Dear Simon,

Advisory Committee on Resource Allocation

The Advisory Committee on Resource Allocation (ACRA) is an independent expert, technical committee with a remit to provide recommendations and advice on the formulae which inform target allocations. Our remit covers providing recommendations to NHS England on NHS allocations and to the Secretary of State for Health on public health allocations.

In this letter, I set out ACRA’s recommendations on NHS allocations. I will be writing separately to the Secretary of State with our recommendations on public health allocations.

ACRA has delivered a major programme of work this year. We have refreshed and updated the current formulae, and have also made significant steps forward in developing a new primary medical care workload formula and an adjustment for the higher costs faced by small remote hospitals. We have for the first time developed an initial formula for specialised services.

Our recommendations continue to be based on the principles that the formulae support equal opportunity of access for equal need and contribute to the reduction in avoidable health inequalities. ACRA recognises also that NHS England has a duty to have regard to reducing inequalities in access and outcomes.

ACRA continues to assess and test the evidence base for the formulae, making our recommendations on the best evidence available, and also noting when judgements have necessarily been made where the available data are limited.

I set out our recommendations below. I would like to thank members of ACRA and members of ACRA’s Technical Advisory Group (TAG) for all their contributions to delivering the work programme.
Clinical Commissioning Group core allocations
Our work on the formula for core CCG allocations covered refreshing and updating the following components: general and acute; maternity; prescribing; and the emergency ambulance cost adjustment. The refresh ensures the formula uses the most recent data available and re-estimated weights for age and other drivers of need.

The current formula for general and acute services was developed by the Nuffield Trust in 2010-11. It is built up from anonymised, individual patient data, covering inpatient, outpatient and accident and emergency activity, which are also linked to demographic information for all patients registered with GP practices. Previous diagnoses for patients admitted to hospital is a major factor in the estimate of the need for health care services.

The general and acute formula is the largest component of the CCG formula. In refreshing the formula we adopted the same methodology as the Nuffield Trust and re-estimated the models using the latest data available, which are for four years more recent than those used by the Nuffield Trust.

The current formula for maternity was developed by the CARAN project in 2006-07. We have refreshed this formula and have also been able to use anonymised, person-level data on previous diagnoses which were not available to CARAN. We believe the refreshed formula is a significant improvement over the CARAN formula as it better takes account of the mother’s non-pregnancy related health that affects the level of need for maternity services.

The prescribing formula covers the costs of drugs prescribed by GP practices. We have refreshed the current formula, which was developed in 2010. We have followed the same methodology and used data that are five years more recent than used for the current formula.

The emergency ambulance cost adjustment adjusts for the higher costs of providing ambulance services in sparsely populated areas. The current formula is outdated and we have refreshed it by modelling data on the time it takes for ambulances to reach incidents and convey patients to hospital.

**Recommendation 1 : The refreshed formulae for general and acute, maternity, prescribing and the emergency ambulance cost adjustment are adopted.**

**Remoteness**
It is likely that the costs of providing some services in sparsely populated, remote areas are higher than in other areas due to the absence of economies of scale in service delivery and longer travel times for community services staff making home visits.

ACRA has reviewed the evidence and data sources several times in the past and found no strong quantitative evidence that sparsely populated areas have unavoidably higher costs.
other than for emergency ambulance services. This is in part because the cost data available were mainly at trust level and trusts often cover a mixture of urban and sparsely populated areas.

We believe this year we have made a significant step forward in being able to undertake our analysis at the level of individual hospital sites.

We propose there is an adjustment for hospitals that are unavoidably small due to remoteness. This is where the next nearest hospital is too far away for clinical reasons to serve the local population, and the size of the local population is too small for the hospital to operate at the national average scale.

The criteria we have used to identify small, remote hospitals are that they provide 24 hours A&E services, the population of their catchment area is under a threshold (we considered options of between 200,000 and 300,000 people) and at least 10% of the population live more than 60 minutes away from the next nearest hospital with 24 hour A&E services. These criteria identified eight or nine hospitals. It would be reasonable to set the threshold in a way that ensures the adjustment is applied only to those areas facing the most significant challenge.

The next step was to estimate how much higher are the costs faced by small providers. Modelling was undertaken to estimate the relative costs of all hospitals by size (measured by their activity). Relative costs were adjusted to remove the impact of differences in case mix and unavoidable differences in costs that are already compensated though the market forces factor (such as higher staff and premises costs in London).

**Recommendation 2: There is an adjustment as described above for the higher costs of unavoidably small hospitals in remote areas.**

Further work is needed on the potentially higher costs of community and other services in remote areas, and we will put this on our future work programme. The lack of good data on the costs of community and other services will present a challenge for this work.

**Primary medical care formula**

The primary medical care formula used for 2014-15 and 2015-16 allocations to Area Teams is based on the Carr-Hill formula, which was developed for the new GMS contract introduced in 2004-05. ACRA recommended previously that the use of the Carr-Hill formula for the primary medical care formula should be seen as an interim approach and further work should be undertaken.

We have made a significant step forward in developing a new formula this year.

The Carr-Hill formula adjusts for GP practice workload and cost variations. Our modelling has provided new workload estimates using especially commissioned, anonymised data on
around 2 million patients from the Clinical Practice Research Datalink (CPRD). It has not been possible to update the cost estimates due to the very long lead times for HMRC to assess the application and grant approval for access to data on GP practice expenses on a confidential basis.

The new workload modelling is a good step forward. While we believe the formula could be improved further by securing more comprehensive data, we recommend the workload estimates are used for next year’s allocations given that the Carr-Hill workload formula is very dated - it is based on data for 1999-2002. We nevertheless view the workload formula as an interim formula subject to further work being undertaken next year.

Our recommendations on the workload formula are for allocations purposes only. ACRA’s remit does not extend to recommendations on how GP practices are remunerated through the GMS contract.

**Recommendation 3:** The new workload estimates should be used in the primary medical care formula, and work continues on developing both the workload formula and cost adjustments.

**Specialised services**
We have developed for the first time a formula for specialised services using the same anonymised, person-level data and methodology as for the refresh of the Nuffield formula.

We believe the formula shows promise but we have so far only been able to review preliminary findings and further work is required. There are particular concerns about the limited coverage of some specialised services within the Secondary Users Services (SUS) data used for the modelling, and about the robustness of the models at CCG level for very specialised services. The need for these services is difficult to predict at CCG level due to the underlying natural variability in the incidence of rare and costly illness.

**Recommendation 4:** The initial formula for specialised services will have to be used cautiously: it should be restricted to those services for which the model has significant coverage, and it should not be a major driver of pace of change at CCG level. We recommend that NHS England gives careful consideration to appropriate risk sharing arrangements for specialised services and that further work is undertaken to develop further the specialised services formula.

**Unmet need and health inequalities adjustment**
The current adjustment for unmet need and health inequalities used in the CCG and primary care formulae is based on the standardised mortality ratio for those aged under 75 years (SMR<75) for small areas - the Office for National Statistics defined Middle Layer Super Output Areas (MSOAs).
The choice of the measure and how it is scaled is a matter of judgement. There is currently no quantified evidence on unmet need that could be employed in a formula – the available evidence tends to be for individual areas and specific conditions and therefore cannot be generalised across the country. The absence of current evidence on unmet need suitable for use in a formula was confirmed by a literature survey we commissioned from the Centre for Health Economics at the University of York.

ACRA previously recommended the measure is the SMR<75 to provide a level of consistency with the formula for public health grants to local authorities. The SMR<75 was recommended as an indicator of each CCG’s whole population’s health status, and it should not be interpreted as suggesting that the adjustment should not reflect the needs of those aged over 75 or that morbidity is unimportant.

We recommend that the SMR<75 continues to be the measure used for the unmet need and health inequalities adjustment. We are recommending some changes to how the SMR<75 is scaled in the public health formula and we recommend these are adopted also for the unmet need and health inequalities adjustment.

The current adjustment groups the small areas into ten groups based on their SMR<75 value, and gives a weight per head five times higher for the small areas in the group with the highest SMR<75s than for the small areas in the group with the lowest SMR<75s. For the public health formula, we are recommending there are instead 16 groups, and a weight per head 10 times higher for the new group with the worst SMR<75s compared with the new group with the lowest SMR<75s. This change focuses more resources on the small areas with very high SMR<75s.

**Recommendation 5: The SMR<75 continues to be used as the measure in the unmet need and health inequalities adjustment, and is scaled according to 16 groups, with a weight per head 10 times higher for the group with the highest SMR<75s compared with the group with the lowest SMR<75s.**

We reviewed a recent paper by Ben Barr of the University of Liverpool and colleagues that modelled the impact of differential growth in allocations per head in the decade to 2011 and found that increasing the proportion of resources allocated to deprived areas compared with more affluent areas was associated with a reduction in absolute health inequalities in mortality from causes amenable to healthcare.

The paper is the best evidence that ACRA has seen to date that quantifies the potential impact of the adjustment in the allocations formula for unmet need and health inequalities. However, we found there were too many uncertainties concerning the size of the impact, and whether the results are too specific to a particular period, for the paper to be able to inform size of the share of the unmet need and health inequalities adjustment in the overall CCG formula.
As in previous years, due to the lack of evidence, ACRA is not in a position to make a recommendation on what share the unmet need and health inequalities adjustment should have in the overall formula. We believe this should be a matter for NHS England to determine, being best placed to reflect their policy priorities in the decision.

We wish to undertake further work seeking to estimate the scale of unmet need. In conducting the literature review on unmet need, the Centre for Health Economics was asked to provide advice on potential methodologies for this further work. We expect that primary research may be required.

**Recommendation 6: Work to develop research proposals that would lead to a better understanding of the scale and distribution of unmet need should continue, building on the findings of the Centre for Health Economics.**

**Registered lists**
We have previously stressed the importance of GP registered lists being accurate and up-to-date as they are the population base for the formulae for both CCG and primary care allocations. We would find it helpful to be kept informed of the ongoing work to ensure this is the case.

**Future work programme**
We have this year undertaken a refresh of many of the formulae following the current methodology, and this highlighted a number of areas where further development work may be appropriate. Our initial focus in the new year will be to develop a proposal for our future work programme, exploiting the longer period that a multi-year allocation offers.

I will also review the governance of ACRA next year to ensure the committee continues to best meet the needs of NHS England and the Secretary of State for Health, and continues to function as effectively as possible. I would welcome your views on how ACRA is best organised to support the NHS in meeting its challenges over the coming years.

I would be happy to discuss further with you if you would find this helpful.

Yours sincerely,

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Chair of the Advisory Committee on Resource Allocation