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Making Change Happen in Health

Denis Horgan[a] Carin Smand[b] Anastassia Negrouk[c] Denis Lacombe[c]

[a]European Alliance for Personalised Medicine, Brussels, Belgium; [b]European Hematology Association, The Hague, The Netherlands; [c]European Organisation for Research and Treatment of Cancer (EORTC), Brussels, Belgium

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Abstract
Integrating personalised medicine into Europe's healthcare systems will undoubtedly need to draw upon diverse talents via a multi-stakeholder approach taking expertise from academia, industry, healthcare organisations, government, policymakers and, of course, patient groups. It will also need a long-term budget commitment geared towards stimulating research and innovation in order to succeed. The role of HTA also needs to be boosted, while EU engagement in health needs to increase, not decrease, and requires a long-term strategy to provide a structure, a framework, and a consensus. Health equals wealth and the authors argue here that investment in research and innovation, alongside laws and rules that are fit-for-purpose and reflect the swiftly changing world of medicine, are vital. Europe needs to grasp these points at every level for the benefit of the millions of potential patients spread across the soon-to-be 27 Member States.

Harnessing the Benefits of Science

The dramatic improvement in the health of the citizens of Europe over the last two centuries has transformed the continent and the lives of the people living in it. But is Europe able to seize the new benefits that science, technology and forward-thinking public-policy

Denis Horgan
European Alliance for Personalised Medicine (EAPM)
Avenue de l'Armée 10
BE–1040 Brussels (Belgium)
E-Mail denishorgan@euapm.eu

decisions could confer on current and future generations of Europeans – or is it losing the will and capacity to grasp the fruits of progress?

Courageous social reforms since the 19th century in everything from sanitation and housing to education and welfare created the conditions in which the inventiveness and dedication of physicians, surgeons, biologists, chemists and pharmacologists could bring new forms of medical treatment to the sick. The insatiable curiosity of scientists and technologists opened up new paths to the understanding and preservation of health. And the spirit of enterprise among researchers and industrialists turned new ideas into new medicines, devices and procedures.

Is Europe now stalling? Its science and technology are certainly not. Healthcare professionals still have a powerful sense of dedication. And research and industry function at an unprecedentedly high rhythm. What is missing from the picture is an overarching vision of how to – or even whether to – exploit all that potential.

And as a result, for all the advances made, deep inequalities and unexploited opportunities disfigure the landscape of European health. It needs no more than a cursory glance at the metrics of life expectancy and morbidity and access to care to reveal the wide disparities between Europe's citizens – depending on where they live or their level of income or the nature of their disease. And the continuing lack of hope for the millions of Europe's patients suffering from what is termed, with chilling detachment, "unmet need" is an indictment of the torpor that has overtaken much of Europe's erstwhile energy to find solutions. In an ironic reflection of Europe's current divergences on political persuasion, the panorama of health in Europe is strongly characterised by haves and have-nots. So much could be done, not just to equalise the provision of healthcare, but to enrich it so that everyone's chances of health and quality of life are improved. The opportunity is there [1].

But Europe's driving force for the last half-century, the European Union, is now struggling to prove itself equal to the challenge this presents. The EU is a magnificent creation, and over and above the political stability it has brought to a fractious continent, it has delivered much to improve the quality of its citizens' lives. In the health area specifically, it has provided a secure legislative and regulatory framework designed to guarantee EU-wide safety, quality and efficacy in medicines.

It has made efforts to simplify clinical trial authorisation procedures, to ease cross-border care, and to incentivise novel treatments with orphan drugs or through its emerging European Reference Networks. But the EU has its limits, and in relation to health it chose its limits more than fifty years ago with its first treaty, which kept most health policy and practice firmly within the sovereign competences of its member states. The clauses in that first text did allude to the pursuit of its citizens' health. But the allusion left Europe in a state of ambiguity over health that it has never since resolved, for all the subsequent tweaks to the founding treaty. The most recent treaty revision maintained the equivocal stance, with health barely mentioned, and relegated to – at best – a competence that is merely shared with member states [2].

How much more might have been done for the health of Europe's citizens over the last half-century if a common approach had been agreed? Concerted action would have long ago drawn attention to the conditions generating inequalities in health status and healthcare, and would have permitted the design of remedial measures. The best practices in some member states would have become general practice across the EU. And focused research and standardised infrastructures would have provided much-needed impetus to healthcare delivery and economies of scale [3].

That attractive dream rapidly fades when confronted with the growing difficulties that Europe faces in tackling multiplying health challenges with both arms tied behind its back. Because the harsh reality is that the inadequate governance of health in Europe leaves so many opportunities missed, so much progress hampered, so much waste and duplication and needless and fruitless conflict [4].

The shortest catalogue of Europe's faltering attempts to compensate for this deficiency eloquently exposes just what a handicap the divided attitudes represent.

Health was explicitly excluded from the attempt to construct a European single market for services, and the consequent gap had to be filled by the compromise of the cross-border patients' rights legislation – a measure that, in the face of member state indifference or downright resistance, produced only some limited examples of cross-border care, and spawned some limited cooperation on e-health, on health technology assessment, and, most recently, on centres of excellence for treating rare diseases [5].

True, there is an EU group working on e-health – but at a very restricted level in terms of content and seniority. The EU's much-vaunted digital single market strategy, launched with a fanfare early in 2015 as a strategic boost to Europe, pays little attention to health, and the current EU agenda does little more than scratch the surface of relatively minor issues such as e-prescriptions. The vast opportunities that Big Data offers in the health field are largely overlooked [6].

Time to Boost the Role of HTA

Health technology assessment (HTA), a vital link in the chain of bringing health innovations to patients, is light-years away from achieving any effective European accord, despite the urgent need to establish some clearer understanding at EU level of the concept of value in healthcare. In major disease categories such as diabetes, neurological disease and cancer, the EU member states continue to entertain distinct views on what is worth pursuing in terms of treatment, prevention, diagnosis and reimbursement.

More than 50 national and regional HTA bodies across Europe persist in conducting their assessments in their own way, and 15 years of well-meaning but ineffectual encouragements towards working together at EU level have barely altered that situation. An earnest attempt at cooperation is underway to find some form of agreement before EU support runs out in 2020, but by mid-2017 the Commission had got no further than completing a consultation on options, with the promise of some as-yet undefined "further initiative" [7].

The critical role of HTA in therapeutic innovation cannot be overlooked. It is essential that issues such as use in combination and sequencing and duration of use are given the attention they deserve. It is good that it is happening to some extent in discussions on new drugs between EMA and HTA bodies, but it does not go far enough.

This discipline is not integrated into the healthcare system across Europe, and it is currently too focused just on medicines. Take the case of oncology, for instance, where drugs are far from the sole therapeutic option, and it is necessary to integrate other modalities into trials – surgery, radiology, and newer and highly expensive options such as proton therapy. There is currently no sufficiently urgent or sufficiently comprehensive overview that takes account of this gap in Europe [8].

More EU Cooperation Needed

The poster-child of EU cooperation in health in 2017 is the formal launch of the European Reference Networks, an ingenious attempt to provide virtual links between centres of excellence in rare diseases across Europe. The initiative has the merit of providing greater focus and sharing of expertise in a score of complex diseases where treatment is still lacking, but it is not yet operational, suffers from the EU's failure to provide a substantial budget for it, and risks being significant more for its emblematic character as a cross-border exercise than as a real uptick in EU attention to the health challenge [9].

A further notorious example of how the EU's limited powers in health have hobbled its efforts is the saga of its attempt to accommodate pan-European clinical trials. The EU has tried – twice – to establish some common rules among the member states to reduce the delays and administrative burdens that national autonomy imposes. The first attempt was early admitted to be a fiasco – and twenty years on from those first initiatives, a revised system has now been agreed, but is still not in place, and in any case remains full of holes because of multiple examples of national insistence on doing things their own way [10].

A tenuous or intermittent understanding that innovation depends heavily on incentives has resulted over the years in some small improvements, including limited patent term restoration for pharmaceuticals, and some extended data exclusivity for orphans or paediatric drugs.

But in an EU devoid of an overarching vision of health, what has been given by the Commission departments responsible for research or industry is under threat from Commission departments responsible for competition or from health ministers suspicious of risks of abuse – and everything remains dependent on the goodwill of member states [11].

The EU repeatedly attempts to patch up some of its all-too-obvious deficiencies by the creation of innumerable working groups and so-called "joint actions" on subjects as diverse as mental health, HIV, workforce planning, or health information. An elaborate project ostensibly aimed at promoting precision medicine has resulted, so far, in nothing more than deferred deadlines and circular reflections on potential barriers.

All these exercises, often an uncomfortable halfway-house between expert reflection and token stakeholder involvement, tend to move slowly, and their impact on policy is piecemeal at best, and invisible at worst. And by their very nature, as isolated operations, they fail to respond to the underlying problem of incoherence [12].

Slow, Slow. Quick, Quick, Slow

Overall, EU engagement in health could be summarised as "too little, too late." It was not until the start of this century that the Commission had a directorate dedicated to health. It was not until 2003 that the EU ran its first health programme. It was not until 2011 that it made its first timid legislative step into cross-border care with the patients' rights directive – and then only grudgingly, at the prompting of the European Court of Justice. There are figures that speak for themselves. The budget for the Commission's health directorate general for 2014–2020 is EUR 2.3 billion – and of that, EUR 1.8 billion is earmarked for activities linked to "Food and Feed," leaving only EUR 449 million for "Public Health" – only around EUR 70 million a year for 500 million citizens across 28 countries!

Even the highly-respected European Medicines Agency took nearly four decades to come into existence, and today continues to operate on the basis of the search for consensus among distinct national medicines agencies, with no executive power of its own. It has developed a powerful reputation worldwide for its expertise (although how its performance and reputation will fare as Brexit obliges it to re-locate remains to be seen), and within its limited mandate it has done what it can to promote innovation, but its own senior figures openly recognised that the framework it operates in is not finely attuned to the evolving science of new medicines.

These failings are not a judgement on the good will, good sense and dedication of the countless officials (and occasional enlightened political figures) who have struggled against the odds to make the best of a bad job. The root of the problem is systemic – a refusal at policy level to adopt a broad view of health and to accord the subject the priority it deserves.

Time after time, ministers and senior officials and MEPs have drawn back from what might have been – should have been – breakthrough moments in health policy formation. Despite overwhelming evidence of the merits of taking a holistic approach to the many-sided issues that health represents, they have opted for the easy way out, proposing improvised fixes of isolated aspects of the health dilemma, and – often citing the treaty limitations on what they can do – backing a short-term approach [13].

Vision for the Future

If Europe is to grasp the opportunities it incontestably has for making real improvements in the health of European citizens, this haphazard laisser-faire attitude will no longer do. The short-term disconnected approach must be abandoned in favour of a longer-term vision that recognises explicitly that real progress depends on a comprehensive appraisal of needs and a cooperative response to come up with answers. This is not a plea for relying on a utopian omniscience. Many problems and issues cannot be foreseen, so no longer-term plan will ever have all the answers. But what a long-term vision can do is to provide a structure, a framework, a consensus on principal objectives, so that as unforeseen issues arise, they can be confronted within an agreed context, and intermediate solutions can be sought that will not conflict with one another or with overall goals [14].

That would avoid the difficulties Europe encountered in regulating data privacy, for instance. Aiming at the perfectly acceptable objective of protecting citizens from incursions and intrusions and abuse by commercially driven internet services and social networks, the EU unwittingly created rules putting at risk the transfer of personal data that is the lifeblood of medical research. A longer-term view would also avert knee-jerk reactions and permit legislation to emerge from mature reflection rather than panic. For instance, the review of EU legislation on medical devices and in vitro diagnostics was hijacked by the understandable outcry over the breast implant scandal – but the sudden pressure did nothing to improve the quality of the legislation that emerged. Similarly, the EU's rules on pharmacovigilance were given an extra last-minute twist in response to the late-breaking revelations of persistent inaction over numerous adverse reactions to Servier's diabetic treatment mis-prescribed as an appetite suppressant [15].

But how to move from where we are now to where we might want to go? These are matters of policy, and policy changes are needed to effect change in the real world. So where are the policy options?

EU strategy is certainly up for grabs in a way that has not been seen since its inception. The combination of recent internal and external strains on the EU – the financial and economic shock of a decade ago, mass migration, geopolitical shifts, popular disenchantment, Brexit… – have called into question so many of the assumptions on which the EU had been operating in more tranquil times. So much so that no less a figure than the President of the European Commission was moved early in 2017 to publicly offer a range of scenarios for the future direction of the EU as it approached its sixtieth anniversary in March. "We have Europe's future in our own hands," he said. His five options ranged from limiting the EU to nothing more than the single market to carrying on as at present, in a halfway house towards a more integrated Europe, or, at its most ambitious, doing much more together – with member states sharing more power, resources and decision-making across the board [16].

That invitation to review the EU's destination and its route is only one of a raft of similar reflections over recent years at the level of the European Council, the European Parliament, and in other institutions, in official and unofficial circles. All of them share the same underlying theme of re-assessing what the EU should be doing, and how it should be doing it. In other

words, the shape and purpose of the EU is already on the table, and the time is ripe for bringing new strategic thinking to policy formation. That citizens expect more from the EU on health and healthcare is evident, both from regular Eurobarometer polls and from the recent initiative by European civil society and patient groups to anchor health more firmly in EU policy. The upcoming European Parliament elections and the shortly-to-commence preparations for a new European Commission hold out opportunities for taking on a new focus [17].

A particular opening is available for new thinking on healthcare governance, because Juncker followed up in April with the launch of the proposed European Pillar of Social Rights, "seeking to put social priorities at the heart of Europe's work," which specifically lists improvements to welfare systems and aspires to ensuring "better working and living conditions in Europe." The June EU Health Council already began an examination of the implications. And the exercise is open to everyone: "member states, EU institutions, the social partners and civil society all have to take on their responsibility," said Juncker. The timing is short, too. "I would like to see the Pillar endorsed at the highest political level before the end of this year," said the Commission President.

In the health field, the Commission has also indicated its approach is open to change. In 2016 it launched a two-year review of the *State of Health in the EU*, with a view to supporting evidence-based decision-making. And in early 2017, it concluded a wide consultation on the future of its multi-annual health programme. A less public internal review is also underway of the future of the Commission's health department [18].

Since the opportunity clearly exists for input into EU thinking, what input should be made in the field of health? The most obvious need, given the current level of fragmentation of policy and practice, is for a new degree of coherence.

But coherence is not enough. A top-down imposition of new rules cannot be the answer if the essence of the EU's concern – the welfare of its citizens – is to have priority. The oft-cited mantra of patient-centred healthcare must also be given real meaning, and that implies a careful and thoughtful complement of bottom-up thinking too.

For both top-down and bottom-up strands to be brought successfully together, there must be a new degree of trust, too. The imposition of regulation and legislation cannot be the complete answer. It can create a more appropriate framework, but within that the promotion of innovation and of integration will always depend ultimately on voluntary cooperation.

Stakeholder Engagement

All stakeholders will have to play their part in discussions and policy formation. And they will all have to accept that the ultimate objective is better health for patients. Their own interest and priorities must adapt to that priority [19].

For industry that could mean taking advantage of greater synergies in new models of clinical trials and drug development, making use of more sensitive and comprehensive data on delivery of therapeutic advantage – and with a more sophisticated relation between prices and demonstrated performance…

For health services it could mean more effective screening programmes, using higher tech, low-dose radiation…

For institutions and member states it could mean more purposeful discussion – taking more account of input from stakeholders, avoiding repetition, and translating decisions into action…

In the Commission, the Council and the Parliament, it could mean closer links between their own internal departments and committees dealing with health, and closer links between all three of them in decision-making.

For healthcare professionals it could mean openness to new ways of working, new techniques and technologies in screening, diagnosis and treatment, and a new focus on prevention – and readiness to undergo new training.

For individual patients, this could mean new options for healthcare access – and new responsibilities for developing health literacy, so they too can play a bigger role in their own health and their treatment.

It is not a question of revolution, but more of re-engineering.

Archetypically, and emblematically, a more thoughtful approach to the therapeutic development process could lead to a long overdue transformation of the healthcare systems in which patient-centered questions are given genuinely equal consideration as drug development questions. Properly applied clinical research would then take its rightful place in the transition from R&D into rational and affordable care, reducing the risk of insufficient testing – and consequently inappropriate prescribing – of potentially great innovations.

Redefinition of a comprehensive multidisciplinary patient-centered process in therapeutic innovation could act as a template for a similar reappraisal of the way that Europe could approach its entire healthcare challenge. Above all, the crucial role of the EU as a facilitator of member state cooperation could be intensified, because the EU has a unique position for bringing focus and a coherent perspective. Nor does it need to wait until there is treaty change or a wholesale abandonment of sovereignty by member states. Because if a group of like-minded countries decide they wish to work together on health – as they have done in an increasing range of policy areas, with, for instance, Estonia leading a self-selecting group of pioneer countries on the digital agenda – then there is no legitimacy issue whatever to prevent the EU, and the Commission itself, assisting this form of collaboration. Self-created and self-sustaining coalitions of willing countries can – and do – work together without going for the lowest common denominator.

For Europe, beset by popular scepticism about politics, politicians and political systems, it could offer a powerful antidote to public hostility and populist disenchantment with technology and globalisation. At the level that matters most to everyone, their own personal interest, a recalibration of policy towards the patient could not only improve health, but restore faith in Europe itself.

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Funding Sources

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