

PHO Alliance

He huinga ratonga hauora

Targeting Resources:
Strengthening
New Zealand's
primary care capitation
funding formula

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Preface

There is a long-standing debate as to the robustness of the methodology underpinning funding allocations to primary care, and specifically to general practice, in New Zealand.

Every locality, community and population group in New Zealand believes they have a set of distinct and special circumstances, be they related to rurality, urban, high-need, Maori or another distinct need which places them apart from elsewhere and result in variations in health outcomes for their population.

The perceived failings of the current capitation formula and additional allocations to primary care are well documented. These include the fundamental flaws of the Very Low Cost Access (VLCA) scheme as well as the lack of weighting for patient need within the basic first-contact capitation formula.

Over the following pages we propose a set of principles and factors for a new patient level, needs based formula which should drive future funding allocations to primary care providers.

Our motivation is simple; to appropriately target resources to where need is greatest and incentivise higher quality patient outcomes to improve the overall health of the New Zealand population and reduce the unacceptable inequalities which still exist in our society.

Some of our proposals will have a material impact upon certain providers and will therefore require bravery to implement. We offer some initial thinking to aid transition and ensure that our essential primary care network of providers and expertise is not destabilised. However, we believe that improved patient outcomes must stand above existing arrangements and organisational barriers.

We hope our proposals provide a valuable contribution to the funding and equity debate.

John Ayling

Chair, PHO Alliance

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Note

In this publication:

1. We discuss several current New Zealand primary care funding envelopes including capitation, CarePlus, VLCA and rurality premiums. For consistency, when we talk about our proposals for the future we just refer to the Primary Care Funding Formula (or 'the formula') and in doing so include reference to all of the current primary care funding envelopes.
2. We regularly refer to organisations based in the community providing primary care services to a registered patient list. Such organisations have traditionally been recognised and referred to as General Practices but we wish to acknowledge that the development of integrated care and multi-professional team approaches have clouded that traditional image and such future organisations may perhaps be private or public sector, GP or non-GP owned, healthcare homes or integrated family health centres as well as multiple other variations on the theme. For consistency, we simply refer to Primary Care Providers (or 'providers') and would make the single stipulation that they must all have General Practitioners as the ultimate clinical leads and guardians of the registered patient lists.
3. We propose an approach to inform an aggregate Primary Care Funding Formula which determines the relative shares of funding to be allocated to different providers across the country on behalf of their registered population. We do not comment here on the very different, and understandably political, debate regarding the appropriate level of overall funding or, the absolute levels of co-payments which patients should be expected to pay.

1. Background

We believe that the current primary care capitation formula and associated allocation methodologies for managing the health of the New Zealand population are fundamentally flawed.

Taxpayer funding capitation payment for primary care and general practice via PHOs and DHBs has been in place since the early 2000s.

Age and gender are the only drivers of differential rates of first contact capitation funding based on very limited and out-dated historic utilisation data from a subset of medical centres during the mid-1990s.

Over time, additional funding envelopes have been made available through DHBs and PHOs to recognise greater need in certain communities based on limited ethnicity, prevalence and socio-economic deprivation data. Such funding envelopes have included Services to Improve Access (SIA), CarePlus and VLCA. The latter of these came with an obligation that providers limit the level of co-payment charged to patients for consultations with their GP.

The fundamental failings of the VLCA scheme are well documented. The co-payments a patient pays to see a GP are unrelated to that patient's ability or inability to pay, but rather to the make-up of that practice's population as a whole and to the pricing policy of the individual medical centre. As a result there are approximately 590,000 non-high needs patients inappropriately receiving the benefit of VLCA funding whilst approximately 560,000 high needs patients are not able to access their intended benefit.

Similarly, the attempted targeting of wider primary care funding envelopes appears to be mostly failing. There remains a significant and unacceptable gap for both health outcomes and life expectancy between Maori and non-Maori and between higher and lower socio economic members of the population. The Ministry of Health's own report into health loss published in 2013¹ identifies that health loss in Maori is still almost 1.8 times higher than in non-Maori.

That we live with such inequality in the 21st Century in a developed society is unacceptable.

2. Fit for purpose principles

We believe a number of key principles should underpin the formula.

Principle 1: Needs based

We feel that the principle of allocating funding based on the need of individual patients is hard to argue with and we fully support it. Where things become trickier is determining how that need is defined.

Many capitation formulae incorporate a need component in theory, yet when it comes to calculating the formula in practice, they often use some form of historic cost measure as a proxy for that need, with perhaps, an additional factor to represent 'unmet need'. Indeed, DHBs own population based funding formula² currently does just that.

Not surprisingly, we feel such an approach is fundamentally flawed and assumes a whole series of perverse historical behaviour patterns are an accurate forecast for future need. They are not.

Similarly, many formulae use some sort of overarching geographical needs factor or indeed a 'provider organisation level' needs factor. Once again, we argue that such an approach is fundamentally flawed and doesn't accommodate the significant variations which exist with geographic localities or across an organisations registered patient list.

Additionally, factors which claim to adjust for unmet need often allocate resources regardless of whether such need is identified, targeted or addressed. We believe this significant perverse incentive can and must be rectified.

The development of technology and specifically electronic patient records in recent years has given us a great opportunity to incorporate a real patient level need component into the formula. We believe such a component is essential and should include multiple patient level 'need' factors which we set out further in the following chapters.

Principle 2: Low bureaucracy

The multiple current funding streams and silo approaches to funding primary and community health care is grossly inefficient and prevents health dollars getting to the front line. Millions of dollars are spent by

the Ministry of Health, DHBs, PHOs and provider organisations on planning processes, approval mechanisms, monitoring arrangements, tendering, contract exercises and payment processes for many individual and comparatively low value funding envelopes such as CarePlus, SIA, VLCA, IT and others.

We believe the future funding formula should be based on low bureaucracy principles and empowerment of PHOs and providers to deliver clear outcomes in the most appropriate ways according to local circumstances.

Principle 3: Patient List based

One of the widely recognised strengths of New Zealand primary care is the principle of patient enrolment and registration to underpin continuity of care and the country wide benefits that come from a population health approach (e.g. a national database underpinning important evidence based medicine).

The funding formula should fully support and align with the expectation of patient enrolment and registration. It should not perversely promote an ad-hoc approach to health care through over reliance on fee-for-service funding or the provision of 'casual' patient services.

As mentioned previously however, we do not believe patient registration should necessarily be with an individual GP but rather with a Primary Care Provider which in turn must have a named General Practitioner(s) as the ultimate clinical lead and guardians of their registered patient list.

Principle 4: Multi-professional team approach

We strongly advocate for list-based primary care which is clinically led by GPs. However, we also believe that, for many reasons, a GP may not always be the best health professional for patients to see when they turn to the health system for support or assistance.

As we move towards an integrated, multidisciplinary team approach in primary care we need a funding formula that supports such a wider patient centred team approach. In doing so, we should not, for instance, look to historic models of care or use meaningless ratios such as number of registered patients per GP to determine funding allocations.

When a long-serving General Practitioner retires from a multi-GP provider, the formula must support a broader local discussion about

whether it may be more appropriate for that GP to be replaced by nurses, allied health professionals or clinical pharmacists.

Principle 5: Incentivises outcomes

It sounds obvious, but we strongly believe that the formula must incentivise outcomes. It cannot be enough to simply have a patient registered on a provider's list without some level of proactive management of that patient's health status and their health needs.

To demonstrate this point further, we refer again to the concept of 'unmet need'.

- If a provider registers a member of the local community who was previously unregistered with any other provider, they should be funded for maintaining such a registration.
- If that provider then identifies that the patient has one or more previously undiagnosed long-term conditions, they should be funded further for doing so and maintaining them on their list.
- If the provider then puts in place and implements a proactive management plan for that long-term condition, a further tier of funding should be forthcoming.
- If, ultimately, the provider successfully manages that patient's long-term condition such that, for instance, a diabetic's HbA_{1c} level remains below 7% for each 12 month period and the patient requires no associated secondary care intervention, they should receive the highest potential funding.

We believe that provider organisations, at any point in the health system, should not receive those higher tiers of funding based just on the assumption that they *should* be identifying those patients and managing their health needs.

Principle 6: Availability of data

Our final key principle is that timely, accurate and auditable data must be available to underpin the various components of the formula.

In this regard we are extremely fortunate that recent technological advances have provided us with a country-wide primary care database which details individual demographic and health prevalence data for the entire enrolled population.

We no longer need to rely on historical activity data as a proxy for future demand. We no longer need to rely on generic locality-wide factors as a proxy for the need of every individual, yet unique, resident in that locality.

We have developed one of the richest population health databases in the world and we should now make greater use of it to target our resources at a patient level to maximum effect.

3. Proposed factors of the formula

We believe the primary care funding formula should be updated to incorporate specific new or updated factors.

We believe the formula should be updated to incorporate specific factors which primarily combine to determine the likely future need of individual members of the population. We also propose including factors which indicate how well a provider is addressing and managing the needs of those individual patients.

In making these proposals we have also drawn on the learnings from the review of the [UK] General Medical Services global sum formula³ which, in 2007, made strong comment regarding data availability to be able to make accurate, forward looking predictions of the likely health need of individual registered patients.

We propose an approach for funding primary care for registered patients only. We believe such an approach best incentivises registration as well as the proactive list-based management of a community's health needs. We also recognise that casual, fee-for-service health care will remain available to patients outside of capitated services. We do not comment on those casual services in this publication other than to note that the funding regime should always incentivise registration.

Age and sex

These are both clearly still significant factors affecting the health need of individual members of the population and should form a key component of the future formula. However, the current age and sex 'cost-curves' utilised in the first contact capitation formula should be updated and based on a full national dataset of current utilisation rates (rather than an out-of-date and non-representative sub-set).

Prevalence

The health status of individual registered patients has to be the most significant individual predictor of likely future health need. Unlike technicians working on the development of past allocation formulae, we

now have a comprehensive electronic database of disease prevalence to enable us to incorporate this into our funding formula. New Zealand's biggest killers and those conditions generating the biggest demand on primary care should feature here including Cancer, Diabetes, CVD, COPD and Mental Health.

Prevalence Management

As stated previously, we believe the formula should incentivise outcomes. It is not enough to simply fund the recording of a patient's disease prevalence. We propose that the formula includes an additional factor to recognise the extent to which a patient's recorded disease prevalence is being appropriately, and proactively, managed by the provider.

Ethnicity

We know that health outcomes for Maori and Pacific peoples are unacceptably worse than for the white European population of New Zealand. The same is also true, to varying levels, for several other ethnicities which now form a growing percentage of the New Zealand population. We propose that such key ethnic variations in health status should be recognised within the formula.

Deprivation

There is a well evidenced correlation between deprivation and poor health and therefore deprivation data should rightly be included within the formula. Our caveat here is to what extent incorporating deprivation as a factor would duplicate the effect of including prevalence data. We say more about this potential duplication later.

Refugees

We know that refugees place significant pressures upon the health system for a range of reasons. We believe this additional pressure should be recognised within the formula for 1 year only. Following this period we do not believe that having refugee status on its own is any indicator of need that wouldn't otherwise be recognised through that patient's ethnicity and prevalence status for example.

Newly registered patients

We believe newly registered patients are likely to place a greater pressure upon their registered provider for the period immediately following their registration. As with refugees, we believe this effect should be recognised within the formula for a maximum period of 1 year and only to a level which does not encourage or incentivise 'practice/provider hopping'.

Rurality

There is considerable literature regarding the additional pressure and cost of providing primary care to registered patients in rural and remote communities. We believe this is for many reasons and includes the cost barriers to travel longer distances to access services, lack of local access to secondary/specialist care, wider determinants of health such as social and economic isolation, and, the greater cost of recruiting and retaining health professionals in such isolated communities.

We disagree that the impact of rurality upon primary care providers is best left to the vagaries of a case-by-case process through non-statutory local Alliances and therefore, we propose there should be a rurality factor within the formula ensuring the consistent recognition of rurality regardless of which DHB or PHO's locality the provider is based within.

As mentioned previously, we acknowledge the existence of potential double counting between the factors listed above. For example, to what extent are the health need implications of deprivation accounted for in the recording of prevalence? There will of course be other health implications of deprivation, but once you have taken out the effect of prevalence, are the remaining deprivation implications material enough to warrant inclusion within the formula?

We do not seek to resolve such potential double counting here other than to say that the commissioning of standard regression analysis by statistical experts should provide appropriate recommendations for the extent to which such factors should be included. Similarly, such processes would also assist with modelling the appropriate

compounding effect of utilising all of the above factors within a single formulaic approach.

We acknowledge that construction of such a formula is not an absolute science, we are seeking to predict likely future need based on a manageable process which balances simplicity, timeliness and accuracy. In doing so, we believe the factors listed above are those which would have most consistent and material impact to warrant inclusion.

We acknowledge however that there are many other factors in addition to those we propose above, which will determine health need at an individual patient level and there will always be exceptions to the rules. In this regard, we support the inclusion of a provider level discretionary budget such as the ARI (At Risk Individuals) scheme implemented by Counties Manukau DHB which allows providers flexibility to fund additional consultations or referrals for services such as psychology or dietetics where the funding and services framework does not cover their exceptional need. We note that the scheme is well received by patients and practitioners alike.

4. Data sources

We believe we have one of the richest population health databases in the world and we should now make greater use of it to target our resources to maximum effect.

We have stated that timely, accurate and auditable data must be available to underpin the various recommended factors within the formula.

Over recent years, the New Zealand health sector has invested strongly in IT and standardised data infrastructure which is now delivering a comprehensive database of patient level intelligence. Rather than looking predominantly to the past to estimate future patterns of need and exacerbating historic perverse incentives and inequalities, we have an incredible opportunity to use real-time data at patient level to target our scarce health dollar to maximum effect.

In the following table we point to currently available data sources to underpin our proposed factors for inclusion within the formula.

Age and sex As currently, a provider's patient list taken from their PMS database will provide up-to-date, and with electronic enrolment, real-time age & sex data.

Prevalence A provider's PMS database will record patient level prevalence data. Quite simply, if a provider or PHO does not have processes in place to appropriately diagnose and record prevalence, they would not be funded for it.

Of significant importance here is the development and implementation of patient portals which provide an extremely valuable audit and compliance tool such that patients will have sight of their own prevalence status and be able to challenge any inappropriate 'up-coding' or recording by their provider.

Prevalence Management	As with prevalence, the provider's PMS database will offer the required data for inclusion within the formula and be auditable by individual patients from their own patient portal access.
Ethnicity	Recorded on a patient by patient basis within each providers PMS database.
Deprivation	Through the patient's recorded home address on the provider's PMS database, a generic geo-coded deprivation factor can be included for the formula.
Refugees	Immigration NZ maintains a database of refugees and a data-matching exercise can cross-reference such patients within each provider's PMS database. Each provider's PMS database will record the date of first registration and thus the formula can include a factor for refugees who are within 12 months of that recorded date.
Newly registered patients	Each provider's PMS database will record the date of first registration and thus the formula can include a factor for patients who are within 12 months of that recorded date.
Rurality	Through the patient's recorded home address on the provider's PMS database, a generic geo-coded rurality factor can be included for the formula.

5. Implementation and transition

We acknowledge that implementing a revised formula approach to funding primary care will require careful implementation and a proactively managed transition.

There would be much work to complete in order to introduce a wider formula approach to funding primary care providers in the way we propose in this publication. We note for instance the need for technical development of the factor weightings, statistical modelling, sector-wide consultation and potential legislative considerations.

We set out below some of the immediate practical implications of such an approach and do so in the spirit of offering potential and practical solutions to support the managed implementation of our proposals.

Overall funding envelope

In support of our proposed principle of simplicity and low bureaucracy for any new formula, we propose that the aggregated funding formula be applied to the collective value of the following current funding streams:

	2013/14 est actuals \$ million
First contact funding	596.2
Free under 13's	15.2
After hours under 6's	7.0
VLCA	44.9
Care Plus	55.0
Rurality	13.6
Total	731.9

▪ Source: MoH

Patient co-payments

In changing the VLCA scheme from a provider level payment to be included within a wider patient-based formula, the associated patient co-payment arrangements would need revising. We propose that to

align with the patient level allocation of the above funding streams, a simple three-tier patient level co-payment framework be developed which uses provider PMS data to determine which of three tiers each individual patient qualifies for using real-time PMS data at the time of consultation. This would replace the iniquitous provider level framework which currently undermines the VLCA scheme. We propose the following standard 3 tiers for all providers:

Tier 1. Lowest tier of co-payment based on those highest need patients for whom cost barriers to primary care are likely to lead to disproportionately higher costs elsewhere in the health system, such as ED and hospital admissions.

- We propose that this include the top, say 10%, of high-need Maori and Pacific patients with multiple co-morbidities.
- We note (but make no opinion) that this tier would likely include those population groups for which, through political processes, a zero charge has been introduced (e.g. Free under 13 year olds).

Tier 2. A mid-level of co-payment for those patients with a higher than average level of need or limited ability to pay. This would likely include for example:

- Maori and Pacific patients with poorer outcomes but from higher socio-economic groups with the ability to pay more
- Patients with multiple co-morbidities from higher socio-economic groups with the ability to pay more (e.g. those that may currently qualify for the CarePlus scheme)

Tier 3. Highest tier of co-payment for those with the lowest need and the greatest ability to pay.

Additionally, as referred to in Section 3, we would support a provider level discretionary budget for exceptional cases similar to the existing Counties Manukau DHB 'At Risk Individual' scheme.

Transitional support

We note that to move existing funding envelopes, as set out above, to an aggregated funding formula applied consistently across all providers, will likely result in a material re-distribution of funding.

The sector must acknowledge that to move to a more equitable distribution of funding for patient care there will inevitably be financial winners and losers. We propose a development phase to include provider level modelling to help inform the magnitude of change and the extent of transitional support required.

We emphasise the need to maintain the long term stability of providers and also note the need for providers themselves to ensure they operate on a cost effective basis and align their services according to the population group they serve.

Nonetheless, a transition period will be required to avoid destabilisation and, subject to the results of the modelling analysis, we would propose that a target of 95% of providers be moved to their new proposed formula-driven funding levels within 3 years.

Transitional support

As with current arrangements and local flexibility, we would point to the role of individual DHBs and PHOs to support local arrangements where a longer period of transitional support may be required or where exceptional local circumstances render essential providers unsustainable under any new formula driven funding framework.

We anticipate the responsibility of DHBs and PHOs under such circumstances would be to ensure communities continue to receive access to appropriate and high quality primary care in a timely and responsive manner.

Appendix A

References

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About the PHO Alliance

The PHO Alliance is a consortia of member primary care organisations working together to share learning, share best practice and support better outcomes for patients.

Our member PHOs encompass over 1 million New Zealanders living in some of the most deprived communities from Cape Reinga to Bluff. Our reason for being is to improve community health and the enrolled population of New Zealand.

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