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SUBMISSION TO THE STRATEGIC REVIEW OF HEALTH AND MEDICAL RESEARCH

By way of introduction and to declare the derivation of my views, I should note that I am a physician-scientist with over 30 years experience of working both in medical research and in the hospital sector. I have been fortunate to hold an NHMRC Research Fellowship for almost 20 years, being one of the few clinically active medical researchers to do so. I have in the past been actively involved in NHMRC governance through Chairing both the Training Awards Committee and the Enabling Grants Committee as well as peer review panels. I have also served on research institute boards and the Board of The Cancer Council of Victoria and the Victorian Cancer Agency Advisory Committee.

This Strategic Review of Health and Medical Research is timely in that there are increasing pressures on limited research resources, decreasing opportunities and increasing pressures in the context of career development with some conflict arising from competing interests within the sector. There has also been increasing pressure particularly on the NHMRC to cover a much broader and indeed diffuse range of activities including various sectional pressures around either specific diseases or craft groups. In addition areas traditionally associated with Health Departments which might be seen as rather more Development than Research are now expecting NHMRC support. Thus a static funding base is increasingly being expected to be spread further. With respect to the four questions:

1. Why is it in Australia's interests to have a viable internationally competitive health and medical research sector?

The reasons for this have been very well articulated in a number of fora including the excellent Australian Society of Medical Research submission. As a practising clinician, it is very clear that the quality of the workforce, the quality of the information that is used by the workforce and the quality of the translation of current research into practice is intimately linked with a healthy, vibrant and contemporary research sector. Sections of health care delivery that are not so informed tend to practice the medicine they were taught as undergraduates many years prior. Health care is a high technology sector, the amount invested in R&D is miniscule compared to what would be expected of an equivalent corporate enterprise.

2. How might health and medical research be best managed and funded in Australia?

As per my comments above, the NHMRC has been placed under considerable pressure as a result of increasing demands and expectations. The traditional view that funding should be based on excellence clearly needs to be balanced by strategic- and needs-based imperatives but should not become captive of these. The latter is a very good way to ensure an impotent research sector.

The work of the Wills Committee in New South Wales has highlighted the benefits of diversity in the research enterprise, thus any review of how medical research should be funded and delivered needs to avoid the risk of narrowing the base, indeed moving to a monopoly. The great strength of medical research in Victoria when compared for instance to New South Wales as highlighted in the NSW report reflects not the quality of the universities, which are outstanding and internationally competitive in both states, but the tradition of strong independent medical research institutes associated with hospitals, a situation that has been extant in Victoria for over 50 years. There is some pressure, particularly from the Group of Eight (G8) universities to narrow the base. This must be firmly resisted as it undoubtedly is not in the best interests of research or patients. There are elements of this ambition that have rather cartel-like behaviour. This is not a criticism of the universities which are a fundamental keystone of the research enterprise as are health services, the independent medical research institutes, the consumers and a range of other groups who all need to be involved and their respective often unique contributions acknowledged.

The Health and Medical Research sector cannot be viewed in isolation. Cost shifting, cost restrictions and "ring fencing" are rife. Thus the ARC avoids funding anything that hints of "medical" and indeed precludes NHMRC Fellows and MRI's from accessing its schemes. Infrastructure is contentious with various sections accessing different schemes for indirect costs with some universities creating "pseudo-institutes" to access multiple infrastructure schemes, etc. This is also reflected in the workforce where universities have shifted successful academics across to the NHMRC Fellowship Scheme – the money saved then disappears into consolidated revenue; MRI directors cannot be NHMRC Fellows but in the university, NHMRC Fellows fill roles as Deputy Deans, which should be funded from university resources. To some extent this reflects the fact that while the MRI's generally remain lean, efficient, focused and nimble, many universities are exhibiting the "dys-economies of scale". Lest this be seen as a criticism of the university sector, it is clearly and unambiguously, chronically underfunded. Similarly, funds and employment for research in hospitals and the commercial sector are scarce. The notion that Fellowships support mid-career scientists enabling them to transition to a permanent career role is naïve when the positions they are meant to transition to do not exist.

The current trend to push for so-called **Academic Health Centres** needs to be addressed with some circumspection. Most of the arguments advanced rely on overseas examples, sometimes misrepresented, but generally, given jurisdictional differences, irrelevant. The drivers for this push are diverse and sometimes have more to do with local ambition or

cost-shifting (G8), than delivering better medical research and outcomes for patients. As often happens in this situation, there is a risk that some intrinsic points of merit become lost in the institutionalisation and formalisation of the process, indeed the whole thing has started to become a mantra rather than a functional ambition. The principles espoused in the AHSC discussion should be applied to existing entities without the need to introduce a new layer of bureaucracy, as seems to be occurring, at least in my immediate location.

In the original remit for this review there was a desire to increase **philanthropy** in the sector. The situation in North America is often taken as an appropriate goal but it ignores differences in size and culture, America is, in a global context, the exception, not the rule. Asking or telling philanthropists to give more or people to become philanthropic is naïve and reflects almost a "cargo cult" mentality. So if governments want to encourage and facilitate philanthropy, they presumably need to provide real, material (financial) inducements and/or to address potential structural impediments, such as tax laws, etc.

3. What are the health and medical research strategic directions and priority and how might we meet them?

It is essential that Australia maintain a diverse portfolio of engagement. There is no doubt that issues such as obesity and diabetes require a whole of community approach as do some sections of oncology and cardiovascular disease. On the other hand, the enthusiasts for this approach seem sometimes to ignore the fact that there remains a substantial burden of disease that as best as one can determine is independent of environment and social behaviour and requires a biological approach. One can reasonably argue that pursuit of the biological basis of say obesity misses the point. Conversely a major impediment in the area of lung cancer research has been the assumption, for decades, that the problem can be simply addressed by smoking control; in reality, there is a substantial burden of disease not associated with smoking. There are many examples going both ways arguing very clearly for a balanced approach. The original Wills Report of a decade ago got it right in that there needs to be innovative, investigator-driven research in the biological and medical sciences, but in areas of public health, and even more so, health services research, a much more targeted and essentially contractual approach is required; it is arguably the difference between Research and Development.

Although perhaps self-evident, there are clearly a range of well canvassed **impediments** to achieving our goals in health and medical research (ethics committees, access to platform technologies, facilities for clinical research, biobanks, etc.). **The absolutely critical impediment, the "gorilla in the room" is clinical data.** Health information systems, be it nationally or at an institutional level, are archaic. Any attempt to collect or interrogate the data is a nightmare. Medical records in my institution are fragmented across multiple incompatible systems such as pathology, imaging and medical records with the latter in reality, despite being introduced recently, an elaborate system of non-searchable photocopies!

4. How can we optimise translation of health and medical research into better health and wellbeing?

There are diverse ways in which this question can be interpreted and many will chose to interpret it in different ways. Unfortunately "Translational Research" like "Evidence-Based Medicine" has become a mantra; like beauty, it is very much in the eye of the beholder. The reality is that translation needs educated, research-aware, if not research-active, healthcare professionals working in environments in which research is seen as integral to healthcare. Unfortunately, only too often in health services, research is seen as something that happens "over there", that the health service is only about service. This narrow view of the world has not served patients or the community well, although to be fair it often reflects the resource realities and the background of the health service executives, which is either in clinical service or management, neither of which leads to "research literacy".

There are also fundamental **structural impediments** in the complex, cross jurisdictional way health is funded in this country. As someone whose clinical discipline is primarily based on consulting medicine, it is very clear that the State health services have tried for many years to shift ambulatory care to Commonwealth funding and the Commonwealth has to some extent acquiesced without any attempt to provide an academic or systematic framework in which this may occur. Increasingly tertiary level health care is delivered in the ambulatory setting. Many diseases rarely involve hospitalisation and yet the burden of disease is substantial. The lack of appropriate ambulatory care facilities, support for research-active clinicians working in ambulatory care and appropriate recognition or desire for research in these areas is clearly lagging. Thus for instance the problem of osteoporosis and minimal trauma fractures is a major health burden, yet it little interests the administrators of health services. In the absence of a systematic approach to research coupled to service provision in this setting, the sector becomes totally captive of commercial imperatives both private, corporate and indeed pharmaceutical.

In conclusion, I commend the Committee for taking on what is an extraordinarily arduous yet vital piece of work that will set the scene for the next decade in Australia. It is a heavy responsibility and I would certainly be more than happy to contribute any further thoughts or discussion if there was thought to be merit in this.

Peter Fuller
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