Why we are Rethinking Medicine

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Foreword

by Professors Alf Collins and Martin Marshall

The practice of medicine evolves continuously. On the one hand, genomics offers opportunities to manage disease in ways that were unimaginable a decade or so ago. On the other hand, colleagues in primary care teams are paying more attention to the social determinants, and psychosocial impact, of poor health in our communities. These are just two examples of ways in which medical practice is evolving and they sit on a continuum. Genomics draws on a traditional biomedical approach whilst more community faced approaches draw on a subtle mix of biomedical, psychological and social activities, all working in concert.

And whilst these two examples sit on a continuum, they could be thought of as representing fundamentally different categories of working, but we believe that separating them out would not serve our profession or our population well.

Rethinking Medicine aims to stimulate debate and to ignite fresh ideas about how medicine is changing and how, alongside this, fundamental concepts of what medicine is and how it should be practiced are changing as well.

We hope you enjoy reading our position paper, we hope it stimulates you to think differently and we invite you to join us to develop our thinking and to plan together for the future.

Yours faithfully,

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'Rethinking Medicine' seeks to address the problem of the dominant use of the biomedical model ('the model') in England as a universal solution to address many of the multiple and complex challenges that our population faces with its health and wellbeing. This paper sets out this problem definition in greater detail.

Modern medicine prolongs lives and saves lives; it is one of humanity's greatest achievements. The clarity, simplicity and success of the model[1] are both remarkable and beguiling; one author has noted that '*when faced with complexity or uncertainty… most healthcare professionals retreat to the safety of the biomedical model*'.[2]

It was not always so. In the early years of modern medicine, science had fewer tools to offer the physician and the role of human interaction in medical practice was more palpable. As Sir William Osler noted, *"The good physician treats the disease; the great physician treats the patient who has the disease."*

However, a growing number of doctors and patients are questioning whether modern medicine has over-stretched itself[3], whether it is always as effective as proponents claim and whether there are instances where the side effects and unintended consequences outweigh the benefits. Given this context, this paper addresses how the success of the current medical model leads to, and is associated with, several overlapping imbalances.[4] Principally, these include:

1: The model encourages a detached, reductionist, and deterministic stance which is not always appropriate

Medical students are taught to be scientifically detached in order to place patients in diagnostic categories. Having done so, they are taught to use evidence-based practice to tailor treatments to the underlying conditions. This approach is helpful when patients do indeed present with evident diagnoses. However:

- Whilst many patients present with specific medical conditions, many present with complex 'bio-psycho-social' stories not readily reducible to simple diagnoses. The Biopsychosocial Model of health and illness, as defined by Engel in 1977[4], implies that behaviours, thoughts and feelings may influence a physical state.
- In addition, health-related quality of life is determined by the burden of the medical condition *plus* the psychosocial impact. However, this impact is often not assessed or attended to because the primacy of the medical model drives an imperative to ascribe not only disease states but also symptom[5] complexes and health-related quality of life to primarily bodily causes. Not to mention, the psychosocial impact of a medical condition can worsen or perpetuate the medical condition itself.

- The quest for scientific objectivity (alongside many other factors) means that clinicians learn to become detached and do not always treat patients with compassion or empathy. [6]
- *And associated with this,* the primacy of the medical model, and the fact that many clinicians define themselves in terms of their technical knowledge or expertise [7] can encourage paternalism, rather than a sense of wanting to listen to patients' stories or gathering learnings inter-professionally.

2: More is expected of the model than it can deliver

- Patients and clinicians tend to overestimate treatment benefits and underestimate harms[8]
- There is a lack of understanding amongst patients and professionals of the probabilistic nature of medicine. [9]
- There is a cultural tendency to attribute the breadth and depth of human suffering to a specific, diagnosable, treatable cause. [5]
- There is an associated cultural tendency to believe that early diagnosis through screening is always 'a good thing'. [10] [11]
- Increased access to services offered by the current medical model, paradoxically, tends to increase dependency on it.
- Alongside a professional culture that seeks to manage risk and avoid litigation (doctors are more fearful of being sued for *not doing* something than they are fearful of being sued for the complications of *doing* something[12]), all of this contributes to a tendency towards over-investigation, overdiagnosis and overtreatment leading to avoidable waste and harm.

3: The model's focus encourages increasing specialization on the body accompanied by relative neglect of people's lives and the biopsychosocial model

- The scientific reductionist model increases need for specialist knowledge, and therefore specialists, who may have a poor interprofessional understanding of who does what.
- The model is focused on pathology, that is, on clinical states/markers of disease, rather than quality of life or wellbeing. This risks relative neglect of (a) those factors which bring about changes in bodily functioning – perhaps preeminently the social determinants of health, (b) the impact of medical conditions on psychosocial wellbeing and (c) the contributions people can make to their own health and wellbeing.

- Though it is often what patients want, the focus on 'what is wrong' and the giving of advice and recommendations by healthcare professionals (which may then be reinforced by certain government policies and interventions) disempowers individuals and communities, and can establish a 'victim-blaming culture' and sets up a dependency on the medical model.[13 14 15 16] A strengths-based personal counselling and/or community development approach, on the other hand, seeks to empower and enhance knowledge, understanding, resources and skills of the individual and their community (a 'bottom-up' approach[17]).

Consequences and implications

An unbalanced approach to medicine – with too much emphasis on the medical model – contributes to the key problems facing different groups involved in the delivery of healthcare, as set out in Table 1.

Table 1: Consequences

Group	Consequences
Patients	• Many patients do not feel that they experience a compassionate, coordinated service that pays enough attention to their individual needs, assets, values, preferences and priorities. • Many patients feel that the burden of treatment is more than they expect/want, and 'non-compliance' is their predictable response.[18]
Clinicians	• They are not providing the service to patients that they feel they want to provide. Indeed, making sure that people are involved in and central to their care is now recognised as a key component of developing high quality healthcare.[19,20,21,22] • Health and care professionals feel burnt out and unsupported.[23,24]
System leaders	• There is a need to focus on value, so therefore a need to reduce waste and avoidable harm. • There is an associated need to understand and manage expectations and to ensure that demand is informed. • There is an increasing need to attend to the needs of an aging population with the attendant problems of multimorbidity, frailty, overdiagnosis, overtreatment and treatment burden. • However, most senior system leaders do not understand that many of the problems our health system faces are due - at least in part - to the limitations of the medical model/the lack of understanding of the limitations of the medical model.

Tomorrow's health professionals will need to be quite different to today's. They will need to understand how to provide compassionate, coordinated person-centred care, blending a medical approach with a psychosocial, capability-based approach with knowledge of the limitations of each of these approaches individually. They will need to support people in a different way - understanding values and preferences; and supporting those with low levels of health literacy make sense of the maelstrom of information around them and understand their options. They will need to work in a different away, more in networks and teams than individually. Technological and scientific advances, such as whole genome sequencing, data and informatics and wearable technology, offer the potential for personalised medicine like never before.[25] As a result tomorrow's professionals will also need to consider the evolving context in which medicine operates and need to keep less information in their heads but know how to access, navigate, synthesise and utilise information in order to provide the best care for individual patients.

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The problem is complex and needs to be supported with resources, research and a shift in how health and social care professionals intersect and interact with each other as well as other groups, since a sustainable, effective change cannot happen without bringing other stakeholders along on the journey. [26] Patients, the public, students, communities, politics, media, behavioural economists, technology are just a few groups to consider.

Finally, a change in the education and training of practitioners, as well as the mindset and culture of the health and care system as a whole, is critical to make asset-based person and community-centred care the default mode of medical practice.

The role of Rethinking Medicine in addressing the 'problem'

Some doctors are already trying to change their relationships with patients, to listen more carefully to their narratives and work alongside them, sharing information about diagnoses and options for treatment, and offering more personalised care and support.[27] Others are focusing on helping schoolchildren to understand and manage their own health and wellbeing and to understand where doctors do and do not add value.[28]

We see these evolving activities in which doctors are choosing to focus their energies as connected. We believe that underlying them is an awareness that some things doctors do are effective for some clinical problems but that different approaches are required to respond to an increasing number of the challenges that doctors face.

Some initiatives are being developed at a national level to support this process. *Prudent Healthcare* in Wales [29] and *Realistic Medicine* in Scotland [3] represent concerted efforts to create a new set of principles and activities to guide clinical practice, and a narrative which builds on the ground-up energy for change.

We believe that the process of rethinking medicine is a necessary challenge. We need to more clearly define where the application of a disease-focused medical model adds value and where it doesn't, to help doctors actively develop more productive relationships with patients and to help them incorporate social interventions into the more traditional armoury of biological and psychological interventions.

The aim of Rethinking Medicine is to unify and give voice to what is already happening

The aim of Rethinking Medicine is to act as a 'force multiplier' which resonates with people – particularly doctors – as a mutually reinforcing set of concepts and activities going on in this area already. By drawing together these disparate programmes, Rethinking Medicine does not duplicate existing work but strengthens it.

To fulfill this force-multiplier role Rethinking Medicine is:

- designing and delivering a community or network of those wanting to be involved, including representatives from all stakeholder groups. At this stage the focus is mostly on doctors, from those working in primary to those working in tertiary care. However, we are also talking to patients and other health professionals to explore the implications of rethinking medicine for them
- working with policy makers and leaders in the NHS to generate thought leadership
- supporting both of the above, Rethinking Medicine is delivering well planned and executed communications through traditional methods as well as social media
- establishing an infrastructure to support the initiative – for example an evaluation strategy to measure impact, secretariat to support governance, and programme management to support planning and execution of activity.

The aim of Rethinking Medicine is to unify and give voice to what is already happening across the broad landscape of modern medical practice, from social prescribing to genomic medicine. This means unifying all the ways of working that sit neatly – perhaps comfortably – together as outlined in this paper and it also means aligning this broadened conceptualisation of medical practice with the perhaps more traditional view of medicine as a way of understanding and managing disease. Quite simply, we believe that modern medical practice should not simply be about an ever narrower focus on disease states and tailored treatment strategies. It should also be about an ever broader understanding of the determinants and impact of poor health – and, with that, medicine's role in 21st century society.

References

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