

## Translational health policy: towards an integration of academia and policy

## May CI van Schalkwyk and Matthew Harris

Department of Primary Care and Public Health, Imperial College London, London W6 6RP, UK **Corresponding author:** May CI van Schalkwyk. Email: maizie333@icloud.com

Commitment to investing substantial resources into biomedical research is common in developed countries; however, translating this into meaningful changes in clinical practice can be challenging. Translational research began over a decade ago, smoothening the transition from theory to practice, and furthering the evidence-based medicine movement. 'Bench to bedside' translational research is now an established concept and involves close collaboration of researchers and clinicians in designing and conducting clinical trials and testing novel therapeutic methods in fields such as oncology.<sup>1,2</sup> Although translational research was initially confined to medical applications, other specialties followed,<sup>3</sup> and 'bench to bedside to curbside' is an emerging field that applies to translational health disparities research.4

In the policy space, substantial amounts of resources and investment are dedicated to producing policy documents; however, they do not always lead to practice change or yield desired benefits. Swaths of high-quality policy research remain largely unknown or wasted with no real-life change or population benefit being observed. Several reasons could explain this: for instance, (1) there are many powerful actors that shape the policymaking process to serve, what are often, conflicting interests (e.g. the tobacco industry's influence on tobacco control policies); (2) there are considerably varying views as to what constitutes legitimate interference from the state; (3) there is a lack of a common language to unite all parties involved; and (4) there is a need to balance values among researchers, policymakers and the public, which may often be at odds.

Much can be learned from progress in other fields to improve and standardise the use of evidence for impact. Policies need to be treated as per health interventions. They should be held to account, adopting ethical and safety standards by weighing up the likely harms, burdens and benefits using validated, standardised tools and frameworks building on those used in other fields of translational research. Health policy research and implementation should be guided by the principles of translational biomedical research where researchers, clinicians and regulators all play integral roles in the translational process, every stage of which is transparent, refined over time and formally documented using standardised methods.

A more strategic and meaningful approach to the use of evidence in policy is not new. The evidencebased policy movement is well recognised and literature describing this endeavour has appeared since the 1970s and continues to this day. Indeed, few researchers or policymakers would publicly deny the common goal of evidence-based policy.<sup>5</sup> Attempts to fulfil this goal have led to mixed outcomes, however, and have predominantly focused on bridging a 'gap' between research and policy and on describing the actions taken by academics in their attempt to overcome the 'barriers' to the use of their research by policymakers. The limitations of this approach are well articulated by Oliver et al.<sup>5</sup> who highlight the need for, and propose a different approach to, the field of evidence-based policy research. They advocate for a shift away from asking how to increase the influence of evidence to aiming towards a greater understanding of what constitutes and influences policy and produce studies of decision-making more informed by critique and theory.<sup>5</sup> Cairney and Oliver<sup>6</sup> suggest that, to succeed in the pursuit of evidence-based policymaking, researchers consider the use of governance principles, such as co-production, and persuasion in combination with evidence to translate complex evidence into approachable stories that influence the policy agenda. Drawing insights from their review of secondary data and policy theory, the authors describe pragmatic options to combine scientific evidence with governance principles to have impact.<sup>6</sup>

Funding allocation, producing and disseminating evidence are all predominately overseen by researchers, and this may hinder progress in the pursuit of translation. A senior academic recently stated that is was not their role to help shape policies but to deliver the evidence alone,<sup>7</sup> a statement described as 'laughably passive' in a recent *Lancet* editorial.<sup>8</sup> Equally, the UK government has been criticised for its failure to translate the best available evidence provided to it in the context of the NHS and financing of public health.<sup>9</sup>

Researchers and policymakers alike need to acknowledge the value that others outside of their immediate fields can add to achieving desired outcomes. The role of the social sciences should not be underestimated and the impacts of human thinking, behaviour and bias cannot be overlooked. As discussed in The World Development Report 2015, Mind, Society and Behavior,<sup>10</sup> the use of three principles relating to human behaviour - 'thinking automatically', 'thinking socially' and 'thinking through mental models' – can lead to considerable gains.<sup>10</sup> These principles not only aid understanding the population for whom the intervention or policy is intended, thereby increasing the likelihood of positive outcomes, they describe the cognitive processes used by researchers and policymakers themselves and the potential biases that can be introduced, such as confirmation bias and sunk cost bias. The use of evidence and policymaking can be improved using established methods to mitigate the negative impacts introduced by our thought processes and biases.<sup>10</sup>

Then there is the need to establish what constitutes acceptable use of evidence, an example of which is the recent public criticism by Stephen Hawking of what he viewed as inappropriate use of evidence to justify policy establishing a seven-day NHS.<sup>11</sup> Unfortunately, healthy and important debate did not follow, in part owing to a lack of effective channels, and the concerns were dismissed by the Health Minister.<sup>12</sup>

In light of the above, we propose that steps need to be taken to reach consensus on how to use evidence optimally for meaningful outcomes. These can be broadly conceptualised as: *what, who, how, and why?* 

What: What defines the translation of evidence into policy? Acceptable and realistic answers to what constitutes evidence, whose evidence to use, how much, and of what quality using what measures, should be sought. An agreed minimal amount of sound multi-sourced evidence to be used in guiding policymaking, and a recognised threshold weight of evidence that cannot be ignored, could be reasonable starting points. We also advocate that reasons for including

or not including evidence should be transparent and documented consistently.

Who: Who is tasked with the challenge of evidence translation and policy adaptation in real-world contexts? We would argue that all those tasked with forwarding the lives of people and the communities and environments in which they live, including both researchers and policymakers, have a key role. We recommend that strong collaborative partnerships be established between all specialties and institutions involved across the life-course of policy, from inception to implementation and enforcement to review and evaluation. We need to shift away from the inherent disconnect between those who form and implement policy from those who research the health impacts and set the research agendas. Novel approaches of working in unison, for example between policymakers, academia, non-governmental organisations and the media, are gaining traction and have shown positive outcomes, as summarised comprehensively by Sallis et al.<sup>13</sup> Additionally, who contributes to the policymaking process should be transparent and known to all parties involved to optimise the use of both evidence and governance principles, and collaborative working.

How: How to ensure that health research is relevant and used routinely and effectively? This will require a more systematic approach to the translation of research that involves ongoing collaboration between researchers, practitioners and policymakers supported by the adoption of standardised transparency and accountability structures and indicators of progress, building on the framework established to review transparency in UK government policy proposals.<sup>14</sup> The application of research findings to policy would be further supported by a greater understanding of policy processes by researchers, using simple models such as that described by Kingdon and Thurber,<sup>15</sup> formalised opportunities for researchers to experience the field of policymaking and vice versa, and a research agenda informed by knowledge gaps within the policy arena and use of policy-relevant methods.<sup>13</sup> Useful strategies include 'red teaming' where researchers and policymakers allow operational proposals to be critiqued by an outside team to help expose potential weaknesses and fuel productive group debate, and 'dogfooding' where one attempts to experience one's product before its release.<sup>10</sup> Furthermore, complex systems approaches, fundamental to conceptualising many of today's current health issues, can aid in framing the problem and forming of policy options, and, in conjunction with realist evaluation, could support measuring outcomes and understanding of what works, in which contexts, for whom, and why?<sup>16,17</sup> The process of policymaking and delivery should be iterative and allow for adaptation as evidence is gathered during implementation and evaluation.

Why: Why pursue the translation of evidence into policy? It is evident that the desire for policy to be evidence-based is to ensure a more beneficial outcome. This is based on the assumption that the use of evidence will undoubtedly achieve this. To support this assertion, examples of successful evidence translation and enhancement of policy need to be highlighted and used to establish models of best practice and standards. Learning from failure will be an integral part of the process. Broadening our view of how the use of evidence can be of benefit would support its use. For example, the translation may help build partnerships across traditional sector boundaries (so often needed with current complex health challenges). support the communication of risk and uncertainty with the public, foster trust in both researchers and the political system and in establishing clearer lines of accountability and governance.

We have far to go and much work awaits us. However, this should not overshadow how far we have come. Let us continue this journey unified by a common goal – policies for people.

## Declarations

Competing Interests: None declared.

Funding: None declared.

Ethical approval: Not applicable.

Guarantor: MCIvS.

Contributorship: All authors contributed equally.

Acknowledgements: We wish to extend our sincerest thanks to Roger P Worthington for his invaluable role in helping to conceive the premise for the manuscript and for his comments on the content. We also wish to thank the reviewer of the original manuscript for his constructive and insightful comments, which enhanced substantially the content and message of the work.

**Provenance:** Not commissioned; peer-reviewed by Martin McKee.

## References

1. Marincola FM. Translational medicine: a two-way road. *J Transl Med* 2003; 1: 1.

- Goldblatt EM and Lee W-H. From bench to bedside: the growing use of translational research in cancer medicine. Am J Transl Res 2010; 2: 1–18.
- 3. Woolf SH. The meaning of translational research and why it matters. *JAMA* 2008; 299: 211–213.
- Dankwa-Mullan I, Rhee KB, Stoff DM, Pohlhaus JR, Sy FS, Stinson N Jr, et al. Moving toward paradigmshifting research in health disparities through translational, transformational, and transdisciplinary approaches. *Am J Public Health* 2010; 100(suppl): S19–S24.
- 5. Oliver K, Lorenc T and Innvær S. New directions in evidence-based policy research: a critical analysis of the literature. *Heal Res policy Syst* 2014; 12: 34.
- Cairney P and Oliver K. Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? *Heal Res Policy Syst* 2017; 15: 35.
- BBC Radio 4 *Today*. See www.bbc.co.uk/program mes/b090vdk1?ns\_mchannel=social& (last accessed 26 August 2017).
- 8. The Lancet. The UK's inadequate plan for reducing childhood obesity. *Lancet* 2017; 390: 822.
- 9. The Lancet Public Health. Prospects for public health in a sustainable NHS. *Lancet Public Heal* 2017; 2: e202.
- Group WB. World Development Report 2015: Mind, Society, and Behavior. Washington, DC: The World Bank, 2014. doi:10.1596/978-1-4648-0342-0.
- 11. Hawking S. The NHS saved me. As a scientist, I must help to save it, Stephen Hawking, Opinion. *The Guardian*, 18 August 2017.
- 12. Slawson N and Gayle D. Jeremy Hunt accuses Stephen Hawking of 'pernicious falsehood' in NHS row, Politics. *The Guardian*, 19 August 2017.
- Sallis JF, Bull F, Burdett R, Frank LD, Griffiths P, Giles-Corti B, et al. Use of science to guide city planning policy and practice: how to achieve healthy and sustainable future cities. *Lancet* 2016; 388: 2936–2947.
- 14. Sense about Science. *Transparency of evidence*. See http://senseaboutscience.org/activities/transparency-evidence/ (2016, last accessed 28 August 2017).
- Kingdon J. Agendas, Alternatives, and Public Policies, 2nd edn. New York: Longman, 1995.
- Rutter H, Savona N, Glonti K, Bibby J, Cummins S, Finegood DT, et al. The need for a complex systems model of evidence for public health. *Lancet* 2017; 6736: 9–11.
- Salter KL and Kothari A. Using realist evaluation to open the black box of knowledge translation: a stateof-the-art review. *Implement Sci* 2014; 9: 115.