THE NEW ZEALAND MEDICAL JOURNAL
Journal of the New Zealand Medical Association

Moving forward with healthcare prioritisation

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In a recent Cabinet Paper,[1] Tony Ryall, New Zealand's Minister of Health, called for creation of a "national assessment and prioritisation function for health technologies and interventions.[2] This followed the Ministerial Review Group's report,[3] which, as noted by Mr Ryall:

> …identified improved prioritisation as way to manage costs and improve safety and effectiveness of health services, as has been achieved by PHARMAC with respect to community pharmaceuticals. This requires smarter control of the introduction of new technology and interventions…while decreasing the utilisation of less effective and outdated services.[4]

Following MRG's advice,[5] Mr Ryall proposed that the principal locus of prioritisation be vested in 'a reconfigured and strengthened' National Health Committee (NHC). He cited NHC's 'long pedigree of high quality work' and consequent 'credible brand' as reasons for this choice.

The Minister's desire "to establish a national prioritisation process as quickly as possible"[6] is welcome and timely. Public expectations of what the New Zealand health system should provide are increasingly diverging from what can be afforded, especially in view of the continuing development of expensive new drugs and medical technologies.

Several key questions remain to be decided by Cabinet before a national system of prioritisation can deliver what is required, including:

- How NHC should select and assess interventions
- Whether and how NHC decisions should affect or constrain District Health Boards' funding decisions, and
- Whether and how groups of similar products and services (e.g., new technologies, devices, diagnostics) should be ring-fenced and subjected to a fixed budget, PHARMAC-style.

These as-yet unanswered questions, especially #2, were cited by Treasury as reasons to 'defer' development of a prioritisation programme:

> Deferral would enable the decisions to be taken further in terms of how prioritisation will in fact work and how any prioritisation recommendations will be implemented (crucially, how it will or will not constrain district health boards [DHBs]). These design details matter, as there is a risk of fuelling, rather than dampening, health cost pressures if the model is wrong.[7]

In this paper, I will discuss the above three unanswered questions, providing suggestions on 'how prioritisation will in fact work", or at any rate how it *might* work.

First, some relevant history.

The Minister's proposal to develop a national prioritisation capability signals the resumption of an undertaking first begun during the National Party Government-led health reforms in the early-1990s.[8,9] Included in these reforms was creation of drug

purchaser PHARMAC and the Core Services Committee (CSC), whose mission was to define 'core' health services, i.e. those services that should be publicly funded. But in 1996, after 3 years of work, CSC abandoned (or was asked to abandon) its quest to 'define the core', and was accordingly renamed the National Health Committee. NHC remained intermittently involved in prioritisation through 2004, mostly evaluating efforts conducted by other public health bodies (i.e. Health Funding Authority [HFA], Ministry of Health [MOH], DHBs), but after 2004 prioritisation no longer figured in NHC's (or any other national-level public health body's) work programme.

At the other extreme, PHARMAC, which like CSC began work in 1993, continues to set priorities amongst pharmaceutical products and is frequently pointed to (including by MRG and Mr Ryall) as a potential model for prioritisation more broadly.

Why did the original CSC stop trying to define the 'core' after only three years? No consensus exists on exactly 'what happened', but from my perspective (I worked for CSC from 1993–1997[10]), the task of setting priorities *explicitly enough to be used for funding decisions* came to appear to be too difficult. In addition, CSC was under constant pressure to distance itself from the US State of Oregon, which was also setting healthcare priorities during that same time, using a controversial approach that involved developing a long list of many different kinds of services, then 'drawing a line' to separate services to be covered under public insurance ('above the line') from those that would not covered ('below the line').[11]

Much of the criticism aimed at Oregon during that time was deflected on to CSC—a situation no doubt discussed by leaders of the National Party and New Zealand First, which formed New Zealand's first MMP coalition government in 1996. (Oregon's programme and list-based method continue to this day.)

It is not clear what lessons should be drawn from this original experience, except perhaps that explicit prioritisation is very difficult and almost inevitably controversial. Additional discussion on this point amongst people involved at the time would be useful.

How should NHC select and assess interventions?

As noted by Treasury, 'design details matter'. The social significance of NHC's prioritisation decisions, including potentially determining access to desired services, requires that the methods to be used by NHC be specified by the Minister, at least to a substantial extent. Amongst these methods should be consideration of prioritisation criteria specified by the Minister (e.g. effectiveness, value for money, reduced inequity), grounded in a view of what New Zealand society wishes such decisions to be based on.

Mr Ryall provisionally endorsed MRG's recommendation that services selected for assessment be 'at the margin' for both new investments and disinvestments.[12] This would require that services be assessed and compared in terms of benefits expected for patients with defined clinical indications. All services are of marginal (or indeed of no or negative) value except with respect to defined clinical indications.

An efficient method for gaining information concerning these indications for a wide range of services would be to 'piggy back' on the huge body of effectiveness research emanating from the UK's National Institute for Health and Clinical Excellence

(NICE),[13] the US Agency for Healthcare Research and Quality (AHRQ),[14] and similar bodies. By basing much of their work on such 'pre-digested' information, NHC would minimise the need for *de novo* primary data-level analyses—a considerable operational efficiency. NHC might also initiate discussions with appropriate people at NICE and AHRQ (etc.) to obtain information about which indications for which services have been identified as likely candidates for new investment or disinvestment.

After arriving at tentative conclusions based on these assessments, NHC would consult with relevant medical experts and patient groups within New Zealand to determine the perceived applicability and validity of these conclusions here. NHC might constitute 'professional advisory groups' for each clinical area to provide advice . Public consultation might best be coordinated through patient advocacy groups. Only after consultation would NHC make its final priority determinations.

Although the majority of NHC's work programme would likely be grounded in existing overseas analyses, as just described, the DHBs and Minister of Health, as NHC's principal clients, would be able to nominate additional services for priority assessment by NHC. These services would often be DHB-specific programmes designed to address regional and local needs (e.g., transportation to major treatment centres for patients in rural areas).

Role of clinicians

The Cabinet Paper observes that "clinician acceptance of the decision-making process is a key determinant of whether decisions are actually put into practice…Early and strong links with clinical leaders and DHB managers will therefore be important to NHC's success" (sec 28). Indeed, much will depend on the reaction of the medical profession to the prioritisation process.

How are doctors likely to respond to requests for assistance in identifying opportunities for new investment and disinvestment? The MRG report gently criticised doctors over their historical reluctance to participate in making difficult allocation decisions, quoting the New Zealand Medical Council's injunction that doctors "have a responsibility to the community at large to foster the proper use of resources and must balance their duty of care to each patient with their duty of care to the population."[15]

Doctors' ability and willingness to balance these competing duties will be tested during any prioritisation process that will inevitably result in some people missing out on potentially beneficial services. Similar considerations applied during the initial development of clinical priority access criteria (CPAC) for use in booking systems in the mid-1990s.[10] In that context, doctors recognised that the prevailing waiting lists were unfair and inefficient, and generally accepted the rationale for the CPAC approach, e.g. greater fairness and transparency. One hopes and indeed expects that members of the medical profession would take a similar view within the broader prioritisation context. Early involvement, perhaps through one or more professional advisory groups, would facilitate doctors' acceptance of (and contribution to) the prioritisation process.

Information requirements

Assessment and prioritisation of health services cannot be properly accomplished without adequate data on the benefits and harms (e.g. side effects) associated with those services. Unfortunately, such information is commonly lacking, especially for long-term outcomes in real-world settings. This is especially true for medical and surgical treatments, but information on the outcomes of pharmaceuticals is also largely unavailable outside the focused clinical parameters found in RCTs, which typically exclude whole categories of patients based on age, gender, comorbidity, and other factors).

Fortunately, New Zealand is in an excellent position to obtain large quantities of real-world outcome data by linking across multiple health databases (e.g. Cancer Registry, National Minimum Data Set for hospitalisations, pharmaceutical data, mortality). The now-widespread use of unique National Health Index (NHI) numbers permits individual patients to be identified across databases. Amongst other initiatives, the Ministry of Health is amalgamating NHI-linked data into a seamless researchable database called Health Tracker, which already contains more than 98% of the New Zealand population.

NHC should play a major role in helping to ensure that these databases fulfill their potential as an indispensable resource for gaining information on the outcomes associated with health services. NHC and MOH should coordinate closely over the use of this resource for prioritisation purposes.

How should NHC decisions influence DHBs?

The question of how NHC's determinations should constrain DHBs is perhaps the most important and difficult design feature of the envisioned prioritisation programme. As noted in the Cabinet Paper, positive coverage decisions made by NICE in the UK must, by law, be funded through the NHS, even if there is no money in the budget to pay for them. This tenet has at times put a substantial strain on the local funding authorities.

At the other extreme, New Zealand's (now-defunct) process for evaluating new medical technologies, Service Planning and New Health Innovation Assessment (SPNIA), had no authority to require DHBs to provide services deemed cost-effective (though there were very few of these), nor to forbid DHBs from purchasing services deemed non-cost-effective. For this reason (amongst others) SPNIA had relatively little impact on funding policies and indeed was not concerned with prioritisation per se.

The challenge, therefore, is to create a role for NHC that will, on the one hand, give their decisions real 'bite'—that is, decisions that cannot to be easily ignored as simply another piece of advice, nor readily circumvented by governments under political pressure. As noted in the Cabinet Paper, such an approach "risks being much like the current process and lacks a discrete budget constraint".[16]

On the other hand, NHC's decisions must not be divorced from DHB budgets, as noted above, nor should they pre-empt local decision autonomy, a meaningful measure of which is required under the DHB model (as opposed to the centralised Health Funding Authority model of 1997–2000).

Another major consideration in designing an implementation plan for NHC's decisions is that Ministers of Health typically wish to maintain a degree of separation from lower-level decision-making about service provision. As Mr Ryall noted in the Cabinet Paper, an incorrectly designed process would carry the "risk" of the Minister becoming "directly [involved] in detailed and potentially sensitive decisions…[including] establishing the work programme, which may also be contentious."[17]

Disinvestment decisions, i.e. to reduce or eliminate funding for currently provided interventions, including tests, treatments, and facilities, are particularly contentious and will almost always trigger negative reactions from affected constituents. An instructive example can be found in of the Ministry of Health's effort to stop routine paediatric screening for amblyopia (lazy eye) and for glue ear, based on overseas analyses and lack of evidence of effectiveness.[18]

The controversy engendered by this attempt made it impossible for MOH to defund these services without explicit approval from Cabinet, which was eventually obtained. Cabinet has thus in effect set a precedent as being the court of final appeal for controversial potential disinvestments, at least when made at a national level. As such, ministers' desire to maintain distance from the nitty-gritty of decision-making must be reconciled with the ultimate control they must maintain over such decisions as elected representatives.

How might the above considerations be translated into a way forward for NHC?

A proposed modus operandi

The following proposal is put forward as an example of an approach that takes the above considerations into account. Clearly, alternative models might also be developed. Specifically, I propose that the 'strengthened' NHC develop a portfolio of potential investments and disinvestments using what might be called a 'traffic light' approach.

A 'Green List' would contain new investments (new tests and treatments or expanded use of existing ones) deemed sufficiently cost-effective to merit high priority for funding if money is available.

An 'Amber List' would contain indications for services that, after assessment, NHC deemed to be of marginal value. DHBs could select amongst amber-list services for disinvestment, if needed to free up resources.

Finally, a 'Red List' would describe indications for services that NHC determined were likely to result in zero or negative net benefit (e.g. due to serious side effects or high false positive rates). Funding for these could be safely curtailed by all DHBs..

All three lists would mostly be denominated in terms of defined kinds of patients (indications for treatment or non-treatment), since most services provide benefit (or harm) to some but not all patients in whom they are currently used, or would be used. Importantly, the costs entailed by services on the Green List would roughly balance those on the Amber and Red Lists. Pharmaceutical products might be incorporated into the lists at some point, but PHARMAC would continue to operate independently for the foreseeable future.

The NHC's three lists would be presented to the Minister of Health for consideration and, on behalf of Cabinet, possible approval. At least three possible approaches could be taken at this point, varying in the degree to which Cabinet explicitly endorses the lists.

The first approach, entailing the highest level of affirmation, would be modelled after the recently passed US health reform bill, which created a new Independent Medicare Advisory Board (IMAB) "to reduce the per-capita rate of growth in Medicare spending".[19] If and when the Chief Actuary of the Centers for Medicare and Medicaid Services determines that the projected per capita growth rate for Medicare exceeds the target growth rate, IMAB must submit a proposal to cut costs sufficiently to bring the growth rate back in line. The Secretary of Health and Human Services must then implement that proposal *in its entirety unless Congress replaces those recommendations with its own legislation that would cut Medicare spending to the same level* (an unlikely proposition). But the Congress is forbidden from taking any action "that would repeal or otherwise change the recommendations of the Board". This provision is designed to guard against lobbying for piecemeal changes, as occurs when services are singly targeted for reduction. A similar provision was used successfully to close hundreds of unneeded military bases in the US after it proved impossible to close them one at a time due to political considerations (e.g. employment effects)[20]

If such an approach were to be used in the New Zealand health setting, Cabinet would either accept or reject NHC's proposed lists *in toto*. Rejection of the lists would result in maintenance of the status quo with respect to DHB decision-making, while endorsement would effectively pre-authorise the disinvestments contained on the Amber and Red Lists.

A second possible approach would permit Cabinet to make modifications to the list prior to endorsement. Cabinet might prefer to retain this ability, although doing so would potentially expose them to pressure to add services to the Green List or to remove services from the Amber or Red Lists. In this respect the NHC would be like PHARMAC – difficult but not impossible to overrule. Finally, Cabinet could take a hands-off approach, merely expecting that DHBs' investments and disinvestments decisions would be selected from the lists (as opposed to *requiring* that such selections be made from the lists, as on the first two approaches). On this third approach, DHBs would be able to go 'off-list' if they thought NHC had got something wrong or if they (the DHBs) had other priorities. In such cases, the Minister would likely request that DHBs explain their actions. Where disagreements persisted, the Minister might need to intervene.

Fixed budgets outside pharmaceuticals?

As noted above (first quotation in this paper), Mr Ryall accepts MRG's conclusion that PHARMAC's success in managing community pharmaceuticals might be relevant or applicable to a broader range of technologies and interventions.

MRG recommended that, in the first instance, PHARMAC be enlisted to assess and prioritise medical devices:

> Outside pharmaceuticals, however, the current mechanisms for assessing the effectiveness and relative priority of health interventions are not as well developed. Strengthening these mechanisms will help improve the value and control the costs of improvements in health technology. In particular, the MRG considers it both possible and desirable to develop a PHARMAC-like process for assessing the cost-effectiveness of medical devices and prioritising them for public funding. (p.27; sec 68).

But what does a "PHARMAC-like process" mean, exactly? No doubt analytic rigour, including careful consideration of costs and effectiveness, is part of what is intended, but these characteristics are not unique to PHARMAC. PHARMAC's success has largely been due to its contractual and operational tactics, including widespread use of generics and reference pricing, within the context of a fixed budget. Although similar contractual tactics might be difficult to apply more widely in extra-pharmaceutical domains, fixed budgets might have wider applicability.

The Minister cautiously raised this idea in the Cabinet Paper, for example suggesting that prioritisation of new technology might incorporate "methods and procedures for informing decisions and influencing behaviour including perhaps a budget constraint".[21] In addition, "One option is to establish a PHARMAC-style *notional* budget for new technology and interventions, with DHBs agreeing to the level of the budget" ("notional" emphasised in the original) and "The creation of PHARMAC-like budget arrangements can be done in a way which places the Minister at arms length from the decisions".

On the other hand, Mr Ryall notes that fixed budgets applied to all new medical technologies and interventions could pose "significant risks" because "the costs (and cost-effectiveness) of implementing new technology depend not only on the direct costs of the 'kit' itself, but also on complementary workforce and organisational costs".[22]

Perhaps the idea of trialling a fixed budget for medical devices would be a reasonable way to start, particularly if these were restricted to implanted devices (e.g., coronary stents, orthopaedic prostheses, certain cancer treatments). Ideally, a national device registry would be developed to obtain information on the benefits and harms caused by these devices in long-term, real-world settings. (A similar national registry is under consideration in the United States.[23] PHARMAC would be a logical candidate for assessing and prioritising devices within a fixed budget, and indeed they have already been asked to consider some devices, though not in the context of a fixed budget.

In any case, PHARMAC-style operational methods would presumably be implemented to the extent possible, including the institution of reference pricing, where appropriate. This might include a policy in which devices were paid at the same rate as medical therapy, unless sufficient evidence demonstrated that substantial additional benefit was expected from the device. These methods would be largely aimed at obtaining price reductions, as with pharmaceuticals.

If a fixed budget for devices should prove successful, the concept might be expanded to other areas, including certain diagnostics (e.g. genetic testing and some diagnostic imaging). Expansion of the policy to broader domains, such as cancer treatments or heart surgery, while seemingly far-fetched, might also be tried some day.

The above ideas are meant to suggest a possible way forward towards the next phase of healthcare prioritisation in New Zealand. I hope these suggestions will encourage renewed discussion on this vital topic.

Competing interests: None.

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