NICE's 2013 Methods Guide: The Calm Before the Storm?

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In April 2013, the National Institute for Health and Care Excellence (NICE) published an update to its *Guide to the Methods of Technology Appraisal (The Guide)*.[1] However, what should have been a key event for many interested parties passed with unexpectedly little public reaction. What does this say about the changes in *The Guide* and NICE's intentions in making them?

The Guide identifies the evidence required by NICE's committees when determining whether to recommend a technology for reimbursement and the way this evidence will inform their decision. So the content is crucial to the manufacturers of health technologies, given its influence on how NICE perceives the value of their interventions and on the related likelihood of achieving reimbursement. It therefore follows that any update to *The Guide* should be eagerly anticipated by industry. This update was, however, remarkable both for the quiet way in which it was launched and the lack of public reaction it seems to have generated. NICE has not gone out of its way to publicise the update. At the time of writing, for example, no news items relating to the update have been published on the Institute's website. There has also been no public response to *The Guide* from organisations such as the Association of the British Pharmaceutical Industry that might ordinarily be expected to await and react promptly to the publication of such a document.

Perhaps this apparent calm is unsurprising given how little the latest version of *The Guide* differs from its predecessor. This in turn probably owes much to the imminent arrival of value-based pricing (VBP) and its effects on how health technologies will be assessed. The UK Government has confirmed that NICE will have a "central role in the value-based pricing system… and be responsible for the full value

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assessment of medicines under the future system."[2] The fact that specific details about VBP had yet to materialise, even though its launch date was less than nine months away, clearly made the update of *The Guide* difficult for NICE. The Institute had already delayed publication of the document, having consulted on a range of matters that overlapped with the content of VBP, in particular whether and how non-health effects should be incorporated into health technology assessment (HTA). The initial plan was to review *The Guide* between October 2011 and April 2012, with a draft version of the update being issued in May 2012 for public consultation. By that time, it might have been expected that at least some of the detail of VBP would have been known, given that the Department of Health's consultation on VBP ran from December 2010 to March 2011. But with no such information emerging and the update already delayed, the choice facing NICE was to publish with minor changes or to risk producing a document that might turn out to be at odds with the contents of VBP as it emerged post-publication.

That said, *The Guide* was not entirely unaltered, though the changes are subtle and take some finding, and their impact will only become evident as the amended recommendations are applied in practice. For instance, the 2008 *Guide* said that improvements in patient satisfaction due to a more convenient mode of administration should "be noted". By comparison, the 2013 *Guide* seems to go further, in specifying that the value of this greater satisfaction should be "quantified where possible". Does this predict the greater use of patient-preference surveys to quantify such value?

Another subtle, but possibly meaningful update occurs in the section on measuring and valuing health states (i.e., methods for obtaining health state utilities for use in cost-utility analysis). Like the 2008 *Guide*, the 2013 version indicates a preference for utilities based on the EQ-5D[3] in order to maximize "consistency across appraisals," while allowing for alternative approaches when the EQ-5D is not "available" or "appropriate." The 2008 *Guide* specified that these alternative approaches should be "comparable to those used for the EQ-5D," which has often been interpreted as a recommendation for the time trade-off (TTO) utility elicitation method with a 10-year time horizon. In contrast, the 2013 *Guide* no longer has this recommendation. Given the continuing preference for the EQ-5D and consistency across appraisals, it seems likely that the 10-year TTO will continue to be the favoured utility elicitation method for NICE submissions. However, the deletion of this specific recommendation raises the question of whether there may be increasing openness to variation in utility methods.

There are also several areas where NICE has usefully clarified its expectations. For instance, the section on modelling contains more detail on the methods for dealing with extrapolation and cross-over. Specifically, *The Guide* emphasises the importance of assessing the external and internal validity of extrapolations of health impacts over extended time horizons, and the need to avoid simple adjustment methods such as censoring or excluding data to deal with patients who cross-over between the arms of trials. Similar, clarificatory updates have been made to the section on the synthesis of evidence of health effects, where a greater emphasis is given to the use of network meta-analysis. In our view, these additions correspond with existing best practice, and in that regard are welcome.

However, a key missed opportunity in *The Guide* is the lack of progress on recommendations for methods to incorporate effects not currently captured in the incremental cost-effectiveness ratio (ICER). In developing the document, NICE consulted on various ways to capture these effects. These included weighting the quality-adjusted life-years (QALYs) gained and adopting more structured decision-making (SDM) through the use of multi-criteria decision analysis (MCDA), neither of which is included in *The Guide*. The report of the consultation noted that the benefits of the existing deliberative approach—flexibility to undertake context-specific decisions and the ability to develop consensus—were perceived to outweigh the greater consistency that could result from adding more structure to the decision-making process. Participants in NICE's workshops were not confident that SDM would improve decisions, noting that it was "reasonable to expect some degree of inconsistency across appraisals"[4]; that social value is complex and disputed, requiring deliberation; and that there are concerns about how MCDA had been implemented in the past.

Are these concerns reasonable? Certainly, social value is complex and the relevant factors will vary between decisions. But this complexity is precisely why SDM was under consideration and does not seem a sound reason for rejecting it; and the fact that some factors may be specific to decisions does not eliminate the need for greater consistency in the consideration given to other factors, such as access to treatment and disease severity. Furthermore, SDM does not imply using the same factors for every decision, and some frameworks for this approach include both factors that are constant across decisions and others that are decision-specific.[5] Also, SDM does not rule out using deliberation. Providing more structure to how factors are incorporated into decisions, does not, in itself, stop decision-makers from also considering other, context-specific factors. Finally, it is important to acknowledge that some criticisms of previous applications of MCDAs are valid—for example, that they have employed overlapping criteria—but these should be seen as lessons to be learned, rather than insurmountable obstacles to the use of the technique.

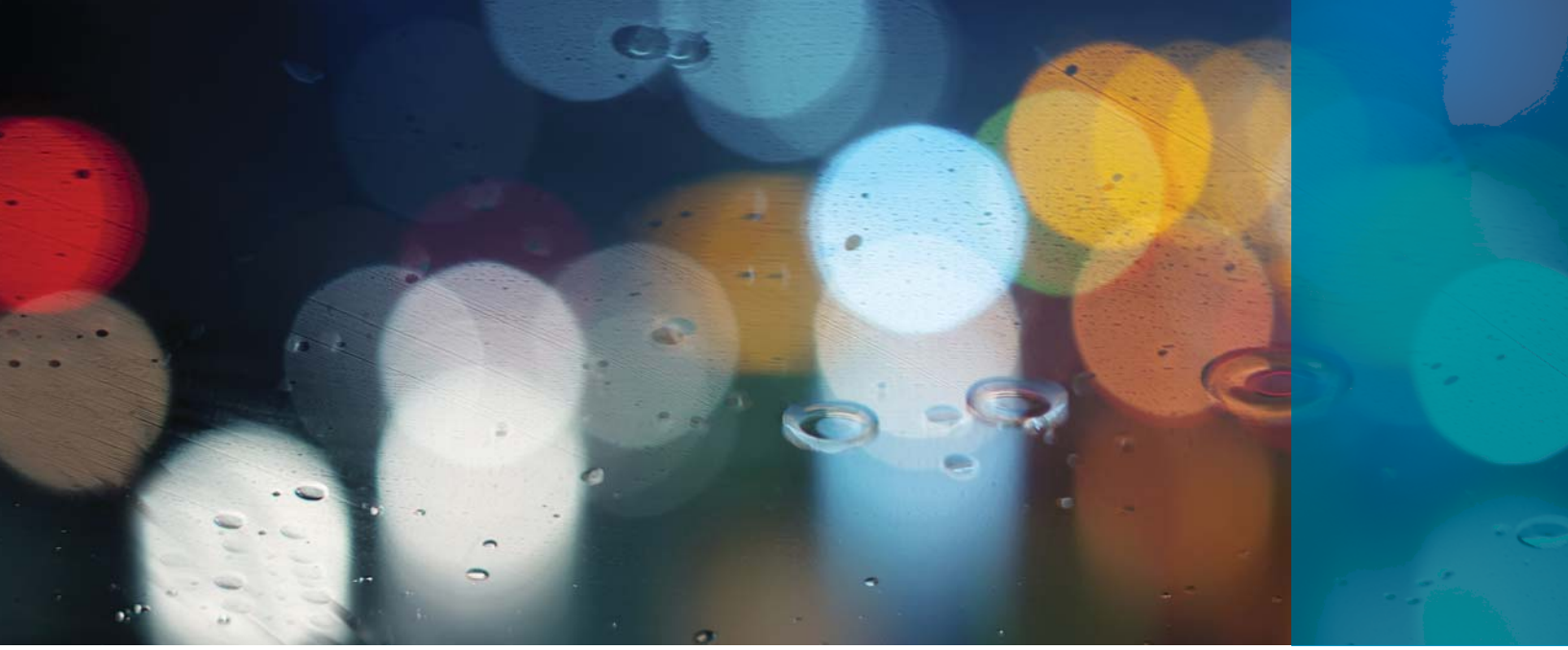
By offering no clear recommendations on how non-health factors should be considered in the decision-making process, NICE appears to be ignoring siren voices in the literature. Perhaps most importantly, the Kennedy Report, itself commissioned by NICE, concluded that we should not "perpetuate the unfortunate idea […] that there is a methodology based on ICER/QALY and then there is some set of afterthoughts. If indeed social judgments, values or benefits do form part of NICE's appraisal as NICE claims and it is a "deliberative process", then they should overtly be identified."[6]

These ideas were echoed by some of the participants in NICE's consultation workshops, who suggested that a checklist of criteria to consider might help inform submissions and support the reporting of recommendations. This would have been a first step in the right direction, but did not make it into *The Guide*. A further useful step would have been the use of effect tables to transparently report the performance of technologies against these checklist criteria, along the lines proposed by the European Medicines Agency to support benefit-risk assessment.[7] We might go further and ask why, if NICE accepts pre-defined tariffs for the dimensions of the EQ-5D, has it rejected the notion of pre-defined weights for the other factors relevant to all decisions?

UNTIL THE DETAIL OF VBP AND THE IMPLICATIONS FOR NICE'S WORK ARE FINALISED, PERHAPS IT WOULD BE PREMATURE FOR NICE TO FORMALLY ADDRESS HOW NON-HEALTH FACTORS SHOULD BE CONSIDERED IN THEIR DECISIONS.

But perhaps that question is unfair and, again, it is easy to see the influence of VBP in NICE's response to these issues. On a number of occasions, the notes from NICE's workshop highlight concern over whether *The Guide* should be aligned with VBP. Participants even proposed positions contrary to those likely to be adopted in VBP, such as rejecting the explicit inclusion of the innovativeness of a technology in the assessment.[4] Until the detail of VBP and the implications for NICE's work are finalised, perhaps it would be premature for NICE to formally address how non-health factors should be considered in their decisions.

VBP is not the only initiative that will have a bearing on how NICE assesses technologies. In April 2013, NICE took back the responsibility for assessing ultra-orphan drugs. This previously sat with the Advisory Group on National Specialised Services (AGNSS), which developed an MCDA framework for assessing technologies. NICE published its Interim Process and Methods of the Highly Specialised Technology



(HST) Programme[8] in June of 2013. This goes further than *The Guide* and identifies a range of non-efficiency criteria that will be used to assess HSTs, including the severity of the disease, the availability of alternative treatments, and the innovativeness of a technology. These criteria are particularly important in the context of orphan drugs, but they are also relevant to the valuation of other technologies. It is tempting to speculate that this development in the methodology for orphan drugs establishes a precedent that *The Guide* will follow.

Given the debates about how technologies are assessed for value, it is disappointing, if understandable, that NICE has chosen to issue a largely unaltered version of *The Guide*. The result is to leave stakeholders in the position of having to follow recommendations that are both absolute but potentially temporary, and in which key limitations are unaddressed. Decisions about the precise content of VBP and methods for valuing orphan drugs will influence NICE's methods in the near future. So perhaps it won't be long before the current calm is replaced by the storm of another, much more provocative, update to *The Guide*. We watch these developments with interest.

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