Dear Andrew,

NHS RESOURCE ALLOCATION FORMULA

I am writing to you in my role as the chair of the Advisory Committee on Resource Allocation (ACRA) to advise you of our recommendations for changes to the Primary Care Trust (PCT) resource allocation formula post 2010-11. Application of the formula has been driven by an independent advisory group since 1975, a role currently fulfilled by ACRA.

The recent White Paper made clear that the Coalition government will take a different approach to the development of the funding formula, following the establishment of the NHS Commissioning Board. I was pleased to see your comments to the Health Select Committee indicating that, in the interim, you will continue to look to ACRA to provide independent, robust advice on the allocation of NHS resources, including during the transitional period. In describing ACRA’s recommendations I have noted how these may fit with your vision for the future of the NHS.

We were tasked with developing a formula that:

- ensures equal opportunity of access to health care for people at equal risk; and
- contributes to the avoidable reduction in health inequalities.

The detail of ACRA’s recent work programme and a description of our recommendations are set out at the Annex. Most of the recommended changes are technical improvements which are the result of better and
more up-to-date data. The changes that have the greatest impact on target allocations are updates to the Office for National Statistics (ONS) population projections and changes to the mental health formula. Your officials will provide further advice on the detailed impact of the changes. We are also recommending a significant future change with a work programme on GP registrations as the future population base.

**Mental Health**

Our recommended approach to mental health is a major step forward. The Mental Health Minimum Dataset has allowed a formula to be developed that for the first time covers inpatient, outpatient and community activity, reflecting the increasing provision of mental health services in the community. This is in contrast to the previous formula, which dates back to 2003 (using even older data) and was based on the pattern of inpatient care only.

We are also recommending separate models for older and younger adults to ensure their different mental health needs are captured.

**Populations**

In the past ACRA has expressed a wish to move to GP registrations as the population base as these better reflect local need and support practice based commissioning. Previously we have been unable to firmly recommend such a move due to significant differences between registrations and ONS population estimates. Large differences continue to exist for some PCTs, however, a move to GP registrations would be critical in supporting the policy of making allocations to GP Commissioning Consortia.

I am pleased to report that substantial progress has been made in understanding these differences. We can now make clear recommendations as to how these can be addressed and perverse incentives mitigated. Our future focus will need to be on the handful of PCTs where this variation is at 15–20 per cent. The detail is set out in Annex A. The move to these populations should be made within two years, which would match the timescales in the White Paper by which allocations are to be made to GP consortia. ONS population projections will still be used to provide an estimate of population changes over time.

For the 2011–12 PCT allocations, ACRA continues to recommend that the population base is the latest ONS sub-national population projections.
These exploit improved methods used for calculating national and local authority mid-year population estimates, and specifically the methods used for the migration component. However, we see this as a short term expedient. Immediate focus is required to ensure allocations can be based on GP registered populations in the near future.

Given the future direction of allocation policy, I am sure you will also be interested to know that ACRA has progressed its longer-term work to produce a person-based formula. This may be particularly relevant to allocations to GP consortia and we would like to continue to progress this work as an alternative to the current approaches. However, the issue of funding provision for non GP registered populations will require further attention.

Health Inequalities

I would also like to draw your attention to ACRA’s position in relation to the health inequalities adjustment. Despite extensive investigation, and because of the lack of previous NHS research on the issue, ACRA has been unable to find sufficient evidence to use to determine the size of the adjustment. We recommend that the current form of the adjustment is retained, however, the scale of adjustment is a matter for your judgement in the context of the persistent gap in health inequalities.

The White Paper sets out that your future approach to health inequalities will be based more clearly on public health interventions; funded through a separate allocation. It is worth considering that the current adjustment is intended to allow for unmet health care need as well as health improvement activities. We would be happy to explore estimating the size of any unmet health care need alongside any advice you may seek from us on developing a public health allocation.

Reporting

Previously, ACRA’s recommendations have been published alongside the allocations. We feel that it would be helpful if we could do the same again to improve the understanding of the proposed changes and to aid transparency of our decision making process. If you are happy with this, we can work with your officials to produce a document that is available to publish when you announce the approach to allocations.

I would be happy to explain further ACRA’s recommendations if needed.
I look forward to hearing from you, in particular in relation to how the role of ACRA may change in the coming years.

Yours sincerely

David Fillingham
Chief Executive Advancing Quality Alliance (AQuA) North West & Chair of ACRA
ACRA’S RECOMMENDATIONS

This annex provides further detail and rationale for ACRA’s recommended changes to the weighted capitation formula to inform revenue allocations to primary care trusts (PCTs) for 2011-12.

Mental Health

One of two recommendations to have a significant impact on PCT target allocations is that for mental health. ACRA recommends a new approach to the mental health component of the weighted capitation formula. The approach is a major step forward in how funding is allocated for mental health services. It proposes:

- the use of recently available Mental Health Minimum Dataset (MHMDS), which covers inpatient, outpatient and importantly, community activity;
- separate models for under and over 65s to reflect the different mental health needs and care requirements of working age and older adults, for example the prevalence of dementia; and
- the over 65s model includes data on single person pension credit claimants, to reflect the higher mental health needs of those living alone.

The proposed formula better reflects current service provision due to its coverage beyond inpatient care and is thus a substantial improvement on the current dated mental health formula, introduced in 2003 from the Allocation of Resources to English Areas (AREA) research. Previous efforts to update the mental health formula in 2007 were unsuccessful as the data then available did not capture the shift in the pattern of care towards community provision of mental health services since 2003.

The formula is based on activity from the MHMDS covering inpatient bed days, consultant activity in outpatient and community settings, the activities of mental health community teams and mental health specialist
teams, and low and medium secure mental health secure units. This represents just over half the spend on secondary care mental illness services commissioned by PCTs (as reported in the NHS accounts). The formula is applied on a pro-rata basis to child and adolescent mental health services, high secure care, drug and alcohol services, autistic spectrum disorder services, day care facilities to older adults and non-NHS provider services, which are not consistently collected in the MHMDS.

The proposed model for older adults is not as statistically robust as that for younger people, but ACRA believes that a separate model is important as it reflects different service needs and can support further development, particularly as dementia services move in to mainstream older people’s services.

The current approach to mental health captures an element of unmet need, which is not captured in the new formula. ACRA therefore recommends that the health inequalities adjustment is applied to the proposed approach.

**Population Base**

ACRA has again recommended that the most up-to-date Office for National Statistics (ONS) sub-national population projections are used as the basis for resource allocation in the short term. For 2011-12 this means GP registrations are constrained to match 2008-based ONS projections for 2011.

However, more importantly, following a report from its Population Steering Group (PSG) on whether GP list data are robust enough to be used for future allocation rounds, ACRA continues to support its previous recommendation for a medium-term move to an unconstrained count of GP registrations.

ACRA cannot recommend an immediate move because of the differences between registered lists and population estimates which, crucially, vary significantly across the country. However, improved IT systems have reduced the risk of duplicate registration and substantial progress has been made. List variation between ONS populations and GP registered lists is now less than 5 per cent for the large majority of PCTs, but there are still PCTs whose lists are considerably larger than the ONS population estimates. The largest increases are in London, although not for all London PCTs. These variations could be linked to a number of
contributory factors including; poor list management, high list turnover and a large number of short-term migrants. A move should not be made to GP registrations whilst there are still significant unexplained variations between the two data sources.

It is recommended that further work be carried out once the Audit Commission’s recent National Duplicate Records Initiative (NDRI) reports, providing valuable information on the quality of registered lists and a better understanding of short-term migrants. The 2011 census, and ONS work on improving population statistics and sustainable population systems beyond the 2011 Census, is also likely to shed light on the differences between the two population bases for consideration.

ACRA is also concerned that a move to GP registrations under current circumstances may create a perverse incentive for GPs or PCTs to over-count their populations. Strong incentives and robust audit mechanisms need to be in place for PCTs and GPs to maintain clean lists.

ACRA recommends that indicative figures and notional allocations are published based on GP registered populations alongside the current ONS approach to allow organisations to prepare for the impact of a move.

Specifically we recommend:

- GP registrations are used as the population base for allocations.
- To allow this the Department of Health must:
  o ensure NDRI recommendations are implemented;
  o examine the outliers in more detail;
  o establish clear accountability arrangements with respect to GP list management;
  o develop tools to assist back office functions in maintaining list quality;
  o develop indicators (if possible) to monitor list quality.
- That PCTs are informed of the timetable for the transition to GP registrations as the population base for PCT revenue allocations, which should be within two years, and given early indication of potential impacts upon target allocations.
- That the National Health Applications and Infrastructure Services (NHAIS) is used as a source of GP list information until Personal Demographics Service (PDS) data are available and reliable.
The move to GP registrations becomes increasingly important if allocations are to be made to GP consortia and inescapable for allocations to GP practices.

**Health inequalities**

The health inequalities component of the formula was introduced for the 2009-10 and 2010-11 allocations to meet the second of the current objectives for the resource allocation formula, to contribute to the “reduction in avoidable health inequalities.”

The current approach uses disability free life expectancy (DFLE) as the measure of health inequalities as it combines a measure of morbidity with mortality. The measure is applied by comparing every PCT to a benchmark figure - the PCT with the highest DFLE in England. The current health inequalities formula subtracts each PCT’s DFLE from a benchmark of 70 years.

During the last allocations round ACRA was unable to find robust evidence of the cost of reducing health inequalities between PCTs to inform the weight applied to the health inequalities formula compared to the equal access formula.

ACRA saw this approach as an interim measure and continued to consider this issue as part of its work programme for revenue allocations post 2011-12.

The work commissioned by ACRA from a team led from University College London aimed to build on the work previously undertaken by ACRA by:

a) appraising the different approaches to a health inequalities element of the weighted capitation formula;

b) suggesting potential improvements and, as appropriate, new approaches to the health inequalities element of the weighted capitation formula that:
   i) could be implemented in the formula for 2011-12 allocations;
   ii) would require longer to be implemented, and may require data improvements.
Although the work increased conceptual understanding of addressing health inequalities through a funding formula, and offered much for future consideration, it has offered no robust evidence to inform the weight to be given to the weighted capitation formula (previously left to ministerial judgement and set at 15 per cent) and no other new evidence has become available to inform this. ACRA propose the weight should again be determined by ministerial judgement.

The research also set out alternatives to the current (DFLE) measure of health inequality. The use of Quality Adjusted Life Expectancy (QALE) was explored. However, ACRA’s concerns over the technical robustness of QALE as an alternative health inequalities measure has meant that it is advised that the current approach using DFLE remains in place.

In summary ACRA recommends that:
- the health inequalities formula continues to be based upon DFLE;
- and
- the weight to be applied to the health inequalities formula should be again left to ministerial judgement.

**Prescribing formula**

ACRA recommends an update to the prescribing formula to take into account more up-to-date prescribing data.

Work was commissioned to:
- derive an improved prescribing formula that can be used for PCT allocations and for GP practice indicative budgets;
- develop formulae that are appropriate to different population bases.

ACRA believes the analysis has produced well-specified models for prescribing activity, with plausible needs indicators that appear to be stable in the light of changes to the population base and sensitivity analyses. Therefore, ACRA recommends that the prescribing formula should be updated to take account of this more recent data.

**Market Forces Factor**

ACRA has recommended that the staff market forces factor (MFF) is updated to take account of more recent earnings data from 2007-09 and this results in only modest changes to target allocations.
As the staff MFF was the focus of an extensive review prior to the 2009-10 and 2010-11 PCT allocations, ACRA only commissioned the Health Economics Research Unit at Aberdeen University to update the MFF for PCTs and hospital trusts using the current General Labour Market (GLM) approach. The new set of MFF values incorporate the latest and most robust earnings data available for England (2007-09 compared to 2004-06 previously).

**Devolved Central Budgets**

ACRA was asked to advise as to how to incorporate funding for pharmacy fees and allowances and general ophthalmic services (devolved to PCTs from 2010-11), and the primary dental service budget into the weighted capitation formula from 2011-12.

There was little time for ACRA to develop these formula, and data are limited, but ACRA’s view as to how these budgets could be incorporated is set out under separate budget headings below.

**Dentistry**

ACRA agreed the overall weighted capitation formula should be used to determine PCT target shares of the dentistry budget, and that this should be adapted for cross-border flows and the age profile removed. Inadequate data were available to develop a bottom up formula.

In considering how primary dental services may be incorporated into the formula key issues were:

- historic spend data are not a good indicator of either need or demand, and do not look fair when considered against a basic variable such as funding per capita;
- the current distribution of dental practices is uneven and skewed towards more affluent and metropolitan areas;
- variances in the proportions of NHS and private practices provides a further overlay

This should be an interim approach and dentistry considered as part of ACRA’s future work programme in light of the Steele review recommendations.¹

¹ *NHS dental services in England*. An independent review led by Professor Jimmy Steele (June 2009)
General Ophthalmic Services
ACRA recommends that the overall weighted capitation formula is to applied to General Ophthalmic Services due to low materiality of a more specific formula.

Pharmacy Fees and Allowances.
That the prescribing formula should be applied to pharmacy fees and allowances from 2011-12.

Person Based Resource Allocation

ACRA has continued its longer-term work programme to produce a person-based formula that can be used to support practice based commissioning and could be used for PCTs in the future. While this approach is not ready for use in centrally driven, multi-year resource allocation, it does have advantages in allocating resources to individual GP practices.

Acute care
Research, led by the Nuffield Trust, was initially commissioned by DH to provide a needs based formula for indicative budgets (general and acute hospital services) for GP practices under practice based commissioning, and was used in the toolkit for 2010-11 practice allocations.

The Nuffield approach provides an alternative to the current small-area based approach. The method constructs individual rather than area level models of cost-weighted utilisation. The availability of more data at individual level has the potential to improve the accuracy of allocations at practice-level for commissioning inpatient and outpatient care.

However, there are some issues that ACRA believes would need to be resolved before the approach could be considered for revenue allocations:

- The model is based on GP registrations rather than the current population base of GP registrations constrained to ONS populations. As discussed above ACRA feels a number of steps need to be taken before this can be achieved.
- The approach currently only uses populations registered with a GP practice and needs augmenting for unregistered populations.
- It does not currently include a maternity model.

In addition, the main benefits of the person-based approach are when estimating need for small and/or non-geographically defined populations
such as practices – using the PBRA approach would have significantly fewer benefits at the PCT level. Therefore, ACRA advises the Combining Age Related and Additional Need (CARAN) formula should continue to be used for general and acute and for maternity in 2011-12 as it is a well established model and, as it is less data intensive, it can be updated more quickly.

**Mental health**
Research commissioned by the DH from the University of Plymouth for GP indicative budgets has taken an epidemiological and person based approach. In summary, this uses individuals’ self-reported health status in the Health Survey for England (HSE) to model, by socio-economic and demographic characteristics, the prevalence of different types of mental health illness (grouped according to case-mix type) at the individual level. Relative cost weighted need is then attributed to GP practice populations based on the demographic and socio-economic characteristics of GP practice registrations.

ACRA believes the Plymouth approach has produced some good, informative material and its methodology has been critically appraised to a high standard. It was used, as initially intended, to inform indicative allocations to GP practices in the toolkit for 2010-11. However, ACRA expressed concerns over the practical application of the epidemiological approach, including the quality and coverage of the HSE data. In particular high-cost patients may not be picked-up, low level need may be over-represented, and non-household populations are not specifically covered. ACRA’s view is that further work is required if this approach were to be considered for future revenue allocations.

**Primary Medical Services**

ACRA has not updated the Primary Medical Services formula for 2011-12 as it believes it should be considered as part of the longer-term work programme in light of future developments in relation to GP commissioning.