in those which already exist beds have become blocked by chronically disturbed mentally ill patients. The south west has not experienced the latter problem and has therefore virtually always been able to admit prisoners in urgent need of psychiatric treatment. This would appear to be an extremely important use of the regional secure unit, and therefore the ability to run at just below full capacity, thus allowing for emergency admissions from prison, may be desirable.

Nevertheless, there are less favourable interpretations of the data. The increasing use of section 48 may indicate larger numbers of severely mentally ill prisoners on remand. Could this in turn reflect a failure of community psychiatric services and a lack of longer term facilities for the severely mentally ill? Table I shows that both in the south west and nationally the increased use of section 48 has been associated with more than a 30% reduction in the number of psychiatric beds. Interestingly, nearly all of the section 48 patients in the present series were already known to the psychiatric services. It could be argued that those regions with few section 48 admissions are providing a superior service for this group of patients compared with regions that make greater use of the section 48 provision. Clearly more detailed studies are required to clarify this.

It is unlikely that any straightforward conclusions can be drawn from these data. The relation between the use of section 48 and other factors such as the availability of general psychiatric facilities, secure beds, and the recognition of the need to treat mentally ill offenders outside the prison system is a complex equation. Nevertheless, the use of section 48 should be included as one of the parameters by which the psychiatric services are monitored and should be subject to regular audit. For more serious offenders suffering from mental illness who cannot be diverted from the criminal justice system at an early stage the use of section 48 should be encouraged.

We are very grateful to Mr Dyce from the C3 division of the Home Office for providing the national data on section 48 admissions. We also thank Mrs Jenny Peterson for secretarial support.

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The Gatekeeper and the Wizard revisited

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Once upon a time there lived a Gatekeeper and a Wizard.[1] The Gatekeeper lived in a house at the entrance to a great high castle, and in this castle lived the Wizard. The Gatekeeper was very clever and his job was to see all the poorly people and cast his magic spells to make them better. Sometimes, however, the people were so poorly that he couldn't make them better and then he opened the gate into the great high castle so they could see the Wizard. She was also very clever and she too had powerful spells and potions to make the people better. It was a good system but as the Wizard learnt how to cast more powerful spells the number of poorly people waiting to see her grew and grew. The people all cried: "We give the King our money so we can see the Wizard when we're poorly but we are having to wait longer and longer to see her. Why is this?"

The King summoned his Minister. "Pray tell me what is going on?" he demanded.

"Well, Sire," the Minister replied, "although you seem to be spending more money than ever before, that Gatekeeper and Wizard are never satisfied. They keep telling the people that they need more money to run the system and that we don't spend enough compared to other Kings across the sea."

The King stroked his beard and looked thoughtful. "We spend quite enough money on the Gatekeeper and the Wizard as it is," he murmured.

"Why don't we make the Gatekeeper and the Wizard more efficient?" suggested the Minister. "I'm sure that Gatekeeper makes some unnecessary referrals to the Wizard because he can't be bothered to deal with them himself and the Wizard has always got some empty beds in the castle so we could cut down on those as well. I'm sure there's scope for increased efficiency there. We could also close the door of the Counting House two hours earlier each day so they couldn't get money out as quickly."

The King liked what he was hearing.

"And what about an Inspector?" asked the Minister enthusiastically.

"What a splendid idea!" exclaimed the King. "An Inspector is bound to save me money in the long run by finding out just how efficient that Gatekeeper and Wizard are."

"May I suggest a Charter for the poorly people, Sire?"

"Capital!" replied the King. "Tell the people that no one who is quite poorly should have to wait more than two years to see the Wizard."

And so it was done. An Inspector was appointed and the people were given a Charter.

The Inspector makes his visits

The Gatekeeper was busy as usual when the Inspector arrived. "I can measure how efficient you are by how many poorly people you send to the Wizard and by how many spells you have been casting, some of which I'm sure are unnecessary. I can also compare you with other Gatekeepers at different castles. You must prove to me that you are at least as efficient as they are."

The Gatekeeper felt very cross indeed! He didn't like the Inspector's attitude one bit. Here was an Inspector checking up on him, and soon he would be telling him what to do! "How do you know that what you're measuring actually tells you how efficient I am?" he asked angrily.

"The King pays you so he makes the rules—just prove to me that you're as efficient as the other Gatekeepers across the land and you'll have nothing to fear," answered the Inspector.

"I'm doing my best," thought the Gatekeeper. "I suppose I could throw this Inspector out of my house and never let him in again. Perhaps I could do the measuring and only let him see the things I want him to see. I could even point out that if the Counting House was open for longer each day we might have enough

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"I can measure how efficient you are," said the Inspector

money to run the system more efficiently, but I don't think he wants to hear that. I'll just keep my mouth shut and do what I'm told and what's best for the poorly people—there is no point in arguing with him."

Off went the Inspector, feeling quite pleased with himself, to see the Wizard. Now the Wizard was working just about as hard as she could when the Inspector arrived. "You've got to close those empty beds and use the remaining ones more often," said the Inspector after a brief tour of the castle. "That will increase your efficiency."

"But I need all those beds to keep a bit of slack in the system for emergencies and epidemics," replied the Wizard.

"No, what you need is a higher turnover of poorly people and more of them looked after by the Gatekeeper in their own homes," said the Inspector. "You can have a few spare beds for emergencies but no more."

The Gatekeeper and Wizard do as they've been told

The Gatekeeper and the Wizard tried to be more efficient. The Gatekeeper sent the very poorly people to the Wizard, who sent them back just as soon as she could. But it was no good—although the very poorly people could usually see the Wizard straight away, the queue of quite poorly people (the ones needing the Wizard's magic, but not urgently) got longer and longer. Then when winter came and more people became poorly there were no spare beds in the castle for all of the very poorly people. Some even had to be sent to other castles! The Courtyard soon became full of poorly people crying, "Why are there too few beds for us?"

The King summoned his Minister again. "Why are the people crying?" he demanded. "Haven't you told them about the Charter and how we've made the Gatekeeper and the Wizard more efficient?"

"I have, Sire, and about the extra money we've been spending, but it doesn't seem to have done much good. The queue is getting longer and the people are cross. It's all the Gatekeeper's and Wizard's fault—they are still not working efficiently enough."

"Send them to me," roared the King. "I'll sort them out!"

"And what is going on?" he thundered when both of them had arrived. "You," he said, glaring at the Wizard. "I'm spending more and more money on you but the queue of quite poorly people waiting to see you is getting longer and longer. Why can't you work more efficiently?"

"Sire," answered the Wizard, "it's because of Queuing Theory.[2] We have been working more efficiently and treating the same number of poorly people with fewer beds. But when the winter came, and lots of people got very poorly at the same time, I had no spare capacity in the castle to treat them all. In fact, there have been times in the past three months when the poor old Gatekeeper hasn't been able to get any of the very poorly people into the castle at all!

"Not only that, but with my beds occupied by emergencies I don't have enough beds left over to treat the quite poorly people in the queue who have been waiting to see me." She paused. The King looked confused. The Minister consulted his aides.

"Ah, but tell me," said the Minister, following a hurried conversation, "we have been reducing the mean queue arrival rate by telling some of the quite poorly people that they can't be treated any more under the King's Counting House system and that they have to make their own arrangements for treatment by the Wizard. We have also asked you to give priority to those who need a short service time. Why then, oh clever Wizard, is the queue not getting any shorter?"

"Think of it mathematically, my dear Minister," answered the Wizard. "If the ratio of the rate at which poorly people join the queue to the maximum rate at which I can treat them (the traffic density) is greater than 1, then the waiting time will eventually reach infinity! What needs to be done is to keep the ratio down to around 0·6 or 0·7, and this can be done only by increasing the capacity of the system by giving me more beds.[3] My problem is no longer one of efficiency but one of capacity." The Wizard finished on a triumphant note.

"Damn this clever Wizard," muttered the Minister under his breath.

The King looked angrily at the Minister and his aides. "Why wasn't I told?" he asked, icily polite.

"You said you wanted to save money and to make the system more efficient, Sire," stammered the Minister.

The King interrogates the Gatekeeper

"And you," said the King turning to the Gatekeeper. "Why can't you work any more efficiently?"

"I am working more efficiently, but the problem for me," replied the Gatekeeper, "is this Theory of 'Bad Apples.' What the Minister has been trying to do with that horrid Inspector of his is to prove that I'm less efficient (as defined by the number of poorly people I send to the Wizard and the number of spells I cast) than Gatekeepers elsewhere."

"And there's another way...?" The King looked sceptical.

"Why yes," said the Gatekeeper, "it's called the Theory of Continuous Improvement.[4] This works because it focuses on the average Gatekeeper and his or her efficiency, not just the bad apples. A small increase in the efficiency of the majority of Gatekeepers results in an enormous increase in the efficiency of the whole system because the entire distribution is shifted upwards."

"Well, where does all this get us?" said the King, somewhat mollified.

"It means that you need a new Inspector," replied

the Gatekeeper. "You need one who says to me that we have a common interest in improving efficiency and that he or she understands I'm trying very hard but there may be some room for improvement. The Inspector should be able to give me the means to be more efficient. I need a helper, not a police officer, because efficiency is about learning—not rooting out 'bad apples.' You see, punishing 'bad apples' doesn't make the system work more efficiently, nor does it save much money!"

The Gatekeeper paused briefly. "There's another problem, too, because you cannot define my efficiency in terms of the number of poorly people I send to the Wizard or the number of spells I cast. To measure my efficiency you need to find out how much healthier the people are as a result of what I do."[5]

"Oh dear," said the King, "it all seems so terribly complicated. What shall we do, Minister?"

"Well, Sire," the Minister looked shifty, "we should keep quiet. In a few weeks' time we have to ask the people their opinion of us. We won't mention the Charter any more and we can tell them about our talks with the Kings in the lands over the sea."

"Excellent, Minister," said the King.

And what did the people think? That's another story.

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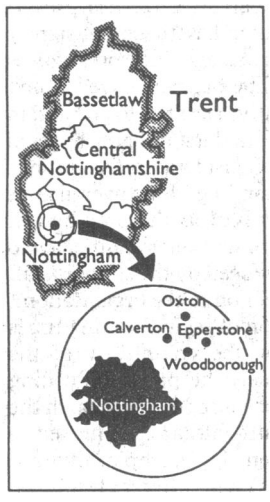
The New NHS: first year's experience

Budget holding in Calverton: one year on

John Bain



A year ago, the Calverton practice was stepping into the unknown of budget holding. The five partners in a practice of just over 9000 patients had not been enthusiastic about the content of the new general practitioner contract but saw budget holding as a means of developing their services to patients. By adopting a fundholding scheme they saw opportunities for decision making in patient care which would be much more under their own control.[1]

At the beginning of 1991, just weeks before the official introduction of a practice held budget for hospital care, prescribing, and staffing, they were still awaiting details of what their actual budget would be. They were unsure how the new methods of operating services would work, demands on doctors and support staff were high, and a new business manager had just been appointed. The creation of a business plan had brought together the shared aims of the partnership and central to this plan was the objective of "having control over our own destiny." What has happened in the past year?

Progress in Calverton

Getting agreement on the budget for the Calverton practice was a tortuous process but eventually £1 017 084 was allocated (table I). Subsequent review of the prescribing budget (originally £374 920) indicated that the projected annual prescribing costs were £398 652 and the prescribing budget was increased by £30 000, giving a final working budget for 1991-2 of £1 047 084.

The practice has not negotiated block contracts for specified hospital services and has been working on the basis of "cost per case," which according to senior partner Norman Stoddart allows greater flexibility: "After receiving a bill for an individual case we vet it and if not satisfied we can renegotiate." At a time when both the practice and the hospital are feeling their way in the new system, the cost per case approach seems satisfactory, although it leads to rather cumbersome administration as a member of staff has to check every patient procedure relating to hospital services. To date, most of the practice team's energy has been channelled towards the hospital and specialist services component of the budget.

The variation in the prices for hospital procedures (table II) had been an eye opener to the partners. For example, three centres quoted £19, £23, and £70 for outpatient ultrasound investigations, showing early on how the price of a procedure would determine where patients would be referred to.

TABLE I—*In budget allocation for Calverton practice (9184 patients), 1991-2*

Hospital services	Annual budget (£)	Budget per patient on list (£)
Inpatient services	277 354	30·20
Outpatient services	271 528	30·00
Clinics	206 859	22·5
Pathology	48 304	5·26
Radiology	12 295	1·34
Physiotherapy		
Occupational therapy	1 738	0·19
Speech therapy		
Audiology		
Domiciliary visits	2 332	0·25
Total hospital services	548 882 (52·4%)	59·77
Drus and appliances	404 920 (38·6%)	43·99
Practice staff	93 282 (8·9%)	10·16
Total budget 1991-2	1 047 084 (100·0%)	113·91

TABLE II—*Prices for common surgical procedures in hospitals A and B*

Procedure	Hospital A (£)	Hospital B (£)
Repair of inguinal hernia	567·90	528·38
Varicose veins	428·40	510·92
Endoscopy	579·70	1017·51
Laparoscopy with or without biopsy	301·30	406·10
Dilatation and curettage with or without polypectomy	275·60	406·70

Towards the end of 1991 the stress among staff was considerable, with the combination of providing routine services and unravelling the complexities of budget holding having a major effect on everyone's time and energy. A decision to hold a "practice retreat" for the partners and the business manager proved to be a watershed. With the help of a management consultant, protected time away from the hustle and bustle of daily practice provided clarity about the group's aims and achievements with the result that the cohesiveness of the partnership was strengthened.

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