



## How to put 'nudge' principles to work in the health service

5 January, 2011 By [Georgina Craig](#)

The power of nudge: how applying nudge principles could change healthcare commissioning management

A little book is causing great excitement. Nudge: improving decisions about health, wealth and happiness reframes some of the key policy challenges that western governments face. It is helping people to think differently about how to give citizens choice and nudge them towards options that help achieve the outcomes they would choose if human frailty, inertia and our innate need to simplify an increasing complex world did not get in the way.

How could commissioners nudge the system systematically towards one that maximises health improvement within a limited resource envelope, using choice architecture?

[David Cameron](#) and Barack Obama are champions of the approach. A cross-governmental Nudge Unit was established in September 2010 to apply nudge thinking. The first area to receive the nudge treatment is [public health](#).

Here we look at how the principle of nudge might apply to NHS commissioning.

The premise behind nudge is that public service commissioners are “choice architects”. In other words, they are in a prime position to influence how people behave and the choices they make. They do this more effectively if they apply knowledge from social science and psychology about how people generally behave and make decisions and use this knowledge to design systems that nudge people towards better choices.

This may sound like manipulation. The authors Richard Thaler and Cass Sunstein prefer to call it “libertarian paternalism”. They explain it this way: We can make it easy for people to go their own way, while at the same time consciously steering people’s choices in directions that will improve their decisions in ways they would choose, were they able to focus their full attention on the choice.

Nudge was born out of research evidence that, when left to their own devices, people often make poor choices, decisions they would not have made if they were in possession of all the facts, had unlimited cognitive abilities and could exercise complete self-control. They contrast such fully rational beings - “Econs” - (think Dr Spock) with humans, whom, as we know, are fallible. Many management and economic theories assume people behave like Econs, whereas in reality, most of us are undeniably human.

So, assuming commissioners are human and providers and healthcare consumers are human too, how could commissioners nudge the system systematically towards one that maximises health improvement within a limited resource envelope, using choice architecture?

Thaler and Sunstein have devised a mnemonic - NUDGES - that summarises the key elements of good choice architecture. The suggestions for its application to commissioning come from us.

## **INcentives**

Although not the only thing that matters, the nudge model sees incentives as key to effective choice architecture. Thaler and Sunstein suggest that when designing incentives, people ask:

- Who uses?
- Who chooses?
- Who pays?
- Who profits?

Asking these questions helps choice architects to spot the incentive conflicts. Currently, the patient “uses” services that are most often “chosen” by the physician and “paid for” by the commissioner, with healthcare service and product providers “profiting”. Commissioning consortia are based on the assumption that when the organisation choosing is also paying, it aligns incentives better.

Nudge introduces a second concept alongside incentives that is critical to understanding how people respond to them. It is called salience.

Salience describes the tendency for people to perceive incentives in a skewed way. For example, commissioners rarely notice that incumbent NHS providers have infrastructure and pensions that are NHS funded. This means that commissioners tend to underestimate the cost of continuing to commission services from current providers, and overestimate the cost of alternative providers that have to sustain infrastructure and pension costs in more visible way (through a higher contract price).

To ensure saliency is mitigated for, commissioners need to design pricing and incentive strategies that take into account and make transparent the full cost of NHS service provision.

Unless this happens, commissioners will naturally favour incumbent providers as they will always appear to be less expensive.

The ongoing debate on “make or buy” decisions within consortia commissioning can also be viewed through the nudge lens. While there is an extremely compelling and rational argument for [GPs](#) to have the power to make or buy services to enable them to respond quickly and redesign care, unless the public are able to make a fully independent, informed choice between providers, supported by choice architecture that is independent of their referring GP, make or buy concentrates the choose, pay and profit incentives with one group; and that could create a massive bias towards GP provision.

As humans, it will be pretty much impossible for GP commissioners to recognise the saliency of the cost of alternative providers when there are such strong incentives to make rather than buy; and that may stifle [competition](#).

## Understanding mapping

Mapping is about how we as humans make decisions. As a commissioner, you have to choose between investing in different health priorities, treatments and service delivery options.

You are human. You have access to imperfect information. As a human, you seek to simplify this complex decision making process. How you see the world is influenced by your personal experience and what you have learned from making similar decisions in the past.

To illustrate mapping, the authors use the example of a person choosing between treatment options for prostate [cancer](#). Recognising there are three options: surgery, radiation, and “watchful waiting” and that each of these options has a complex set of possible outcomes, the individual has to make a trade off between his perceived value of various possible outcomes, without really being able to predict what the outcome will be for him personally.

Research tells us that most people decide which option to take in the very first meeting - the same one where their doctor breaks the bad news about diagnosis. This is clearly a bad time to make an informed decision. Shock is likely to lead the person to choose a very simple decision strategy – ask for the doctor’s recommended option.

Of course, doctors are human too and research unsurprisingly shows that the treatment option people choose correlates closely with the specialism of the doctor they see (surgery or radiation).

Few doctors specialise in the third option - watchful waiting - and so there is a very good chance this option is under selected.

To nudge a change, commissioners might set incentives for implementing shared decision making that endorse clinicians discouraging people from making big decisions on the spot, thus providing time and space for reflection. They would also have to pay for follow-up appointments.

In the meantime, commissioners could facilitate access to supportive, relevant choice architecture - perhaps in the form of “living” decision aids, designed with clinical input and also with input from people who are willing to share their experience of making this same decision so that peers can learn from and share their experience. These individuals can relate how their choices panned out, and what they would recommend to others with the benefit of hindsight. The outcome is likely to be less treatment, more watchful waiting and more satisfied, engaged patients.

Such a choice architecture would be more robust if it were created nationally because it could bring together the experience and insight from a large pool of people. We could draw on the increasingly popular concept of “collaborative filtering”, employed by companies such as Amazon where people are shown what “people like me” chose. The internet and the rapid growth in the use of smart phones and other portable [technology](#) is making it easy to develop web based platforms that support the growth of such a user led choice architecture in a very organic way.

Similarly complex decisions are made by commissioners, albeit on a more macro level. In a world with limited resources, where commissioners are making trade-offs and do not really know what the outcomes of their decisions will be in advance, a web-based forum that enables commissioners to share their decisions, the results they have achieved and what they would recommend to other commissioners based on their experience could create a powerful choice architecture to underpin common commissioning challenges.

## Defaults

Defaults are a powerful nudge, especially in the context of contract design.

We have all been victims of defaults. Many of us will have continued paying a gym subscription when we no longer attend, simply because we were too lazy to cancel. A lot of money is made because of our human tendency to follow the path of least resistance, towards inertia and preserving the status quo.

The authors suggest that defaults change behaviour most effectively when we penalise people if they do not change.

The introduction of default penalties for hospitals when people are re-hospitalised within 30 days is a nudge that aims to engage secondary care providers and change their current default belief and behaviour – that once someone is discharged, they are no longer our problem.

Commissioners can use defaults to their advantage. Similar default penalties could support behavioural change among a wide range of providers and the general public. For instance, how would the system react if:

- Acute providers were responsible for a list of “revolving door” patients and had to pay a penalty every time they were admitted to hospital?
- GP commissioners who could not demonstrate commissioning decisions were taken collaboratively with local authorities, providers and patients were penalised?
- Providers had to pay back a percentage of their income if they did not deliver improved outcomes?
- People had to pay a fee if they did not turn up for pre-booked GP and outpatient appointments?
- People had to pay for NHS treatment if they did not change their lifestyle i.e. give up smoking, lose weight before an operation?
- Hospitals had to pay people compensation if their elective surgery slot was cancelled?
- Parents who refused MMR vaccine had to pay the full cost of treatment if their child contracted measles, mumps or rubella?

Thaler and Sunstein’s review of the research tells us that the more complex the decision, the more people appreciate a sensible default.

With such a large agenda to manage, some [GP commissioning](#) groups might well appreciate the option of some sensible defaults and choice architecture for commissioning decisions around national priorities, especially for the key outcomes they need to deliver to satisfy the National Commissioning Board.

Because it is a new challenge and to avoid policy makers imposing their map of the world, this choice architecture would be best designed by those who will use it, and ideally model other sectors where similar things exist.

## **Give feedback**

Feedback is the very best way to improve performance. A well designed commissioning process tells providers and service users when they are doing well and when they are making mistakes and harnesses the power of peer pressure.

Commissioning is about improving quality, defined as: cost effective, clinically appropriate and delivering a good experience, so those are the key parameters where commissioners need to share helpful feedback.

It is critical to understand the difference between feedback and monitoring. Feedback is a two way process that focuses on using salient performance data to agree what improvements the provider intends to make. Just asking someone what they intend to do increases the chances of them doing it. It is called the “mere measurement factor”.

Furthermore, effective feedback presents the desired behaviour as the norm. Most people like to conform. Just telling people that most people are already doing it nudges them to follow suit. For instance, telling teenagers that on average, 96 per cent of teenage girls don't get pregnant makes teenage pregnancy a minority activity. Yet, rarely do we present this statistic in that way.

## **Expect error**

To err is very human. The best systems are designed with that in mind and forgive errors. The question is, what are the common commissioning errors and what can we do to mitigate against them? Underestimating the value of investing in prevention is almost certainly one.

Assuming we know what matters to patients is another. There are probably many others.

When thinking about the design of effective GP commissioning systems, it would be very useful to draw on PCTs' experience so that GP commissioning groups can design systems that avoid common errors from the start.

Habits and systematic ways of working can help reduce predictable errors. For instance, creating an investment prioritisation decision aid that ramps up the visibility of the benefits of prevention would help ensure it is weighted appropriately within investment strategies.

## **Structure complex decisions**

When making decisions, people adopt different strategies, depending on the size and complexity of the choice. The larger and more complex the problem and the less experience we have making that decision, the more room there is for error. In these circumstances, humans commonly adopt simplifying strategies.

Many commissioning decisions are big, complex and infrequent so we cannot learn from past decisions e.g. how to close a hospital A&E department; how to decommission existing services.

Well designed choice architecture could enable people faced with these decisions to share what others have done in the past: how it worked out and what they would do if they could do it over again so that we create a growing knowledge bank for commissioners to dip into.

We might also want to build in a default penalty – that unless commissioners actively share their knowledge through this architecture, part of their commissioning budget would be withheld. Just to be sure we nudge them into sharing.

## Readers' comments (4)

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**Anonymous** 7 January, 2011 9:06 am

Yes, what is needed here is some sort of "primary care" organisation that stands independent of GPs and acute providers, that can take a strategic approach to ...

Oh, hang on a minute.

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**Anonymous** 7 January, 2011 9:33 am

Very useful article that stimulates some thinking. I note however, that much of the theory here is just 1980's management ideas recirculated (feedback loops, learning organisation etc.) with a good healthy dose of social marketing and other recent psychology based theory. Nothing wrong with that of course, just makes me wonder how we have not managed to crack some of the key OD issues in the NHS in the last 20+ years... Have we let too many 'mistakes' creep into the system and passed them off as errors?

For me the sign of a good manager is one who can differentiate between the two. Errors are good, you learn from them if appropriate feedback is done properly: mistakes are where you judge that given all the information available you would not expect something to have gone wrong.

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**Anonymous** 7 January, 2011 9:48 am

Sounds a nice easy, and relatively cheap, solution which also lays the blame for not changing on the people who have not responded to nudging. It's a shame it ignores actual evidence from health psychology etc on what really helps people to change their behaviour!

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[Georgina Craig](#) 10 January, 2011 4:03 pm

Ref Anon 07/01/11 It is important to recognise that this article is not about nudging individual people to change their health related behaviour. It is more, as Anon 07/01/11 9.33 suggests, about how the theory of Nudge can be applied within commissioning management. There is no one simple answer to the NHS's challenges. This is just my musings , stimulated by reading the book! As someone working closely with commissioning organisations, it made me ponder - how might this apply? If it has provided food for thought, it has done its job!

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