The Secretary of State for Health's recent comments on Question Time have re-opened an important debate about how the NHS best deals with patients who don't attend appointments (DNAs). Fines have been mooted as one possible solution and a quick scan of social media shows you the strength of feeling amongst NHS staff. Roy Lilley's blog captured the mood perfectly: *"It's not about the money… We do things because we think it matters, we don't want to let ourselves or other people we care about down…"*

But the price of criticism is proposing a viable alternative. Anyone working in operational management will know that it's easy to knock other people's ideas but rather harder to come up with your own (let alone implement them). Roy came up with a few suggestions:

How about we say: "last month 2,500 people had appointments and came to the surgery on time… if you can't be one of them, let us know, please. We can give your place to someone else."

Sounds sensible, right? Well a few years ago I had similar thoughts. A holiday reading list including *Freakonomics* and *Nudge* left me wondering how behavioural economics could be better applied in the NHS. So I did a small experiment in the services I managed at an acute hospital. Gone were the generic reminders with their abrupt sentences and dubious grammar. In came five messages based on behavioural theory.

Message Type	Message text
Loss-framed (personal)	You have an appointment at <clinic> on <mmm> <dd> at <hh>. Please text back CANCEL if your appointment is no longer needed or text REBOOK if you want to reschedule. If you miss your appointment without informing us, you may be discharged back to your GP
Loss-framed (collectivist)	You have an appointment at <clinic> on <mmm> <dd> at <hh>. Each unused appointment costs the NHS <£ cost of missed appointment>, and means other patients have to wait longer to be seen. Please text back CANCEL if your appointment is no longer needed or text REBOOK if you want to reschedule
Gain-framed (personal)	You have an appointment at <clinic> on <mmm> <dd> at <hh>. By attending your appointments you may improve your health, and can also ask any questions you have to your doctor. Please text back CANCEL if your appointment is no longer needed or text REBOOK if you want to reschedule.
Conformity Heuristic	You have an appointment at <clinic> on <mmm> <dd> at <hh>. Last week 95% of patients at <hospital name> attended their appointment or cancelled in advance. Please do the same - text back CANCEL if your appt is no longer needed or text REBOOK if you want to reschedule
Authority Scarcity and Liking Heuristics	I just wanted to remind you that you have an appointment in one of our clinics at <clinic> on <mmm> <dd> at <hh>. We are looking forward to seeing you. Please text back CANCEL if your appointment is no longer needed or text REBOOK if you want to reschedule – as we are usually fully booked. Dr <doctor's name> MRCP MS (Neurology Clinical Director)

The results were unexpected. None of the messages made a dent in DNA rates. But digging into the data, it became clear that one had produced an unintended effect. For the message playing on authority, liking and scarcity, there was a statistically significant reduction in cancellations of over a third ($p<0.001$). This was mirrored by a corresponding rise in attendances. In other words, the type

of people who tended to cancel when receiving a generic message were instead attending when they received a tailored message.

So what to make of these results? Well to me they suggest that once basic text reminders have been applied, DNA rates are actually very difficult to shift no matter how many sophisticated behavioural theories you employ. Many clinics will simply have a "residual" rate of 8% or so. Given this we should simply do what the restaurant and airline industries have been doing for decades – predict the likely drop-out rate per clinic and over-book so we don't waste resources.

But when it comes to cancellations, it looks like we *can* influence behaviour. The literature suggests many patients cancel simply because of other commitments, but by virtue of the fact they cancel we can assume they are quite conscientious. For this group, receiving a personal text from a highly-qualified consultant, reading that this consultant is looking forward to seeing you, and remembering just how scarce these appointments are may be enough to influence a re-adjustment of priorities. Whilst this would be of little value in many settings, the advantages for screening programmes or certain high-risk clinics could be significant.

The experiment involved almost 9,000 patients, but this doesn't mean the results should be interpreted as "proof" of one method working everywhere. Tiny shifts in the type of person you're trying to influence, the words you use, the communication method you employ – all of this can bring big changes in results. In recent years similar experiments have been run at other acute trusts and the results have always differed depending on the messages and hospital.

But what the experiment should show you is that you don't have to be told what to do. You'll know your own clinics – the patients that attend them, the types of conditions they might have, and the reasons they might not attend. So don't wait around for someone to tell you what works best. Read up on the evidence, talk to colleagues, and try experimenting. Don't wait for permission. When you're done, spread the news so other people can give it a try. Some experiments will show that an intervention works. Some will show one doesn't. But if we all tried out even just one idea, we would all learn a huge deal about how to make the NHS that bit better.

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