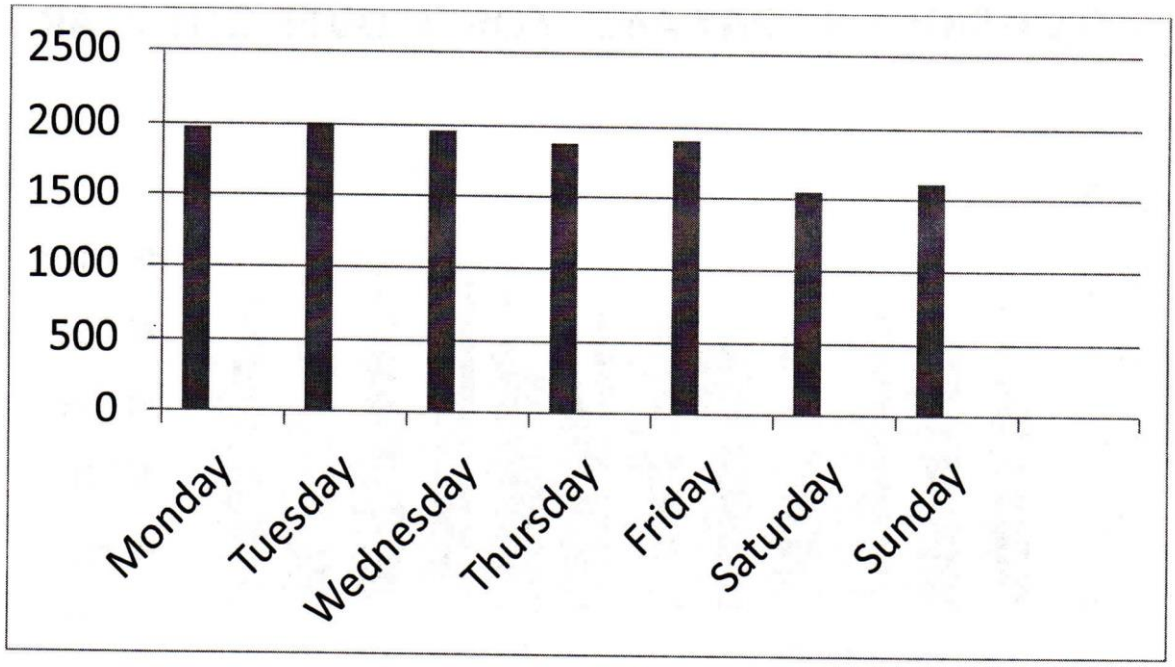


Figure 2 Overall admissions by day throughout the year

SR:
Aren't there five weekdays and two weekend days?

PH:
Yes. So if you just look at the crude figures in the top of Figure 1 you can see that there is a trend towards lower numbers of admissions on Saturday and Sunday compared with weekdays. Which is summarised in the lower half of the figure.

Figure 2 shows the actual admissions by day throughout the 12-month period. This shows that there is a fall on Saturday and Sunday compared with weekdays. Those are crude figures I derived from the computer system.

The first thing that everybody has heard about is that you are more likely to die if you are admitted at weekends. That is false. Not many people die on the day they are admitted anyway. But if you look at the deaths by day of admission (Figure 3), there is actually no statistically significant difference between any of those but there is a clear trend towards fewer deaths in those admitted on a Saturday or on a Sunday.

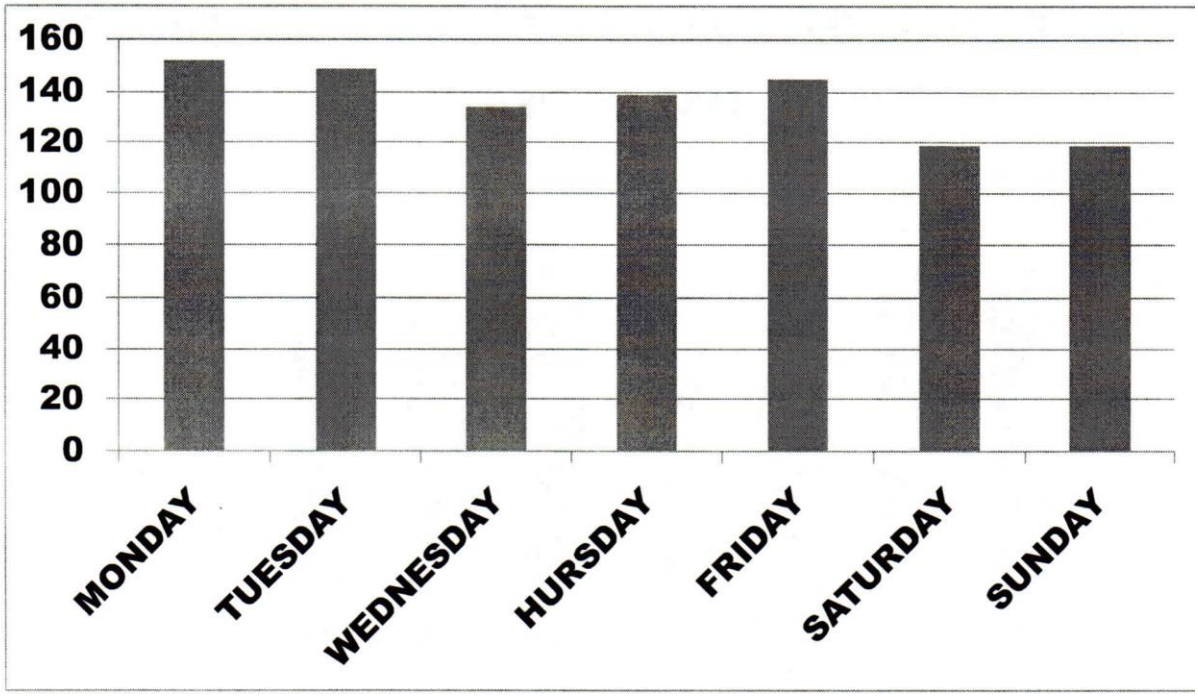


Figure 3 Numbers of deaths by day of admission

If you look at deaths by day of death (Figure 4), again you see a fall towards the end of the week – Saturday and Sunday.

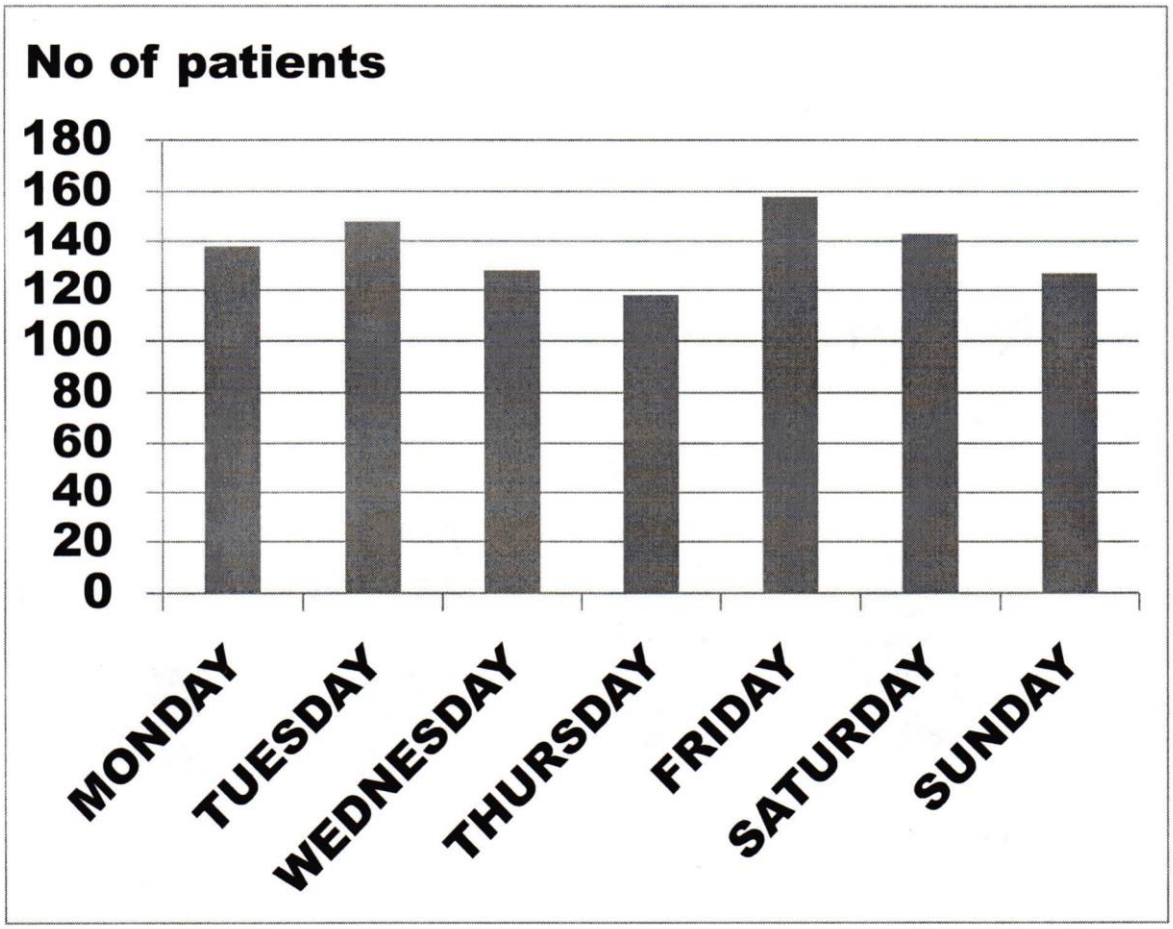


Figure 4 Numbers of deaths by day of death

Again, if you take individual days and if you compare statistically, the high points and the low points, there is no statistically significant difference, even though these are large numbers. From memory I think it was 934 deaths I looked at.

Figures 5 and 6 show that the trends are more or less the same.

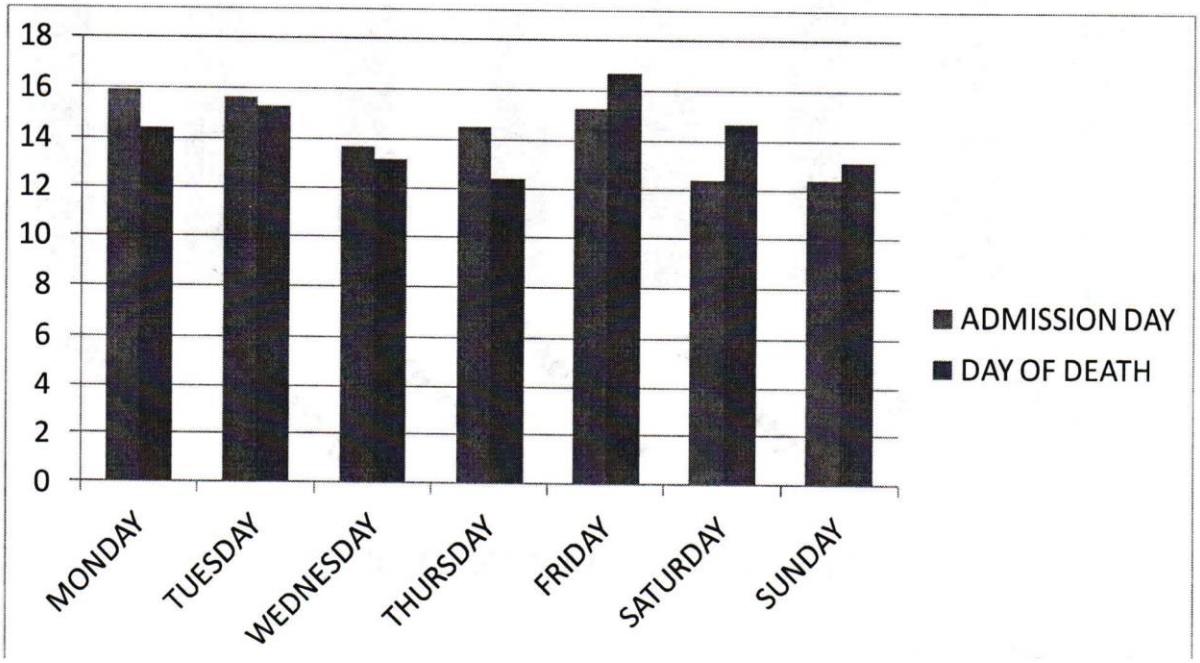


Figure 5 Percentage of deaths by day of admission and day of death

(Figure 6 starts at 200 and goes up to 260.) This shows that the deaths recorded at night – 6pm to midnight and midnight to 6 am – are actually lower than they are during the day. Again, not statistically significantly different.

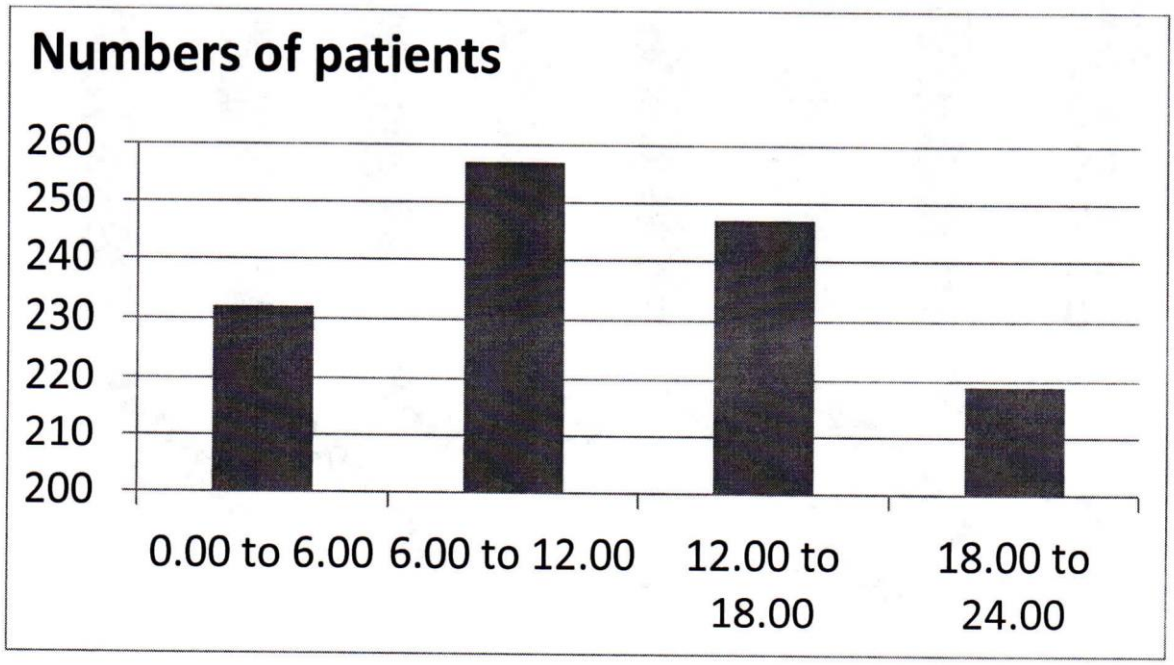


Figure 6 Time of death

If you look at the time the deaths were certified you can't explain any of this on the basis of there being a delay. Doctors are fairly prompt in coming to see patients who are dying.

Figures 7 and 8 show the percentage death rate both by day of admission (Figure 7) and by day of death (Figure 8).

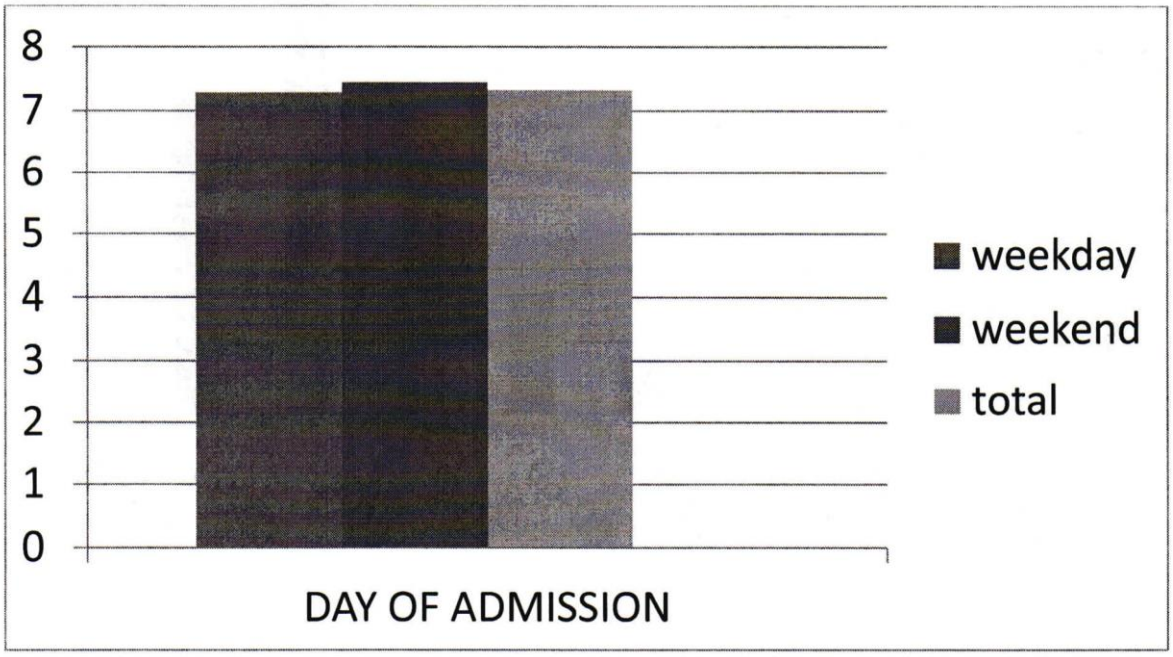


Figure 7 Percentage death rated by day of admission (expressed as a percentage of admissions)

There is absolutely no difference at all, whether you look at it by day of admission or you look at deaths by day of death between weekdays and the weekend. Now what that tells you is that the potential quality with respect to this end point of death is the same throughout the week. Those are crude figures. You don't need statistics to show there is no difference there. They are actual figures from a hospital – St Helier Hospital – which is one of the few that doesn't appear to show this apparent 10% excess mortality at weekends.

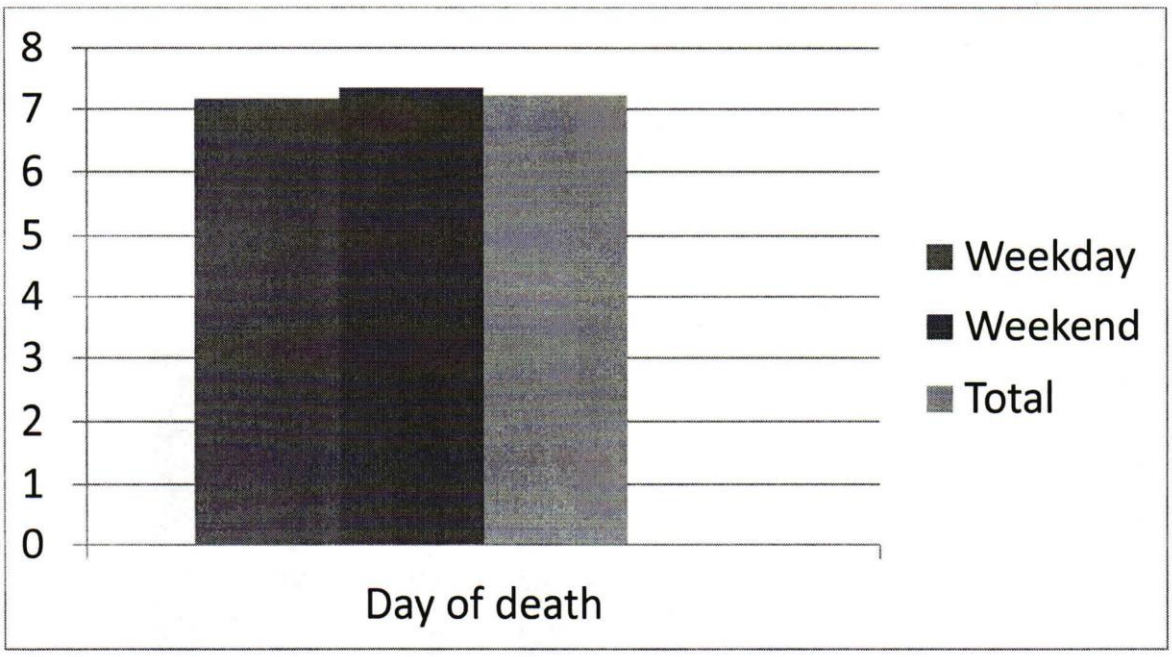


Figure 8 Percentage of death rate by day of death

Figures 9 and 10 are essentially the same.

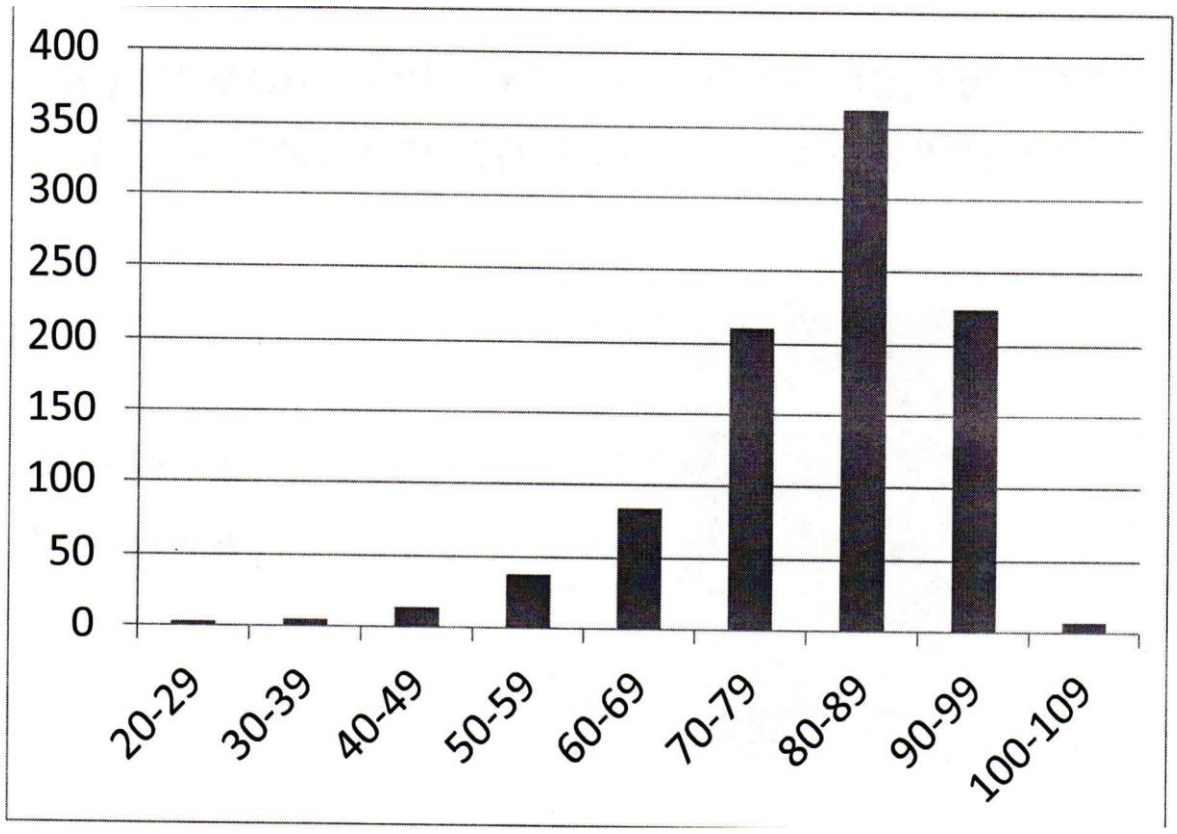


Figure 9 Age profile of patients who died (n=934)

Look at the age profile of the patients who died. As you can see, some 22% are in their eighth decade, 37% are in their ninth decade. So there is no doubt that we are dealing with an elderly

population. If you look at the 100-109 year olds, we have a small percentage of people who died at hospital in extreme old age. The St Helier's estate is relatively deprived, so these are quite remarkable figures in that they show the actual age profile of the population, for those who died [in the time period studied].

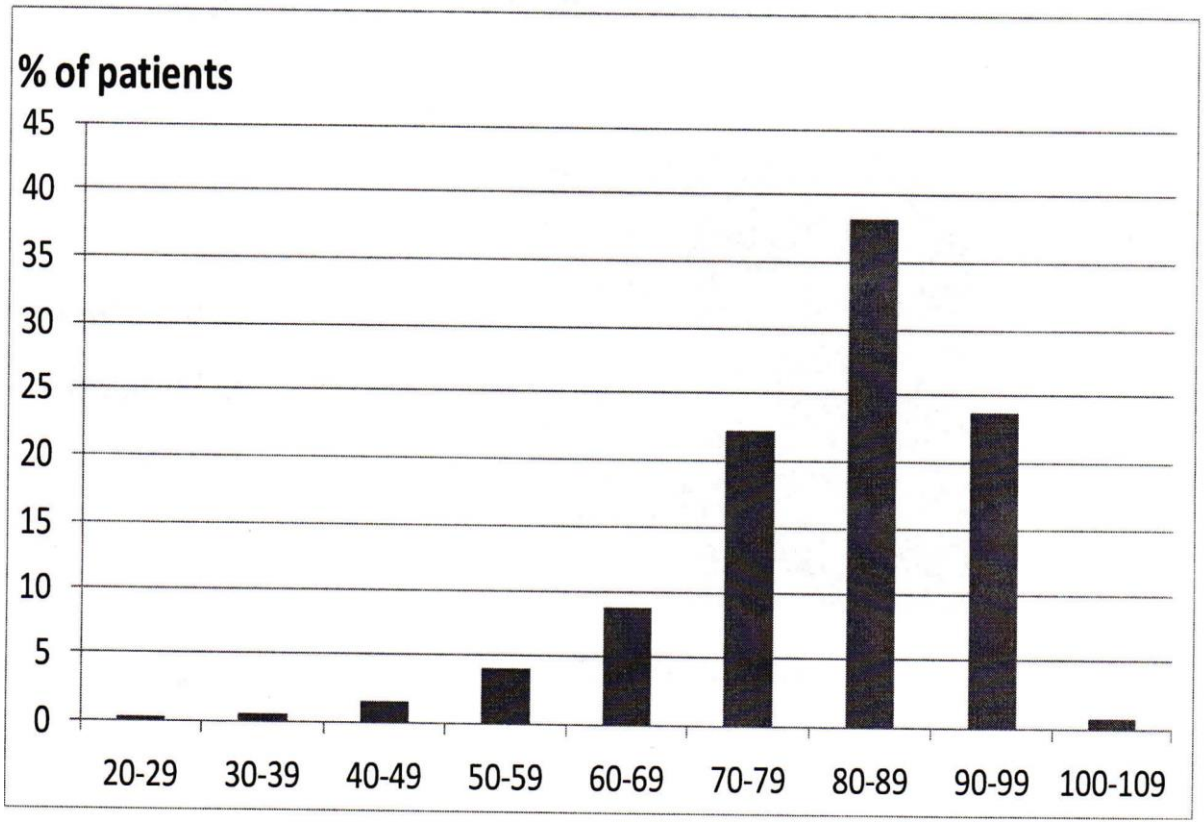


Figure 10 Age profiles of those who died as a percentage

Figures 11 and 12 are quite interesting and surprising.

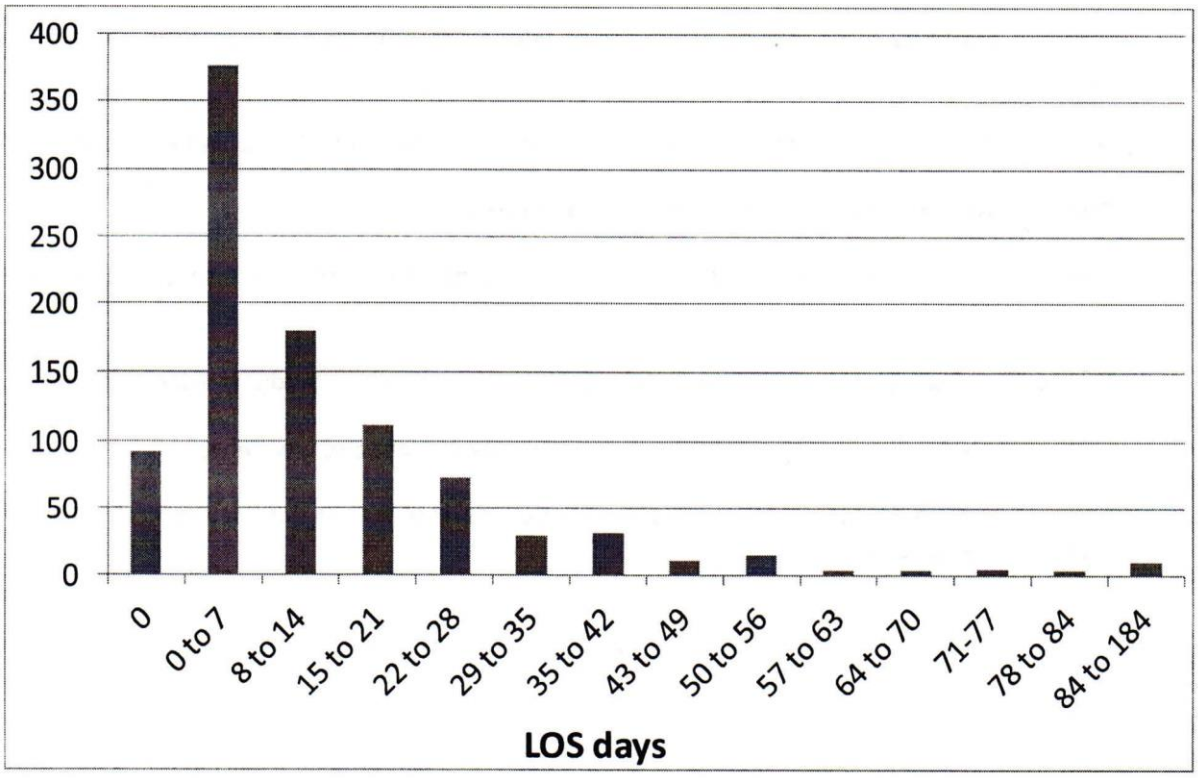


Figure 11 Length of stay (LOS) in hospital (days)

Figure 11 shows the length of stay in hospital on the patients' who died final admission. We have zero day admissions: patients who are either brought in dead to casualty or who die within the first 24 hours. The overwhelming number of patients stay in hospital less than a week. The numbers who have increased lengths of stay in hospital falls off very rapidly. So we are talking about patients whose final admission to hospital when they die is not prolonged but we have a few outliers – 84-184 days – and this reflects largely but not entirely chronic sick patients, often with renal failure because we host the supra-regional renal unit at St Helier.

These patients who come in and die at St Helier Hospital – this doesn't include Epsom but we take transfers from Epsom – don't stay in hospital a long time.

Figure 12 is even more surprising.

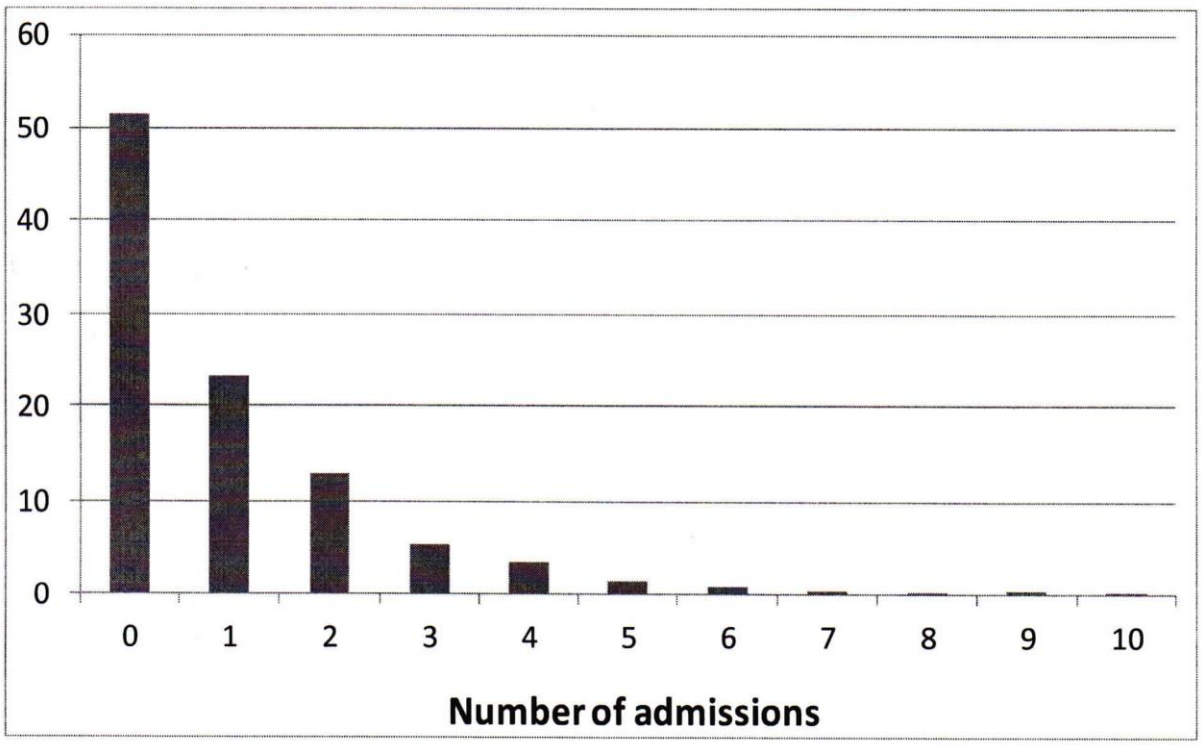


Figure 12 Numbers of admissions to hospital in the year prior to death

It shows the number of prior admissions in the preceding 12 months, before what I could call the terminal admission. Over 50% of patients who die in our hospital have not been admitted in the previous 12 months. Again, the number of 1,2 or 3 admissions tails off very quickly.

The patients who come in and die don't stay in very long but if you look at their histories most of them don't actually have many or indeed any previous admissions to hospital in-patient care in the preceding 12 months. The reason for that is that if you look at the outpatient attendances of these patients before they die, in the last year of life they increase.

I am going to be heretical now. Those patients go to ambulatory care, they go to casualty – Professor Keogh said that 40% of patients who attend casualty do not receive any treatment, they are using it as an outpatients – they go and receive daycase procedures, they have accelerated returns to conventional outpatients, they attend more palliative care clinics and integrated clinics such as airways clinics.

I am going to be looking at this from the point of view of the hospital looking out, and I appreciate that some of the clinics that we do are shared in the community but I cannot comment on what is done from a primary care perspective. This is purely from a hospital-based perspective. The reason we are keeping patients out of hospital is because we are seeing them in outpatient contexts: anything from formal A&E to ambulatory care, to conventional clinics. That is why the number of admissions is so low in the year preceding death. At St Helier we are doing – and have been for many years – good community-based and outpatient care. My little bit of heresy for you is: casualty units are probably a good thing even if you get no treatment.

This was well illustrated by a respiratory nurse, who said if you suffer from chronic airways disease and you suddenly become breathless at 3 o'clock in the morning, you are going to call an ambulance. Absolutely right. You can't legislate for that.

The other thing I think that explains these figures is that we have very good relationships with general practice, and we already have a lot of invigorated care in the community, and our chronic airways clinic and asthma clinic are examples of that.

My conclusions:

- Absolute mortality rates fall at weekends in relation to both day of admission and day of death.
- Mortality in relation to hospital admissions remains the same at weekends and weekdays.
- Overnight mortality rates are lower than daytime rates.
- Over half of patients who died did not have a hospital admission of more than 24 hours in the previous year.
- The quality of adult acute care does not change over the week, ie standards are maintained.
- Further analysis is needed to establish why we are safe at night and weekends.
- Accurate and up-to-date local mortality statistics are essential in the strategic planning of acute medical services.

We are safe at weekends if you look at crude mortality rates. I think that is what is important. We have a catchment population of about 320,000. We are a district general hospital. We are an associate teaching hospital with St George's so we have the standards of a teaching hospital but we have the ethos of a district general hospital.

We take a lot of patients with sepsis from the Royal Marsden which is 3 miles away. We have the supra-regional renal unit so we take a lot of sick patients with renal disease. We also take patients from Epsom and HDU as well. So if anything, our figures should be worse than they are. We are not just a stand-alone DGH. We are a DGH which takes a lot of sick patients from the surrounding hospitals and services.

That is my view. This is 65 years after the start of the NHS. St Helier has been there most if not all of that time. I wanted to know how well we were doing in terms of the hard end point. I think these figures show we are safe and performing well.

RL:
That we very interesting, thank you very much. The question I wanted to ask you I think perhaps you have answered but perhaps we can re-visit that bit: you said people seldom die on the day of admission, which might explain the lower death rates on the Saturday and Sunday and the higher death rates on the Monday. Is that something you could comment on?

PH:
The numbers are very large so it is very difficult to interpret them. That's a very small number of people who die on the day of admission. So if you come in on the Friday and Saturday night sick, you may very well die on the Monday or the Tuesday. That is true.

RL: So it might just skew those numbers, mightn't it?

PH:
It may be, but also you've got to look at selection bias as well. If you are admitting for example sick patients for complex surgery, you are going to admit them on a Sunday for the Monday, and you will not normally want to do complex surgery for example, or deal with high-risk patients, on a Friday.

RL:
You mentioned Bruce Keogh. Where are we now on the 7-day working? I know Epsom quite well, though not obviously as well as you do. Do things come to a grinding halt at the weekends? When I have been 'in there' at the weekends, it has the feel of a weekend hospital about it, it's not 7-day working. Far from it. Could you comment on that, give us a view around it?

PH: It depends on your point of view. If you mean by 7-day working, working as normally, then it's been suggested that you would need a 40% increase in the overall budget.

RL: The places where they do it, they re-schedule the staff.

PH:
Yes, but you would also not have the staff working in the middle of the week when we are busy. I think that would be a problem. Speaking as a physician, a gastroenterologist and general physician, where patients come into hospital we've increased the number of consultants in A&E at St Helier. So the first consultant you are under is an A&E consultant. You then go under an AMU consultant in the acute medical unit. This audit was after we got full complement of four consultants. You also have a general physician on who is on at night and at weekends, and the fourth lock in the system is the very good ITU and in-reach that they do. You've got a quadruple lock there.

The other thing that I think makes it safe is that when we are very, very busy, most consultants live close by, very accessible, and we know our staff. We can call them in, they are quite happy to be called in, and work very hard when they are on take. I think for example I spend about 25% of the time on call actually at the hospital. By time on call I mean 24 hours, not 12 hours: 6-8 hours per 24 hours. That's quite usual. Where you have a busy, bustling, friendly hospital it gets the work done.

You are right in the sense that elective surgery and so on is going to be relatively quiet at weekends and yes, we do adjust our workload, so a lot of the inpatients who are in at the weekends either need to be there, or are relatively stable, or simply can't be discharged at weekends because of social services. The dynamics of health are often very complex. It's a whole system.

SR:
I very well remember the evidence you gave us a year ago, which was our first evidence session. I think you've done more to this painstaking piece of research than you had done then, but it was clearly a very in-depth analysis of what you were achieving. At the same session, somebody whose name I cannot remember poo-pooed it as anecdotal and drew on evidence that I think was accepted within the broader Royal College of Physicians about 7-day working and the dangers of weekends. I am really very interested in how this comes about, that kind of professional legitimation of something that is actually much more differentiated and granular.

You have said that St Helier is best at doing what you do. The use of vast, over-abstracted statistical analysis to make points about how services should be developed seems to me to be a bit of a problem that the profession has got itself into. I can see as an academic how that has come to happen. What's your view on that, and how can we make sensible, rational decisions that are not this kind of crazy distortion of what an evidence base actually means?

PH:
I read an article about 20 years ago that helped enormously. Aside from private practice, there are two health services. There's the real health service and the virtual health service. They are not necessarily the same thing. Dr Sandhu was talking about the real health service, and that is what I am talking about. There's the virtual health service which you will see on spreadsheets, computer

screens, strategies, proposals and so on. I think one of the problems here – an intellectual one – you've got to say 'are we dealing with the real world, or are we dealing with a virtual world?' To make a very serious point, I am sure the basic thrust of the BSBV will come back again, even though it was shelved in January, and the £370 million saving by 2018-19 will be back on the agenda after the election. I accept that.

The fundamental reason was the Nicholson challenge, £20 billion which has now gone up to £30 billion and the need to make savings. That's not changed. If you look at the draft strategy for the South-West London Commissioning Group over 5 years, it is still there even though if you drill down into the figures, you see that we are actually doing rather well– and this bears out what I've said as well – we're very good at not admitting people who don't need to be admitted, and we're very good at discharging people from hospital – delayed discharges, as they are called – in relation to the national average. We're extremely good at that, so we are getting patients out of hospital and we're not admitting inappropriately. That is in the South-West London strategy.

But the other thing that has come in is the London Quality Standards. We've got to have obstetricians in 168 hours a week, we've got to have A&E consultants in 16 hours a day, and so on. Those are standards. I'm not sure, because of the quadruple lock we've got on safety in terms of medical admissions – and I have to say that most of these deaths are medical, even if they started off surgical – is not a good thing. I think it is. There is no evidence that having doctors in all the time, and they estimate they need an extra 184 I think for South-West London, is actually going to improve things.

The important thing – and the thing as clinicians we rely upon – is evidence-based medicine. These I think are the facts, this audit, but we haven't got proof, for example that having an obstetrician in the unit 168 hours a week is actually going to be beneficial.

The other thing is because – however it pans out eventually – we've got a fixed financial envelope, we do not have unlimited resources. Therefore, if the move, for example, is to get 7-day working, that's possibly at a cost of 40% more in terms of the budget – because it's not just consultants, it's nurses, it's clinics, it's diagnostics, and so on. Or you could take the rather narrow view in the strategy of £14 million to pay for 180 extra consultants. But if you push towards one objective, then you divert resources from something else.

If you have 7-day working and you have 180 extra consultants in the South-West London sector, how cost effective is that going to be? And how would you prove that it is actually saving money and saving lives in a way that could not be more cost effective by doing things differently, for example?

PT: The Simon Stevens 5-year view, is that virtual or real? Which side is that on?

PH:
It's virtual. It's virtual because of the London Quality Standards. Because they are wish fulfilment. Of course we would like to have more consultants, etc. That I think is virtual reality.

RL:
Simon Stevens is making an announcement this week, isn't he, on the allocation of resources? So we will see. That's most interesting, and thank you very much.