

It would be entirely possible to waste the total NHS budget on non-evidence-based interventions, resulting in busier staff without making patients healthier or relieving their suffering. Evidence-based practice is crucial, as is cost-effectiveness. No matter how much money we are prepared to spend on the NHS, it will remain a limited resource. The US is a pertinent example of how more healthcare spending does not necessarily translate into better health care, with ineffective and low-value care leading to overuse, and health inequalities and poor outcomes aggressively persisting despite high spending.¹ Sustainable, effective health care needs to critically assess the value of interventions, to ensure that the resources we have are used effectively. Additionally, we should question what value means — and whose ‘values’ are considered. Concurrently, we should also ensure that, when interventions are proven worthwhile, there is the resource to service them. But how do we achieve this while general practice has its local services subject to austerity, budgets activity reckoned through big data, paid for by results, subject to commissioning pressures, and with all the uncertainties that even high-quality evidence-based medicine presents? The overdiagnosis movement can perhaps be seen as a cultural counterpoint, trying to ensure that claims for intervention are fairly expressed, and based on suitably robust and applicable evidence, such that individual patient values are listened to and prioritised, preserving the human relationships that underpin health care.

CONSULTATION ON EVIDENCE-BASED INTERVENTIONS

NHS England is consulting on evidence-based interventions and has already issued guidance for GP prescribing. Challenge has been rightly made to general practice to stop doing ineffective or low-value interventions. Indeed, work of little value means less room for better-value health care. But there is a concern that ‘value’ as currently practised may mean monetary cost coming first,² and may be used to describe the values of a balanced accounting sheet rather than the personal values of an individual patient. Higher-quality care may happen to be less expensive, but cost should not be the sole arbiter. Yet the opportunity cost of doctors

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having to explain why CCGs are no longer funding prescriptions for ‘self-limiting’ conditions, rather than doing other work, has not been factored,³ and the fuzzy reality of general practice means that it is hard to police a line between ‘mild migraine’ or ‘mild acne’ whose medication should not be funded versus that which is.

BIG DATA

Meanwhile, big data has the potential to help doctors reckon their prescribing, referrals, or interventions against others. However, it has also been used to castigate GPs for overprescribing when the coded medical record is analysed and fails to comply with the retrospective application of expert opinion and guidelines.⁴ Yet notes are often written under time pressure and coding may be inaccurate. Neither were guidelines designed to be applied with uniform and industrial exactitude to patients — as distinct from the role of the doctor treating the individual patient.

Although interrogating big data may help us to identify prescribing patterns, it is not sufficient to elucidate the complex, multifactorial reasons behind prescribing decisions. Different methods, such as qualitative interviews, are required to understand prescribing patterns and support doctors and patients to make safe and effective decisions. Understanding patterns and the limitations of big data is crucial — hard work needs to be done to help make sense of such data and appreciate the uncertainties. Relying on measures easily plotted on spreadsheets to identify good or bad practice is problematic without thoughtful, critical interrogation to ensure that conclusions are safe, do not overreach, and take account of local factors — such as the presence of nursing homes or homelessness services. Using data to produce crude targets may have unintended adverse outcomes, but it has the potential to help doctors and patients if used well.

CHOOSING WISELY

One driver for individual clinicians to continue to provide treatments that are not good value according to the available evidence is the very human desire to ‘do something’ when asked for help, a cognitive shortcut that could be classified as action bias.⁵ Take the example of tonsillectomies presented by Šumilo *et al* in this issue of the *BJGP*. They found that the vast majority of children undergoing tonsillectomy in the UK do not have an evidence-based indication and large numbers of patients with an indication kept their tonsils.⁶ The surgeons performing these tonsillectomies are unlikely not to know the evidence on benefits and the potential for overtreatment. It may be that they view themselves as able to help and satisfy patient or family wishes using the tools at their disposal, and therefore do ‘something’ — despite ‘nothing’ being the evidence-based option. And although Choosing Wisely (<http://www.choosingwisely.org>) and others encourage patients to ask ‘what will happen if I do nothing?’, it may be difficult to question or discount a doctor’s recommendation. Nor can we blame healthcare professionals for providing inadequate information if our systems fail to provide the time and resources to have these nuanced discussions in a culture of blame and litigation. Other factors may be at play. Evidence suggests a decades-old association between private practice and increased risk of tonsillectomy.⁷ The pattern of overtreatment for some with undertreatment of others clearly requires to be understood before it can be mitigated.

HEALTHCARE POLICIES

A disregard for the evidence base is not limited to clinical decisions and medical interventions. Our healthcare leaders are equally culpable. Simon Stevens, Chief Executive of NHS England, has directed money into dealing with the rise in referrals for urological cancer after celebrity publicity

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for prostate cancer screening, with the claim that it will ‘help save lives’.⁸ On the same NHS webpage, a prostate cancer charity is quoted calling for a prostate cancer screening programme ‘... as this will have the biggest impact’, despite the lack of evidence to support this statement. The Health Secretary, Matt Hancock, is vocal in his unreserved backing of technologies and innovations that currently lack evidence of benefit. He has cited ‘digital technology and personal data’ along with genomic information as being capable of serving as preventive medicine, despite the lack of evidence for doing so and the opportunity cost that will be incurred. The enthusiasm to do ‘something’ may be wasted, however, if it is not evidence based. We not only need systematic interrogation of all new healthcare policies for evidence and cost-effectiveness, but we also need real-life testing with rapid abandonment for new policies that do not work or have unintended and unacceptable adverse effects.

Perhaps the most troubling and tangible deviation from the evidence base is the persistence of policy prioritising access ahead of continuity of care, despite what we know of the value of long-term, longitudinal relationships.⁹ Our era of health care needs to acknowledge and support the humans meeting in the consulting room. We share a rightful concern about overuse, but we all have cognitive biases, incomplete knowledge, and a fear of error that lead us to make what may be perceived by others as bad decisions. We must acknowledge and mitigate our human fallibilities. This is why the systems we work in must support doctors and patients to work together to practise less harmful health care.

SHARED DECISION MAKING

Although it may sometimes appear that clinicians, academics, and policymakers disagree on what health care should look like, fundamentally we all want the same thing: compassionate and competent clinical care, delivered within the limited resources available. We have plenty of evidence that helps us decide what

treatments are, and are not, effective, and plenty more that suggests this evidence is not always informing decisions. So perhaps we should focus our efforts, and research funding, on ensuring patients and clinicians are adequately supported in making evidence-based decisions; and finding outcome measures that reflect what truly matters to patients. Shared decision making is imperative, and although research shows that use of patient decision aids often result in patients choosing less invasive treatment options,¹⁰ we need more work in this area to find whether shared decision aids can assist in lowering unwarranted variation in interventions. Indeed, we think medical practice can be made better for staff and patients through evidence-based, shared decision making. We also suspect this has the potential to decrease unnecessary interventions, thus leaving more resource for valuable ones. The NHS as a whole must work to support patients and clinicians to be able to find, communicate, and discuss the evidence they need to help make high-value choices before, during, and after the consultation.

CONCLUSION

Professional practice should not be a threat to health, as Ilich (1978) would have it: ‘*Within the last decade medical professional practice has become a major threat to health.*’ But in order to realise its potential we should listen to Voltaire: ‘*The art of medicine consists of amusing the patient while nature cures the disease*’; and while not seeking to ‘amuse’, instead our systems should foster therapeutic relationships and the thoughtful application of evidence — focusing on what matters to our patients, mitigating our biases, and allowing honest discussion about what we do and do not know.

Margaret McCartney,

GP, Fulton Street Medical Practice, Glasgow.

Sam Finnikin,

GP, Sutton Coldfield Group Practice; Clinical Research Fellow, Institute of Applied Health Research, University of Birmingham, Birmingham.

ADDRESS FOR CORRESPONDENCE

Margaret McCartney

Fulton Street Medical Practice, 94 Fulton Street, Glasgow G13 1JE, UK.

Email: margaret@margaretmccartney.com

Provenance

Commissioned; not externally peer reviewed.

Competing interests

Both authors are RCGP Fellows in Evidence and Values. Margaret McCartney is a freelance journalist and has received royalties for book and radio work. She also gives a small amount of money to Keep Our NHS Public.

Acknowledgements

With thanks to Julian Treadwell, Richard Lehman, and Lisa Finnikin.

DOI: <https://doi.org/10.3399/bjgp19X700313>

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