

ABF Information Series No. 7

Research and training

Professor Kathy Eagar
Centre for Health Service Development
University of Wollongong
April 2010

Under the Rudd hospital reform plan, the Commonwealth will, from 1 July 2011, fund 60% of “recurrent expenditure on research and training functions undertaken in public hospitals”.¹ The proposed ‘independent umpire’ will determine both the mechanism and the funding amount for these functions.

This paper in the ABF series describes these functions and identifies issues relevant to their funding. Before doing so, it places these functions into context.

The changing nature of research and training

Australian public hospitals have always been important centres for both research and training, with many large hospitals having university clinical schools and research centres. ‘Teaching hospitals’, each associated with a well-established university medical school, have historically been the key organisations to translate clinical research into clinical practice as well as critical providers of both undergraduate and postgraduate training.

But the nature of both research and training is changing. The traditional model of a small number of teaching hospitals linked to long-established medical schools no longer applies, as the number of medical schools has grown considerably over the last decade and many are in suburban and regional areas. Research and training is being increasingly undertaken outside ‘teaching hospitals’ and is now routinely occurring in other hospitals, community health centres and GP rooms.

Indeed, the term ‘teaching hospital’ no longer means what it used to, with ‘teaching hospitals’ now referred to as ‘tertiary referral’ or ‘principal referral’ hospitals instead. The use of the term ‘referral’ recognises that these large specialist hospitals treat patients who cannot be treated in smaller hospitals and that they receive referrals from hospitals and doctors outside the local district.

In the ABF context, the changing nature of research and training means that it will not be sufficient to simply set a higher price for tertiary referral hospitals. To do so would disadvantage, for example, the larger regional hospitals (‘country base’ hospitals) that, as part of a rural workforce development strategy, are increasingly undertaking both training and research.

Research

With the exception of clinical trials funded by organisations such as pharmaceutical companies, the direct costs of research in Australian public hospitals are mostly funded by external research grants from bodies such as the National Health and Medical Research Council (NHMRC) and the Australian Research Council (ARC). These grants may be awarded directly to the hospital, through an affiliated university or through an independent medical research institute associated with the hospital.

However, it is well recognised that these external grants do not cover all of the costs, leaving the administering organisation or hospital to pick up any direct funding shortfalls and the research infrastructure costs. In the university sector, the Sustainable Research Excellence initiative² is designed to address these shortfalls. A special initiative such as this may also be required in the hospital sector.

¹ Australian Government Department of Health and Ageing. *A National Health and Hospitals Network for Australia’s future*. Canberra: Commonwealth of Australia, 2010. Page 27

² Department of Innovation, Industry, Science and Research.

[http://www.innovation.gov.au/Section/Research/Pages/SustainableResearchExcellence\(SRE\).aspx](http://www.innovation.gov.au/Section/Research/Pages/SustainableResearchExcellence(SRE).aspx). Accessed March 2010.

Training

Training has two components. One is teaching. The other is learning. Medical training (intern, resident and registrar training) and nurse education are the two largest training costs covered by public hospitals. However, hospitals also train other groups, including apprenticeships in the trades (eg, plumbers, electricians), scientific staff and other health professionals (eg, dietitians, social workers).

Teaching, learning, research and patient care are often undertaken together

As illustrated by the example in the box, teaching, learning, research and clinical care often take place at the same time. For this reason, the costs of training and research are notoriously difficult to identify and to separate from the cost of the patient care activity to be funded under ABF.

Professor Layton, a cancer specialist, is doing a hospital round to review each of her patients. With her are doctors who are training to be cancer specialists (registrars) as well as junior doctors (interns and residents). All of her patients are on a clinical research trial of a new drug and, as she sees each patient, she uses the opportunity to also collect the information that she needs for the clinical trial. She spends quite some time with each patient as it takes additional time to teach the other doctors about the patient's disease and treatment.

That night, one of Professor Layton's patients becomes extremely unwell and Dr Spender (a junior resident doctor) orders urgent diagnostic tests. A more experienced doctor would have known the cause of the patient's condition and not ordered the \$400 tests that proved to be unnecessary.

Direct and indirect costs

The example in the box raises another issue and this is the indirect costs associated with training and research. Should the time that Professor Layton spends with each patient be regarded as training, research or clinical care? Should the diagnostic tests ordered by Dr Spender be regarded as a clinical cost or an indirect learning cost?

Funding contributed by universities

University funding contributions towards the costs of training and research vary by university and by hospital. As a general rule, the traditional 'teaching' hospitals are more likely than the newer teaching and research hospitals to have clinical academic staff who are employed or funded by the university. In some cases, the university makes a significant funding contribution and in other cases it is negligible. The 'independent umpire' will need to take this into account on a case by case basis.

The special case of hospitals being developed into full tertiary referral centres

Hospitals making the transition from being a local district hospital to becoming a full tertiary referral and teaching centre represent a special case. These 'second generation' referral hospitals are typically on the urban fringe and in large regional centres. Numbering less than 20 across the country, they are at various stages of development. Examples include (but are not limited to) Wollongong and Nepean in NSW, Geelong in Victoria and Townsville and the Gold Coast in Queensland.

These hospitals require new diagnostic and treatment facilities as well as expensive equipment. However, this is not the whole story. These hospitals need to make a significant up-front investment (over many years) in employing additional clinical staff who can establish the research and training programs they require. They often need to employ new clinical academic staff while at the same time continuing to employ or engage clinicians who have worked at the hospital for many years. They typically need to employ a significant number of additional interns, residents and registrars to build from the ground up the clinical sub-specialties that a full tertiary referral service requires.

In the ABF context, it is critical that the unique situation of these hospitals is recognised and that their additional costs are defined (and funded) as research and training rather than as patient care.