

To boldly go from “computer says no” to an iNHS

It's IT, Jim, but not as we know it, reports **Terence Stephenson**

Captain's log. Stardate May 2013

0830-0930: Consultant led handover as per Francis.¹ The cases are projected by the trainee, Dr McCoy, on to the screen of the NHS Enterprise. Mr Chekov says, “Let's just take a quick look at the chest x ray.” Bones has to come out of the current program, decline several on-screen queries, open a new program, and re-enter his username and password—only to be told that the x ray software won't open unless he begins again and closes the word processing program. Three minutes have elapsed, and we have 60 minutes to discuss 20 cases. We give up, noting the excellent radiologist's report but missing a valuable teaching opportunity. Thank goodness we didn't have to access anything as complicated as the tricorder or switch the phasers to stun.

0930: Consultant led ward round² starts on ward A. The first patient has sickle cell disease and a fever and has been seen by another NHS hospital more than a year ago.

0945: The general practitioner and St Elsewhere's Hospital are telephoned for past medical records, and the consultant orders blood tests and a penicillin antibiotic to cover possible pneumococcal infection.

0950: Dr McCoy cannot find the ward's single, dog-eared, hard copy of the *British National Formulary* but thinks the right dose of intravenous penicillin is 100-200 mg . . . or maybe 1.2 million units . . . or 1-2 million units . . . or 1-2 mg/kg . . . or micrograms? He prescribes the penicillin with a fountain pen on a paper drug chart (which is in a different format in all six NHS hospitals in which he has worked since graduating because NHS trusts are autonomous bodies that won't sign up to a “national drug chart”). Some ward rounds have a pharmacist with a green pen who corrects the doctors' prescriptions—at least those that are legible—but today there is no pharmacist.

1015: The trainee doctor and consultant continue to the next ward.

1030: The nurse gives the antibiotics intravenously as prescribed but, through an easily avoidable decimal point error, the dose is only a tenth of the therapeutic dose and so is inadequate against the patient's septicaemia. Unfortunately, a tenth of a dose is quite sufficient to cause collapse in someone who is penicillin allergic (dutifully recorded in red felt tip pen on the front of the paper medical notes in St Elsewhere's off-site storage facility).



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1031: The “crash” team arrives within minutes but can't read the consultant's handwriting in the notes. The nurse suspects penicillin allergy, and they give fluid and adrenaline to good effect.

1040: The nurse bleeps the trainee doctor to update him.

1045: The trainee was with a patient, and by the time he goes to the phone on ward B and rings ward A, the nurse has gone back to attend to the patient.

The NHS sees one million patients every 36 hours, and of course this scenario doesn't play out every day despite the frustrations of many hospital IT systems. But it could be better.

Captain's log. Stardate May 2018

Failsafe—Results of tests can be overlooked because they are not automatically sent to the doctor who requested them. Like children on a long car journey relentlessly inquiring, “Are we there yet?” the doctor has to repeatedly access the results system for an urgent test result. My taxi now texts me when it arrives. Why not have default alerts sent to the doctor's pager or smartphone as soon as results are available? As the result may arrive after the doctor is off duty, why not have one smartphone that is physically transferred to the duty doctor at each handover?

Safety—General practices have been using e-prescribing and e-records for 30 years. Why are systems which avoid errors of calculation, drug interactions, and illegible prescribing not routine in hospitals? Drug errors are a common cause of negligence claims; as many as a quarter of all settled negligence claims are because of drug prescribing errors.³

“Outside-in” design—We need an end to 10 minute computer start-ups, clunking through multiple screens, and multiple passwords that have to be changed often. We need user friendly interfaces, designed with jobbing doctors in mind. Endless functionality that is rarely required is the enemy of rapid, intuitive use. Sometimes there seems to be no one who can find the zoom button on the x ray viewing software, but everyone can find it on Google Maps.

Efficient—There is a problem in paging someone, but, because you have been paged in the meantime, the phone is engaged when the person you've paged calls back. Could the NHS develop a secure instant messaging app for exclusive use between NHS staff, analogous to iMessage or BlackBerry Messenger?

“Seven day consultant service”—We can view personal banking information from anywhere in the world. Remote access to patient data is sometimes incredibly difficult. Often a special password generating gadget is required; the software works with a desktop computer but not a smartphone or a tablet; and many doctors can access patient information only via a hospital terminal. Of course there are exceptions (for example, scans viewed remotely from home), but a true seven day consultant service could come closer with rapid, remote access to patient data.

On 17 May the UK secretary of state announced a new £260m fund for the “Safer Hospitals, Safer Wards” Technology Fund to use technology to improve safe and effective care. Projects will be funded only if they use input from staff at the coalface. This is a welcome initiative.

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FROM THE FRONTLINE **Des Spence**

Reefer madness training

I drank and smoked at school age. Others picked and took magic mushrooms. Later, when I worked in a pub, some staff always got stoned in the beer cellar, much to my irritation. As a junior doctor I witnessed the terrible complications of heroin: hepatitis, septicaemia, amputations, and the rest. And in the 1990s I saw the recreational drug scene kick off: ecstasy, skunk, and then the increasing use of cocaine.

More recently we have seen the increase in “legal highs” and the abuse of prescription drugs. Every generation seems to have a need to misuse mind altering drugs. Recreational drugs are everywhere, just under the surface of society and some easily accessible online. A perennial debate is how to control (and legislate for) these drugs, but this always seems to be behind the curve of use.

The level of self reported drug use is high. (But when did self reporting accurately reflect the prevalence of any-



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thing?¹) Some drugs are particular to specific communities: khat, a stimulant leaf chewed by east African communities, is legal in the United Kingdom but illegal in many other parts of the world. The acute effects of all recreational drugs are pleasure but also risk taking behaviours. And the come down is depression, paranoia, anxiety, insomnia, or even psychotic episodes. Complications are seen often in general practice, emergency departments, and psychiatry but are relevant in all specialties. But what do doctors actually know of these drugs? How do we advise patients? How do we manage patients who present with symptoms?

We are taught detailed but irrelevant pseudoscientific fluff in our medical training, especially about prescribed drugs. But medicine is a social science—about reading people and situations, not just research papers—so why aren't we taught about recreational drugs, the language, the use, the complications,

and the implications for society? Currently, drugs training is focused almost exclusively on heroin and substitute prescribing.

There are good online resources about recreational drugs,^{2,3} but these are basic and no real help in the medical management of drug use in clinical practice. There is a gaping void of academic research into the prevalence, complications, and management of patients taking these drugs that urgently needs filling. A recent government report called for better drugs training for doctors, but progress is painfully slow.⁴

Recreational drugs are endemic; this is the reality rather than a moral comment. Drugs education likewise should be endemic throughout undergraduate and postgraduate training.

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THE BIGGER PICTURE **Mary E Black**

International health is a misnomer

What does “international health” actually mean? If you are in, say, Uganda, the health system you work in and the population you serve are definitely local, unless you happen to be working as an adviser or a clinician from the United Kingdom. In that case your work is packaged as “international health.” The other difference will be in your salary; despite talk of pay parity in the development industry, international health salaries remain many times higher than local salaries.

What may not differ are your skills, expertise, and training. I continue to be amazed at how many people who would not get a job in their own countries have managed to carve out a lucrative niche in someone else's. And I am amazed at how many people in poorer countries jostle to earn a decent living in the health sector despite hard earned international degrees.

There is preciousness in calling only some people international health

experts. Having managed to become fluent in the lingo, political schmoozing, and Byzantine management skills in an international development organisation does not make you an expert in much that is practical.

But who will say that the emperor wears no clothes? The power relations inherent in richer countries handing out largesse with strings to poorer countries distort what local people really think about the army of international health experts. If you depend on what they can hand out, a sensible approach would be to praise and cajole. The distortion of autonomy and values means that bigger fleas have smaller fleas on their backs to bite them.

Now working in an outer London local authority, I find myself using the same set of skills as those I used when I worked for the World Health Organization or as an international health consultant: lobbying, informing, reporting, partnership working,



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and understanding the local health economy and where it can be adjusted. I even hold budgets and administer sticking plasters to project funding. There is nothing mysterious about this, and the only difference is that here in London I have more resources to work with overall and am not bothered by people from other countries telling me what to do. What I do get, however, is people from central offices who think they know best telling me what to do. This feels rather familiar, especially because often they don't know best.

International health expertise is mostly a load of bunkum. Either that or the many doctors, nurses, pharmacists, and other health workers from countries such as Uganda, India, and Poland who are currently working in the UK are also practising international health.

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