

Foreword: Measurably better healthcare – signs of a (r)evolution in progress towards a new academic science?

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FOREWORD

Welcome to this special edition of the eJIFCC where as guest editors we have the pleasure of sharing with you work from around the world highlighting new and successful ways of working, from local to regional implementation examples. These examples have all earned recognition in the global *UNIVANTS of Healthcare Excellence™* program (1) and represent a range of clinical environments, from emergency care through to the community setting, where there are impacts on population health.

The late Howard Morris, former president of the IFCC (one of the prestigious partner organisations to the UNIVANTS of Healthcare Excellence program), had an aspiration to have a journal dedicated to '*measurably better health care*'. But what is this and why did this hugely respected figure in laboratory medicine think this was important?

Perhaps this can best be defined by exploring what we mean by *measurement* in this context and also what we mean by *better* in health care and specifically in laboratory medicine.

It is more usual, particularly in the current financial climate, to examine cost effectiveness of laboratory testing solely within the silo of the laboratory. However, the concept is wider than this, has greater complexity, and is more difficult to assess when trying to capture clinical outcome benefits accurately. Extra costs in the laboratory can be rationalised as these may impact favourably elsewhere, for example in reducing drug budgets (see Hoenle et al in this edition), through avoidance of other expensive diagnostics, by improving the time to diagnosis (see Lucas et al in this edition) and hence, patient flow through pathways to definitive treatment. Standard measures of diagnostic accuracy cannot capture this complexity, although they provide the gateway into test introduction into practice. Examples of these outcomes in this edition include measures of patient management (length of stay), equity of access for hard to reach populations (see Curtis et al, the Kidney Check programme in this edition), early disease detection and improved patient identification for eligibility for invasive diagnostics which have long waiting times: all of which may be considered better for the patient.

Better can also be defined in terms of health-care economics. Unfortunately financial reviews of laboratory services often focus solely on cost, rather than value. An integral part of our laboratory leadership role is therefore to evangelise and explain this to those defining budgets at the executive level of healthcare. It is no surprise therefore that the application process for UNIVANTS requires the engagement of senior hospital management to support the application team. In this regard, the European Health Management Association (EHMA) is also a *founding* partner (and thus, one of many judge organizations) to the UNIVANTS of Healthcare Excellence awards. Engagement at these levels increases the understanding of the value of laboratory services rather than solely the cost generally of health care.

The concept of value in health care has been championed by many, including in the UK, by Sir Muir Gray (2) and this has impacted on government policy. The IFCC has also recognised the importance of value through the establishment of a committee dedicated to this work: the *IFCC-WASPALM Committee for the Value Proposition in Laboratory Medicine* (3). Committee members Prof. Chris Price and Dr. Andrew St John have provided an introduction (4) for those less familiar with this in a review article where they explain how to ‘unlock’ the potential of this concept for laboratory leaders which they summarise as:

‘The value proposition provides a guide for successful implementation of a test. Although it can address both adoption and implementation, it highlights that the requirements for test implementation are quite different to those of adoption, with an emphasis on real-world evidence and outcomes.’

Laboratories cannot judge value solely on their own. This is apparent by the inclusion of clinicians in all the winning submissions to the *UNIVANTS of Healthcare Excellence Awards*, and also in the articles we present in this issue. As providers of laboratory testing, we need the input of service users to fully understand the impact on patient care. Laboratories working in co-production with clinicians and multi-disciplinary teams are thus ideally placed to tap into the value agenda. The breadth of healthcare scope across which laboratories can impact are exemplified in this edition by the papers of Martin Than (ACS pathway, urgent secondary care) and Judith Strachan (FIT pathway, primary: secondary care interface). For a representative clinician’s view on working with laboratories, we invite you to read ‘Valued Clinical Leaders Share Perspectives on the Importance of Laboratory Medicine’ in which those whose teams have successfully partnered with laboratories share their experience (5).

The *UNIVANTS of Healthcare Excellence* awards, besides facilitating a sharing of ideas, also provide a checklist of good practice ideas for laboratories to review in order to adopt the concepts of working in a value added fashion, as described in more detail in the article by Ravalico and Strain (6) in this issue. This is a useful pointer for a way of working which is new to many of us. There are, of course, other sources of inspiration and guidance, for example, the work of the NICE Diagnostics Committee in the UK, which explores cost effectiveness of laboratory tests, or the IFCC committee's work on the value proposition (3). All contribute in different, but complementary, ways to encourage ongoing quality improvements.

The IFCC and others (7) recognise that laboratories are not good at fully evaluating and measuring outcomes in terms of standard health economic measures (and laboratories may not have been included in such assessments). It is therefore important for future developments to engage with health economists, who should ideally be fully embedded in health care. We need to understand both the micro-economic impact within individual laboratories, as well as the macro-economic population impact. The lack of awareness of health economic modelling, to demonstrate cost-effectiveness, combined with the increasing cost of health care show how important it is for current and future laboratorians to be economically educated. A good start would be to ensure this is included in training programmes for all laboratory disciplines and professions.

Howard Morris was indeed prescient when he recognised this:

"We need to appreciate that what we are doing in some ways is creating a new academic science... a new way of thinking that has not been done before. I think UNIVANTS is the future of Laboratory Medicine and could even be its own journal one day."

Professor Howard Morris, IFCC President at the March 3rd, 2019 UNIVANTS of Healthcare Executive Partner Meeting

This special edition is dedicated to his memory.

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