Human or Cyborg?
Healthcare's trajectory in our digital age

The Doctor, Luke Fildes, 1891
Photo: Tate

David Zigmond

Science and technology are essential bedrocks to our current healthcare: used with probity and competence they must be 'good', surely? Yet more of something good is not necessarily better: it may generate new and serious problems.

This article demonstrates how this is now a growing impediment to a very large part of how we care for others.

A real case from the author's experience illustrates this.

Nothing vast enters the lives of mortals without a curse

Sophocles 496-406 BC

The massive and rapid development of medical science and its applied technologies should command our profound wonder and gratitude – these have spectacularly improved the treatment and prognosis of so many conditions that a few decades ago were commonly lethal or gravely crippling. Some are now extinct and serve as gruesome historical reminders of the harshness of pre-modern times – now almost incredible.

This dramatic and indisputable progress, though, has developed its own expanding rhetoric, and from there a kind of imperial hegemony which we often equate with 'modernisation'. Such regimes grant pre-eminence to measurement, taxonomical-type classifications, executively defined and supervised standardised procedures … modelling practice-protocols and practice-flows on mass-production manufacturing industries… First automation, then digitalisation; both are bound to either precede or follow.

The positive yield from such a tightly-managed scientific-industrial approach is certainly substantial: it accounts for so many now-established health blessings that all come from such generic and formulaic systems. A large bulk of cancers, obstetric catastrophes, cardiovascular and infectious illnesses, for example, now have unmistakably different and positive outcomes.

But the subsequent cultural and institutional rhetoric that has been informed and mandated by such success has also incurred great losses. This rhetoric is inadequately acknowledged – it has increasingly disregarded, even destroyed, the recognition of, and

stewardship for, the vast areas of healthcare that are *not* scientifically fixable or readily preventable. What are these?

To be specific, consider:

> Conditions and confusions of maturation and development; stress-related and psychosomatic complaints; most disturbances of behaviour, appetite, mood and impulse (BAMI, mental illness); ageing physical degenerations that are non-prostheticable; chronic conditions (by definition); palliative and terminal care.

To contextualise these and clarify perspective, they account for most presentations to general practice and most to mental health. So most presentations to the NHS will not be adequately understood ('diagnosis') or responded to ('treatment') by the compliance-driven scientific-generic-management approach that is often so successful elsewhere. This larger – increasingly neglected – remnant here is 'people-work' quite as much as any medical science. This medically located people-work can be monikered 'pastoral healthcare', which reflects guidance-through-relationship, rather than procedure-through-formula – the latter being the anchor of scientific medicine. Better erstwhile GPs and psychiatrists – before the modernising reforms ratcheted such standardised and micromanaged procedure and protocol – assumed a sine quo non: that knowing each particular patient and their relationships is quite as important as knowledge of bodies and illnesses.

Yet recent decades of healthcare reforms have marginalised such an ethos, though rarely explicitly. If challenged, authorities vaunt their preferential tasks that are easier to measure, if not command: decreasing waiting lists and times for investigation and treatments for established and fixable conditions, for example. Pastoral healthcare

becomes seen, rather, as an unnecessary distraction and expense, a 'soft' ineffectual option for the sentimental.

But is it? Consider these two time-separated scenarios:[1]

1. 2010: London. Small traditional Family Doctor Practice

Suki, age sixteen, enters my room shaking and silently sobbing, trying vainly to stem her expressions of turmoil behind a handkerchief pressed to her face. I had known her since toddlerhood: I know this is uncharacteristic and therefore serious.

She now sits tensely on the edge of her seat, facing me. She gulps into a tear-sodden, tremulous cascade of words:

'Doctor, I'm so pleased you're here … you've got to help me … give me something to calm me down, help me sleep… I've got my GCSEs coming up and I really want to do well, but I can't face them like this…'

This will take time. I sit back.

'What is it Suki? What's happened?'

'It's about Mum and Danny [stepfather], see?'

'What about them?'

Another tearful convulsion. 'I think they may be separating, getting divorced … they've been rowing. I wasn't trying to listen, but I could hear… Doctor, I couldn't bear it if Danny left me just with my Mum. My real dad left us when I was two, to go to America: you know all about that. And Danny has been so good to us both, particularly with Mum being like she is: lovely but difficult. But Danny has always been like a real dad should be … for as long as I can remember. You've seen that, haven't you doctor?'

Indeed I have, over many years, but just from my vantage point: Fiona – the mother – affective, attractive but volatile and short-fused with her attachment insecurities; Danny seemingly rock-like in his affectionate and patiently good-humoured attentiveness.

I offer Suki words, I trust, of comfort, hope and guidance and then a small nocturnal dose of Diazepam. A personal bridge and an emotional poultice.

'Come and see me next week, sooner if you want to. I'll want to know how you are', I conclude.

She sniffs back the last of her tears and smiles at me with wistful warmth as she rises to leave.

*

Three days later it is Fiona, the mother, who enters as an Emergency Appointment She seems, to me, anxious and wary – pausing as she enters: *do I really want to talk about this?*

'I don't know, doctor … I'm not myself; something's wrong. I don't want to eat, and feel sick all the time. I think I've lost weight and have strange dizzy spells, thinking I may fall. Last night I felt really peculiar and *did* collapse – became unconscious … No, I don't know for how long … I can't remember.'

I ask the usual 'red-flag' questions and perform the kind of examination that most vigilantly competent doctors would.

We return to our seats. 'Well, that's all reassuringly OK. I don't think there's anything serious here, but we'll certainly keep an eye on things', I say, I hope with the right infusion of cheeriness. I follow it up with an ambiguously unthreatening probe:

'Can you think of anything significant that might have brought this on?'

She shakes her head and looks away, down at the floor. I persist gently; this is difficult territory, 'How's life? Work? At home, family…?'

'No … that's all OK. Nothing there …'. Her answer is clipped.

I notice she now briefly holds her breath, draws in her lips between her teeth, folds her arms, and looks at the door. I retreat diplomatically behind reassurance and offer another appointment to quell and contain, I hope.

It is important that, if she tells me what I already know, she does so on her own terms.

*

A month later this polysymptomatic kaleidoscope, projected by underlying domestic instability, is largely dimmed. Suki takes well to guided support, engages efficiently well with the GCSEs, and seeks further counselling to enhance her own internal stability. With deft encouragement Fiona warily and sparingly discloses the origin and nature of this shared melee of symptoms: she remains more cautious than her daughter of embarking on any further disclosure. There is here no decisive fix-through-treatment, no happy-ever-after; instead we have, through improvised and bespoke dialogue, better-than-before new adaptations. This is growth and healing: achieved through relationships that can imaginatively engage with personal experience and meaning. It is resource-light: no expensive onward referrals to hospital specialists and investigations.

Such is healing and its host-territory of pastoral healthcare.

Medical science-based consultations alone cannot achieve this because objectification cannot include the crucial vagaries of personal experience and meaning; they are disregarded to a state of oblivion or irrelevance.

*

This story was one of many that I continue to remember many years later. Similar-minded GPs from those earlier decades recall kindred tales of such worthwhile work. My mentors in the early 1970s modelled for me such art and craft: we would often share such stories for education and interest. In the following decades I documented and diarised many such consultations as I realised that the reforming culture was tragically destroying the 'soil' in which such healthcare encounters could take root and flourish.

What were the earlier conditions of that soil's fertility? Well, in brief, doctors worked more autonomously in smaller, more stable units. GPs were encouraged to work in long-term partnerships with 'personal lists' of patients. Personal continuity of care – buttressed by cooperative familiarity with staff and colleagues – was then an expected modus vivendi, not an irregular anomaly as now. There was the headspace and heartspace available – encouraged even – to establish the more nuanced approaches of pastoral healthcare.

In 2010 – the time of Suki's story – I had seen, over several years, how this was becoming increasingly resisted and dismantled.

*

That dismantling and radical reformation started several decades ago, in the Thatcher era, and has continued – with amplification – ever since. The underlying idea driving and buttressing these reforms is that all of healthcare can be more reliably, safely and

economically delivered by thorough and rigorous industrialisation that is further modelled on competitive manufacturing corporations.

This mission has been expedited by 4Cs: competition, commodification, commercialisation and computerisation. The last of these – computerisation – has drastically empowered the other three: such bold mass-management was simply impossible in pre-digital times.

There is a fifth cultural principle that has grown massively (sic) with digitalisation: Gigantism. This is the ability and mission to coalesce services into larger and larger teams and premises, serving larger and larger populations and areas: this was – again – impossible in a pre-digital NHS.

Sometimes these industrialisation strategies have been irrefutably and irreplaceably successful – for example, with mass screening, immunisations, data-based research and the specialist hubs to treat malignant and acute cardiovascular disease. In contrast, the place of competitive commerce and tendering in the NHS brings very few, if any, wider or enduring benefits.

In general practice and mental health – the most frequently consulted services and the major locations of pastoral healthcare – the consequences are worse still. Here is an example:

2026. Large federated primary healthcare hub. London [2]

Let us consider the likely (yet hypothetical) scenario and fate of Suki and Fiona with our current serially reformed service. We'll imagine two doctors, Dr X and Dr Y, both working

is large, modern premises. The finances, premises and professional staff are all now, here, managed by a commercial healthcare provider which is tied to venture capitalists. Dr X and Dr Y reflect this culture in their portfolio careers – both work, currently as part-time GPs, two to three sessions weekly in this practice, and opportunistically elsewhere. Dr X has a three-month contract with the practice, Dr Y is paid (better) by a locum agency. Neither want to be partners in any practice – their attitude and working arrangements are closer to gig economy workers. Dr X and Dr Y have never met and barely know other professional or reception staff; almost all 'necessary' signalling is screen-texted. Both doctors are hot-desked and sharply time-managed by people they do not know.

The patient-list for each clinic is almost entirely decided by either receptionist-triage or nurse-triage as expediences to manage patient need or demand. Both doctors usually see patients as a one-off. Sort, Fix or Send[3] is the recommended consultation formula: all else is likely to arouse discouragement or perplexity in the system.

The computer is the dominant and enduring agent both within and across consultations. This is because the digital system can manage, store and easily retrieve any amount of data about limitless people. The working computer system can do this instantly without human fatigue, error or bias. So personal knowledge or memory is thought to be redundant: *what you need to know will be found on the computer screen*. It follows that any suitably qualified professional can see any patient at any time. Isn't that better for staff-management and patient-flow? Why, then, have the fussy inconvenience of any personal continuity? These, speciously, have become working maxims of NHS design and administration.

When Drs X and Y call up the records of each patient there is a swarm of data, codes, algorithmic questions and tasks that the computer system needs completed in order to proceed. The computer 'knows' the person and their history; it is assumed (now usually correctly) that the doctor does not. But such 'knowledge' is only about code-sanctioned diagnosis and treatments, metrics, data and census-type events: it cannot be about individuals' inner or relationship-life, particularly when this is (not yet) expressed. This can only be done by the dedication and skills of people-work: pastoral healthcare.

Sadly Dr X and Dr Y have little opportunity for any professional action and initiative that may depart from the well-mapped and expected routes. Patients, too, are strongly influenced to comply: '*One complaint for one person in one session. Now, what is your problem for our attention?'*

This stern and spare pragmatism has long roots. From the Thatcher-era there has been less and less reference to medical education (how to think), and almost total talk of medical *training* (what to think): most doctors now choose expedience and obedience.

The time-pressures are well known nationally and are sharply directed here, in this hot-desked practice. If Drs X and Y have no personal knowledge of Suki and Fiona, and certainly no knowledge of their patients' relationships, what can these doctors' professional contribution be? The odds, surely, are stacked against them.

Even if these doctors' natures are kindly and emotionally highly literate – despite the industrial and anomic nature of their working conditions – even if they manage to retain high morale and motivation – it is most improbable they can make the necessary nuanced connections. They would not know personal stories. The mother-daughter relationship

would not be perceived, let alone understood: Suki and Fiona have different surnames and would each consult separate doctors – X and Y.

Would Suki even wish to consult Dr X – a complete stranger – with a matter of such delicate complexity? If she does what, in a few minutes, can Dr X understand and do? Dr X has little capacity for follow up. Referral to counselling services demands much intrusive and interrogatory bureaucracy and then a waiting list of many months – useless for such a crisis. If Suki does *not* seek help, what then? Increasing distress leading to a psychiatric emergency? Self-palliation with alcohol or chemicals? Self-harm?

And how will Dr Y respond to Fiona's medley of symptoms? Dr Y has no way of knowing anything of Fiona's emotional fragility and hyperreactivity, or her daughter's current predicament. This doctor in this situation is unlikely to see Fiona again, so defaults to 'defensive practice' to deflect from any culpability of missing major pathology when it first presented. Could Fiona have had a first epileptic fit? Could she have a lethal malignancy? Of the pancreas or ovary, for example? Should she be fast-tracked for specialist investigations?

*

Such are the paradoxical consequences of the abandonment of personal continuity of care and relationships in pursuit of industrial efficiency and cost cutting. Without the possibility of bespoke understanding, guidance and containment with such humanly complex patterns of distress, the costs multiply and amplify – to the alienated patients and doctors, and to the already overloaded hospital specialists and investigation facilities … and to the economy.

The old adage: *Family Doctors protect patients from hospitals and hospitals from patients* has become less and less true, or even possible.

*

We like to think that we invent and operate our machines and devices to free up our attention to, and our investment in, our more important or pleasurable human tasks: that through such control we will have more access to our own and others' headspace and heartspace. This, certainly, is sometimes true, but unreliably so. So often our subsequent indiscretion leads to our excessive and misapplication of our automations and cybernations. Traffic-jammed, dangerously air-polluted cities; mental and behavioural disturbances from the magical powers of digital social media; our environmental degradation from our imaginative but ineluctable use of plastics … all of these represent the curses that emerge when we do not have the wisdom to contain, sometimes rescind, the blessings of our cleverness.

There is an additional severe loss of paradoxical nature. The overuse and misapplication of computers cause the operating humans to involuntarily overadapt to the machines they operate. In having, perforce, to continually use the machines' algorithms, codes, vocabulary and sequences, the humans find their own human imagination, resonance and improvisation increasingly redundant, eventually inaccessible. In this human-IT fusion the digital imperatives are, increasingly, proving to be more powerful than the human's wishes or influence. Dr X and Dr Y, whatever their human qualities outside the consulting room, will find they are the computer's cipher within it. Data and codes may all be in one place; the important humanity is locked out and astray.

And when AI is increasingly making evaluations and decisions, what then?

------0------

> *The danger of the past was that men become slaves. The danger of the future is that men may become robots*.
>
> Erich Fromm (1955) *The Sane Society*

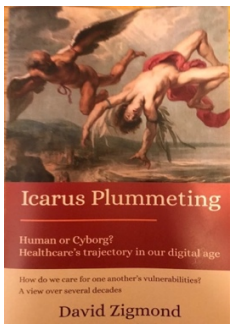
Notes and reference

1. The first of these accounts occurred in 2010 and draws from detailed diarised notebooks I kept throughout my decades of practice.

   The second account, from 2026, is an imaginary composite of many real observations and accounts (both my own and many others) to construct a probable scenario – typical of many described by practitioners, their staff and patients.

2. Zigmond D (2021). 'Sort, Fix or Send?' *BJGP*, August 27

3. The sources of this second imagined narrative are very wide: many years of documented interviews and conversations with patients, practice staff and managers. These often echo my own experiences. The contemporary hub-practice that employs Drs X and Y bears much resemblance to one that replaced the smaller traditional practices where I used to work.



Published by Brown Dog Books, 2026

Interested? Many articles exploring similar themes are available on David Zigmond's Home Page (http://www.marco-learningsystems.com/pages/david-zigmond/david-zigmond.html