Tens of thousands of NHS patients are to get personal health budgets. Does this mean more money will be spent on non-evidence based treatments and private sector services? Or does giving patients responsibility for care choices improve outcomes? Caroline White reports

Last week, England’s health secretary Andrew Lansley announced that 53,000 people with ongoing complex health and care needs would be the first group to become eligible for personal health budgets from April 2014.

The announcement was accompanied by the caveat “subject to evaluation of the pilot programme,” which runs until October 2012, and the disclaimer that the health secretary was responding to the NHS Future Forum choice and competition report in June. This backed the introduction of personal health budgets for patients with complex needs and urged the government to spell out its intentions for the policy.

But according to Karen Jones, a research fellow at the University of Kent who is leading the evaluation of personal health budgets, the government’s intentions are not in doubt. “In all the conversations I’ve had with the Department of Health, there was always going to be a roll out. They were waiting for the evidence to guide policy, explore the best methods to use, and for which groups,” she explains.

Personal health budgets enable holders to purchase services of their choosing either directly or through a third party, with the ultimate aim of boosting health outcomes. The government also hopes they will prompt more integrated care and cut overall costs.

Since the coalition came to power, personal health budgets have featured regularly in key health and social care policy documents, including the public services white paper in July.

As care services minister Paul Burstow put it in July 2010, “[i]n so many ways, personal budgets encapsulate what we represent. Our single radical aim: to change the relationship between the citizen and the state. To do less to people, and more with them.”

That means a fundamental change in the doctor-patient relationship, suggests Richard Humphries, senior fellow at health think tank the King’s Fund. “It’s not just about giving people a pot of money, allowing them to behave like consumers, and letting them get on with it,” he says. “If the aim is to personalise care, it’s as much about changing the culture and the relationship with healthcare professionals.”

Research for the NHS Confederation on the views of mental health service users and carers on personal health budgets, indicated enormous support among doctors for the need to involve patients in their treatment. “But most of them thought they were doing it anyway,” says Jonty Roland, senior policy researcher. “That wasn’t the view of service users.”

**“Should we be spending taxpayers’ money in cash strapped systems on gardening or aromatherapy that may make people feel better, but for which there is no evidence that it actually makes them better?”**

**Convincing doctors**

Hardly any doctors have participated in the pilots, which started in 2009. “When we interviewed organisational representatives three months in, they were concerned no doctors were involved,” says Dr Jones, adding that the evaluation intends to revisit this.

Julia Sinclair, senior lecturer in psychiatry at the University of Southampton, became involved in a pilot of personal health budgets for alcohol misusers more by chance than design, but she is now an enthusiast.

“I do think it’s exciting and that it could improve outcomes and make different services work together. And I think it will create options and engage providers. So I am a convert to it, and I am not easily converted,” she declares.

But international expert on personal health budgets, Vidhya Alakeson, now research and strategy director of think tank, the Resolution Foundation, says that while “seeing has been believing,” the Department of Health has devoted little resource to convincing clinicians of the merit of personal health budgets. “This has got to shift for [personalisation] to have legs,” she contends.

“Clinicians do need to be engaged. A nominal target for clinical commissioning groups would be helpful, so it’s on the page and not just a notion,” ventures Greg Rogers, East Kent general practice champion for personal health budgets. “This is cheap medicine that makes a big difference. But it’s a really tricky thing to put in a new culture and a new way of thinking.”

He became a believer after working on personal care planning, as part of the government’s quality, innovation, productivity, and prevention (QIPP) agenda. A personal care plan, which puts patients in the driving seat, is at the heart of a personal health budget. “When patients take responsibility and achieve what they want to, by and large, outcomes are better,” he says.

While attendance at his talks has been good, and the testimonies of budget holders persuasive, general practitioners (GPs) have been thin on the ground. But more through overwork and uncertainty about the future, as a result of the impending healthcare reforms, than disinterest, he thinks.

“There is so much change at the moment, people don’t know which policy is going to stay the course,” he explains. “And there are so many nuts and bolts to get straight first, that GPs have delegated [personal health budgets].” But he’s not unduly worried.

“GPs are important but they aren’t necessarily key,” says Dr Rogers. But external brokers who are trained in motivational interviewing techniques—which GPs are not—and who, crucially, would be on a more equal footing with the patient, are, he suggests. The snag is cost and capacity.

“The big hope is that the third sector will step forward with trained accredited workers who will then have the capacity to get involved with long term conditions,” he says.

Without it, there’s the potential for personal...
LEAD TO BETTER CARE CHOICES?

PERSONAL HEALTH BUDGETS

A personal health budget is a sum of money allocated from NHS and social care funds to meet an individual’s identified health and wellbeing needs and agreed health outcomes. These are set out in a care plan along with how the money will be spent, and the plan is signed off by the primary care trust or clinical commissioning group.

Personal budgets exclude emergency care and general practice services. They cannot be used for alcohol, tobacco, gambling, debt repayment, or anything illegal. But otherwise, there are few restrictions on the goods and services to which they can apply.

Budgets can be disbursed:
- As a notional budget, where the NHS holds the money and buys or provides the goods or services chosen by the patient
- Through a third party independent of the NHS
- As a direct payment—currently only available for patients participating in the national pilot. Holders are not entitled to additional or more expensive services, or preferential access; nor can they “top-up” the sum from private funds.

For more information see www.personalhealthbudgets.dh.gov.uk

to spending money on non-evidence based treatments, but when you talk to service users that is almost the first thing they suggest, because they want to demedicalise their care,” argues Mr Roland. “A lot of healthcare doesn’t look like healthcare anymore; it’s about helping people have a good life.”

Private provision

Nevertheless, the “pick ‘n’ mix” potential of personal budgets has sparked alarm about the effect of competition on existing services, amid fears that personalisation may be a Trojan horse for privatisation.

“The concern is how the development of smaller providers would undermine existing services on which the majority of the population depend,” says Richard Vautrey, deputy chair of the BMA’s GP committee. “We need to be careful that [this policy] doesn’t destabilise those services,” he adds.

Ian Mulhern, director of think tank the Social Market Foundation, believes that some level of coordination will be needed to allow economies of scale while still enabling choice. “The pure market approach is that choice is a market force for improvement. But commissioners need to shape it in a thoughtful way,” he explains.

“[Personalisation] is not even a Trojan horse, it’s a pretty blatant attempt to shake up the supply side,” he adds, but warns: “If measures are not in place to liberalise [this], we won’t get the efficiency improvements, which in theory, are available.”

Mo Poultney is a personal health budget broker in alcohol services for Southampton City Primary Care Trust. Her job is to stimulate the market so patients can choose whether to buy in support services to detox at home or opt for a residential facility.

Previously, the four local residential providers offered detox only as part of an expensive 12 week rehabilitation package, but thanks to the removal of the block contract to fund personal health budgets, they now offer stand alone detox and other services clients say they want, says Ms Poultney.

“At first lots of providers didn’t want to know, because they liked the safety of the block contract,” she explains. “But what persuaded them was that the NHS didn’t have the money it used to, and they realised they needed to start offering something different rather than get no money at all.”

And current and would-be users like the concept. But the choices that some budget holders have opted for have prompted concerns about the evidence for their effectiveness and whether the outlay can be justified when money is tight.

“There’s a lot of resistance among clinicians at the start,” says Mo Poultney. “But they are starting to understand how to use a personal health budget to help get what they need.”

Alison Austin, personal health budget lead at the Department of Health, is confident that the existing regulatory frameworks will be sufficient. “I can’t see there being a separate body, because after all this is NHS money. But it’s about risk proportionality and people being able to make decisions about who provides services for them, which they do all the time,” she says.

“You’ve got to have some standards. But if you apply lots of controls, you build in protection but you lose innovation,” agrees Mr Humphries. It’s “about getting the balance right.”

Caroline White, freelance medical journalist, London, UK cwhite@bmjgroup.com

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bmj.com/blogs Read Vidhya Alakeson and David Coyle’s blog on personal health budgets at bmj.com/blogs

bmj.com News: Assurances are sought that policy of personal health budgets will follow evidence (BMJ, 2011; 343:d6458)


bmj.com poll Should patients be allowed to spend their personal health budgets on non-evidence based treatments, such as aromatherapy? Yes: 235 (40%), No: 352 (60%)
REMOTE CONTROL

Geoff Watts looks at how surgeons are beginning to use robots and what they might be able to do in future

Submit to any kind of robotic surgery and the machine performing it will almost certainly be called, rather charmingly, a da Vinci. Designed to assist in laparoscopic procedures, the da Vinci robot dominates the market and, unlike its human namesake in renaissance Italy, has few challengers. But although today’s robots wield the knife in only a tiny proportion of all operations, the engineers and scientists of the Hamlyn Centre for Robotic Surgery at Imperial College are already thinking ahead. Tellingly, perhaps, the centre’s da Vinci is in its museum.

But that’s the nature of technology: always striving for the next generation of cheaper, smaller, faster, smarter devices. The question this imperative sometimes raises is one of direction. So, in the context of medicine and medical technology, does the robotic approach seem to represent the future of surgery? Or is it destined to remain an adjunct at the margins rather than a revolutionary change at the core?

In appearance almost all industrial robots, whether for building cars or, as here, for performing intricate surgery, are a deep disappointment. A century of fictional robots has bred the expectation that they should be humanoid. Almost none is. And this includes the da Vinci surgical system. Manufactured by the US company Intuitive Surgical, it comprises three components: a trolley equipped with four mobile arms that wield the instruments and camera; a console with hand grips, by which the surgeon controls the movement and action of these arms; and a high definition 3D vision system to allow the operator to see the operating site.

The essential difference between this and conventional laparoscopic surgery is that the surgeon’s control of the instruments is indirect. Although the console is typically located within the operating theatre, the surgeon is no longer standing over the patient but seated a couple of metres away, peering into a viewfinder. In principle, the surgeon could be in some other location.

It’s in urology, and for prostatectomy in particular, that these “master-slave” robots have flourished. “The prostate is a hidden organ, tucked away at the tip of the pelvis,” explains David Neal, professor of surgical oncology at Addenbrooke’s Hospital in Cambridge. “Even with open surgery it’s always been difficult to get at. This machine could have been made for doing this particular operation.”

In fact, it was originally intended for coronary bypass surgery, according to Guang-Zhong Yang, director of the Hamlyn Centre. He goes on to repeat what, in robotics circles, one suspects may be a well worn joke: “They were aiming at the heart, took a shot, and hit the prostate.”

Robotic surgery offers a clutch of advantages. The mechanics of conventional laparoscopy require surgeons to move their end of the instruments quite extensively to effect the required small movements at the business end. “You lose precision in terms of being able to carve around the prostate and preserve the sphincter muscle and the nerves that produce penile erection,” says Professor Neal. With robotic instruments and 3D vision surgeons can work their way more delicately around the prostate. The machine also eliminates any tremor in the surgeon’s hands, and laparoscopic instruments under robotic control can replicate and surpass the full range of movements of the human wrist. “Even experts doing open surgery on the prostate might expect an average blood loss of a litre. With the robot it’s more like a tenth of that.”

Suturing is one of the trickiest elements of conventional laparoscopic surgery, says Eric Mayer, a clinical lecturer at Imperial College. And prostatectomy, he adds, requires some stitching to be done with great precision – in which the robot is a great help.

Learning curves
Robotic surgery should more properly be called robot assisted surgery because it’s still the surgeon who’s in charge and whose skills count, says Professor Yang. “If you look at a surgeon’s manual dexterity curve, it peaks quickly through training and clinical experience. But as you get older it tapers off. One role of robotic surgery is to maintain the peak as long you can.” Robotic surgery is also safer, he maintains. It can police boundaries beyond which the surgeon cannot move the instruments.

Proficiency in the use of robotic operating systems is not a skill acquired overnight. As Professor Neal points out, in the UK you can’t practise on animals, so anyone who wants to do this has to go to Europe or America. “Here in Cambridge we have a 20 step programme in which surgeons learn how to carry out one particular step at a time and so build up to doing the whole prostatectomy.” At what point can the surgeon be declared fully competent? “You start being safe after about 50,” Professor Neal reckons. “But to get the very best outcomes in terms of potency and continence you need to do about 200 in my view. This is one of the operations where numbers really make a difference. You’d be better going to an open surgeon who’d done one thousand than a robotic surgeon who’d done 20.”

But is all this technology, this expense, worthwhile? Does the robotic approach make a difference? The honest answer is that nobody can be certain. “There have been some small randomised trials,” says Professor Neal, “but they’ve suffered from the problem that surgeons become expert in just one approach. For instance, here in Cambridge since 2005 we’ve done 850 prostatectomies with the robot, and two open ones. I used to be expert at open prostatectomy, but I haven’t done any for five years.”

Professor Neal feels that he can no longer take a properly detached view of the relative efficacy of the alternative approaches because his extensive experience of the robot has led him to believe that it gives better results.

Ara Darzi, professor of surgery at St Mary’s Hospital in London, is trying to answer the question of efficacy before robotic prostatectomy has become so widely used that a trial is impossible. With funding from Cancer Research UK he has
Robotic surgery should, of course, offer certain savings. “The length of stay here in Cambridge is one day,” says Professor Neal. “This compares with about five days for open surgery and two or three days for conventional laparoscopic surgery. The complication rate is very low, and there’s less demand for blood transfusion.”

Mr Mayer is optimistic about the scale of these savings. “If you could do a proper business model for robotics I suspect you’d find it’s more cost effective than people have assumed,” he says. You need to take account of the value of having people return more speedily to work and their improved quality of life. And while it’s true that not all the instruments are reusable, this is also the case with some conventional laparoscopic equipment.

Future developments

Speaking of robotic surgery’s current leading applications, in urology, Professor Neal foresees a rosy future. In the United States, he says, unaided laparoscopic prostatectomy is disappearing. “It would disappear in this country too if the robots were in place because even the staunchest laparoscopic surgeons would like to be using them if they could.” Mr Mayer is equally bullish about the wider use of robotic technology. He doesn’t see it as something likely to remain confined to a relatively limited set of intricate procedures. “This is a rapidly evolving area. And I don’t believe the current system is what we’ll be using in 10 years’ time. In the future we’ll have more miniaturisation and robotics systems that you can have on demand just for certain elements of a procedure.” When robotic systems are used in conjunction with advanced imaging and other technologies, he envisages surgeons being able to navigate their way around the interior of the body doing things that would currently be difficult if not impossible.

Professor Yang is at the forefront of efforts to realise these ambitions. He predicts a whole new direction for robotic surgery. “We need to move away from having this big machine that’s so imposing and dominating in the theatre. My philosophy for the future is the disappearing robot.” Drawing a parallel with computers, he points out how their hardware has shrunk while their performance has increased. He foresees a similar development in robotics. “The robots of the future will be incorporated into smart surgical instruments. You may have three or four different robots to do different tasks.”

He thinks that today’s massive machines will be replaced with smart surgical instruments: smart because the instruments themselves will incorporate the robotic virtues—the precision, the mobility, the elimination of hand tremor, and the rest—but in greatly miniaturised equipment. “In the Hamlyn Centre we’re already making in-roads in that direction. All this miniaturisation can be done in handheld instruments. We can have micromotors to the size of 1 mm. In the future the surgeon will be holding the robot, which is enhancing and augmenting normal human capabilities.” While the big da Vinci-type of master-slave robot has moved surgeons away from direct contact with their patients, Professor Yang’s vision would restore that contact: a development, he thinks, with strong patient appeal.

But all this is for the future. What Mr Mayer would like to see right now is a bit more competition. Having bought out its leading competitor a few years back, Intuitive Surgery is the only serious player in the commercial manufacturing of master-slave surgical robots. The lack of competition, Mr Mayer says, is hindering innovation and doing nothing to lower prices. Like the 15th century human polymath it commemorates, this da Vinci might benefit from a bit of healthy rivalry.

Geoff Watts, freelance journalist, London, UK
geoff@scileg.freeserve.co.uk
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“This is one of the operations where numbers really make a difference. You’d be better going to an open surgeon who’d done one thousand than a robotic surgeon who’d done 20”

started a randomised controlled trial of laparoscopic, open, and robot assisted prostatectomy for organ confined prostate cancer. “In an ideal world you’d have surgeons who are expert at all three,” says Mr Mayer, one of the surgeons taking part. “The best that can be done in practice is to be certain that all participating surgeons are as expert as they can be in the particular technique they’re using.” At this stage the trial is a feasibility study involving four centres and around 100 patients. The intention is to run a much larger national trial comparing the relative clinical and quality of life outcomes of the three techniques, and their cost effectiveness.

Although some centres have had trouble recruiting cases, Mr Mayer believes the main study will go ahead. He certainly hopes so. “There’s a worldwide need to do one. That’s recognised in the literature. And here in the UK we can still do this trial because of the way the healthcare system is organised and funded.” Professor Neal wishes such a study had been set up years ago. “If somebody had said we’re going to put 12 machines in centres around England, and we’re going to run a randomised trial we’d know by now what was best. But the NHS is very poor at commissioning expensive new equipment.”

The drawback to robotic surgery cited by most surgeons is simply its cost. The da Vinci machine is priced at well over £1m (£1.1m; $1.6m), and the running costs—which include some non-reusable equipment—are hardly chickenfeed.