



National Audit Office

**REPORT BY THE  
COMPTROLLER AND  
AUDITOR GENERAL**

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**Cross-government landscape review**

Formula funding of local public services

## Key facts

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**£152bn**

was allocated by three  
formula-based grants  
in 2011-12

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**575**

local public bodies  
are funded by these  
three grants

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**165**

indicators are used  
in the formulae to  
assess needs

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**£1,298-£2,268** variation in per capita allocations for primary care trusts 2011-12

**£4,429-£8,051** variation in per pupil allocations to local authorities based on  
Dedicated Schools Grant 2011-12

**£142-£1,075** variation in per capita Formula Grant allocations to areas for  
council and fire services 2011-12

**£93-£258** variation in per capita Formula Grant allocations for police  
authorities 2011-12

**7 years** since the needs-based formula within the Dedicated Schools  
Grant was updated

**£1.9 billion** was distributed across Primary Care Trusts to enable movement  
towards target allocations, while taking account of the need for  
funding stability in 2011-12

# Summary

**1** Government departments provide funding to local public bodies in a variety of sectors, including health, education, local government, police and fire services. Departments allocate most funds based on complex formulae that apportion total funds available to individual public bodies. This review considers three formula-based grants, under which £152 billion, one-fifth of all government spending, was allocated in 2011-12. They are:

- **Primary Care Trust allocations administered by the Department of Health;** designed to fund services across most aspects of healthcare<sup>1</sup>;
- **The Dedicated Schools Grant administered by the Department for Education;** paid to local authorities but the funding is ring-fenced for schools. Local authorities pass on the funding to maintained schools, based on their own local formulae; and
- **Formula Grant administered by the Department for Communities and Local Government;** distributing funding from national non-domestic rates and revenue support grant to councils, police authorities and fire authorities. Police authorities also receive Police Grant from the Home Office, which the Department for Communities and Local Government takes into account when determining allocations.

**2** Formula funding has been used in local government since at least 1929 and in health since 1976. It offers a rational basis for distribution of funds according to government objectives – in these cases, broadly in response to the relative needs of the bodies concerned. It can also provide transparency and openness to enable public debate. Formula funding also has limitations. The basis for distribution can be unclear as the formulae attempt to reconcile multiple objectives. Key choices in formula design, such as the choice and weighting of needs indicators, are contestable. Approaches to formula design are constrained by data availability.

## Scope of this report

- 3** For the three funding arrangements listed, this report examines:
- the objectives and design of formula funding (Part One);
  - generic issues relating to assessing need and data quality (Part Two); and
  - how departments balance stability with responsiveness (Part Three).

<sup>1</sup> There are some areas, with a budget of £4 billion in 2011-12, that are not fully covered by the formula: primary dental services; pharmaceutical services; general ophthalmic services; and support for joint working between health and social care.

**4** The funding arrangements for all the sectors considered in this report are currently under review. This report examines existing arrangements, with a view to establishing key lessons which new arrangements should address. It is not a full review of systems of local finance and does not consider sources of income beyond the three grants specified. It does not review performance monitoring arrangements used to provide accountability for the use of funds allocated.

### Scale and significance

**5** **Figure 1** sets out the responsible departments and scope of the three largest formula-based grants. The grants within this review are key determinants of the budgets of the recipient organisations, although the extent to which local public bodies depend on these grants, and other central funding, varies by sector. The formulae only help to distribute grant to local bodies; they don't set the totals to be distributed. They are designed to preserve a degree of local discretion in the use of funding received; they don't represent contracts for the local delivery of specific service levels.

### Key findings

**6** The funding formulae reviewed share the broad aim to allocate money to local bodies in response to their relative needs, but the extent to which they have done so varies. The funding models are designed to respond to multiple objectives, which can be in conflict, are open to interpretation, and are prioritised by judgement. This constrains the extent to which funding formulae are responsive to calculated needs. For example, nearly 20 per cent of all authorities funded by Formula Grant in 2011-12 receive allocations more than 10 per cent from their calculated needs. The combination of multiple objectives and the nature of the services being funded results in complex formulae.

### Clarity of objectives and design of models

**7** The objectives for formula funding should be clear; measurable; prioritised where there are multiple objectives; and time-bound where appropriate. **Figure 2** on page 8 sets out the objectives of the funding models reviewed. The Department of Health publishes its objectives clearly, and their relative prioritisation in the formula is quantified. The Department for Education and the Department for Communities and Local Government have not set out clearly, or publicly prioritised, their current objectives for the Dedicated Schools Grant and Formula Grant. The objectives in Figure 2 were taken from a range of sources and confirmed with officials. None of the formulae have objectives which are sufficiently precise or time-bound to allow assessment of the extent to which they have been achieved. Their qualitative nature provides little discipline over key elements in the allocations process, such as the balance between responding to needs and providing funding stability.

**Figure 1**

Formula funding of local public bodies considered in this review

| Grant                          | Administering Department(s)   | Services for which need is assessed             | Funding provided to            | Total amount (2011-12)                                     | Variation in funding by area   |
|--------------------------------|---|---|--------------------------------|--|--|
| Primary Care Trust Allocations | Department of Health  | Health  | 151 Primary Care Trusts        | £85 billion  | £1,298-£2,268 per capita   |
| Dedicated Schools Grant        | Department for Education  | Schools   | 151 Local Authorities          | £37.5 billion  | £4,429-£8,051 per pupil  |
| Formula Grant                  | Department for Communities and Local Government; Home Office (for Police Grant) | Children's Social Services                      | 354 Local Authorities          | £20.5 billion to Local Authorities                         | £142-£1,075 per capita (includes local government and fire services) |
|                                |   | Adult's Personal Social Services                |                                |  |  |
|                                |   | Environmental, Protective and Cultural Services |                                |  |  |
|                                |   | Highways Maintenance                            |                                |  |  |
|                                |   | Fire and Rescue                                 | 31 Fire and Rescue Authorities | £1.1 billion to Combined and Metropolitan Fire Authorities |  |
|                                |   | Police  | 39 Police Authorities          | £7.9 billion to Police Authorities                         | £93-£258 per capita  |

**NOTES**

- 1 The Department for Communities and Local Government and the Home Office use the same relative needs formula for policing, but distribute the funding in different ways. See paragraph 1.37 for more details.
- 2 Combined and Metropolitan fire authorities are distinct entities, but the costs of County fire and rescue services are met within general local authority budgets.
- 3 In addition to services, Formula Grant also contains a relative needs formula for capital financing.
- 4 Variation for Dedicated Schools Grant and Formula Grant excludes City of London.

Sources: Department of Health, Department for Education, Department for Communities and Local Government

**Figure 2**  
Objectives of formula funding

| Grant   | Objectives  |
|---|---|
| <b>Primary Care Trust Allocations</b>                                     | Ensure equal opportunity of access to health care for people at equal risk<br>Contribute to the reduction in avoidable health inequalities  |
| <b>Dedicated Schools Grant</b>  | Provide stability of school funding<br>Provide funding to local authorities on the basis of relative needs<br>Address key national and local authority priority areas, such as personalised learning and special educational needs, through funding for 'ministerial priorities'<br>Drive efficiency at school level, by setting the level of the minimum funding guarantee below inflation   |
| <b>Formula Grant</b><br>(Department for Communities and Local Government) | Provide funding based on the relative needs and the relative resources of each local authority<br>Provide stability and predictability<br>Avoid the previous system's direct links between calculated levels of service need and funding allocations, as the previous Government felt that there was a misunderstanding of the allocations process whereby local authorities used this information to set local budgets and council tax<br>For the 2011-12 settlement period, to ensure those authorities that are most dependent on Formula Grant get smaller reductions |
| (Home Office)   | Allocate funding on the basis of the relative needs of local areas for policing   |

Sources: *Department of Health; National Audit Office analysis*

**8** Departments have developed complex models to assess need, in part reflecting the complexity of the underlying services. The needs elements of the models mostly use a capitation approach, based on counting local populations and weighting those populations using sets of indicators designed to reflect relative needs. There is a broad consensus that this approach is appropriate, though it has limitations.

**9** Although the models are all grounded in assessment of relative needs, other aspects of their design differ (**Figure 3**). These differences are due to the evolution of additional objectives and differences in the circumstances of the different sectors. For example, Formula Grant is designed to take account of the income that local authorities raise through council tax and is structured to account for the different service responsibilities of different types of local authorities. By contrast, the Dedicated Schools Grant does not take account of other income sources and funds organisations providing a single service.

**Figure 3**  
Structural design of formula funding models

| Grant                                 | Structural design  | Implications  |
|---------------------------------------|--|---|
| <b>Primary Care Trust Allocations</b> | <p>The model is based on three elements: hospital and community health services; prescribing; and primary medical services</p> <p>Each element has two components to respond to each of the Department's two objectives</p>  | <p>There is a clear link between the two objectives and the structural design of the model</p> <p>The health inequalities component is based on a crude, single metric which was intended to be an interim solution</p> <p>Allocations are significantly influenced by judgement about the relative weighting of the two objectives</p>   |
| <b>Dedicated Schools Grant</b>        | <p>The grant has been based on a 'spend-plus' design since 2006-07, with almost all of the allocation to a local authority based on its allocation in the previous year</p>  | <p>The model has preserved per pupil allocations to local authority areas at similar levels</p> <p>By prioritising this aspect of stability, allocations have not been responsive to changes in pupil characteristics</p>   |
| <b>Formula Grant</b>                  | <p>The 'four-block' model is based on:</p> <ul style="list-style-type: none"> <li>• allocating a share of funding on the basis of relative needs;</li> <li>• deducting a share of funding on the basis of relative resources;</li> <li>• allocating a share of funding on a per capita basis; and</li> <li>• adjustments to provide funding stability</li> </ul> | <p>The model has become increasingly complex as it has incorporated multiple objectives</p> <p>Although relative needs and resources are assessed in a complex way, the connection between those assessments and funding allocations has been obscured</p> <p>Some design elements of the model have distributive effects that cannot be reconciled back to objectives</p> <p>Allocations are significantly influenced by judgements about key parameters</p> |

Source: National Audit Office

**10** The Department of Health formula plays most directly to its stated objectives. The Department for Education, in reviewing school funding arrangements, has assessed its current approach as unresponsive to changing needs. We agree that current arrangements do not fulfil this objective. For Formula Grant, the impact of the objective to avoid direct links being made between calculated levels of service need and how much local authorities should spend on each service has been to add complexity and reduce transparency – in tension with current government policy on increasing transparency.

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In considering the objectives and design of funding formulae, departments should:

- set clear, precise objectives for funding formulae, articulating measures of success for the distribution process;
  - consider the extent to which a single funding instrument should be based on multiple, and sometimes contradictory, objectives; and
  - design formulae to address objectives directly, in the simplest appropriate way.
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## Needs assessment and data quality

### Estimating local populations

**11** The main purpose of the three grants is to fund local services according to the relative needs, and in the case of Formula Grant, relative resources, of local populations. The process of determining local populations varies between formulae:

- Primary Care Trust allocations use GP registration data scaled to the Office for National Statistics (ONS) projections.
- The Dedicated Schools Grant is based on administrative counts of pupils.
- Formula Grant uses ONS population projections.

**12** Administrative data offer timeliness and responsiveness, but have to be controlled for quality, consistency and potential gaming. Annual ONS projections are grounded in the underlying ten-yearly census, then updated by reference to other sources, and cover all sections of the population but are less responsive. There are sometimes significant differences between different data sets. For example, the total of GP registrations exceeds ONS population projections. Differences between the two data sets at the level of a primary care trust have been as high as 25 per cent. Given the central importance of population data to the capitation approach, these variances represent a risk to funding according to needs.

### Assessing the needs of local populations

**13** In addition to the sizes of local populations, the relative needs of those populations are considered. Few indicators directly measure local needs. Departments therefore rely on proxy indicators, based on their association with variations in past service use or expenditure. Examples include benefit claimant rates or health status. The approach taken to identify these indicators is contestable. Areas of concern relate to the under-use of services by specific groups of people, and the extent to which expenditure patterns reflect organisational practices rather than underlying need. Departments are exploring other approaches, but the development and implementation of new approaches is constrained by the availability of adequate data.



### Data limitations

**14** Departments apply criteria to potential data sources to gauge their fitness for purpose. For example, data must be consistently available for all authorities and not open to manipulation or subject to perverse incentives. The range of suitable, readily-available data sets is limited, leading to some weaknesses in the data. For example, a quarter of the indicators used in Formula Grant, and 10 per cent of those used in Primary Care Trust allocations, are entirely based on data sources that are now ten or more years old, usually because they are based on census data. While the most influential indicators for resource allocation, such as population estimates, are more current, indicators based on old data are still important within the parts of the models to which they relate. There is no ready way to quantify the effect of using old data. Departments have not set quality standards about the levels of data accuracy or timeliness that they expect. There is a margin of error in the formulae's expression of relative need, though this is not quantified.

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In considering needs assessment and data quality, departments should:

- base funding models on indicator sets which most validly and reliably represent underlying objectives; and
  - secure reliable, timely data, setting data standards on accuracy and timeliness for data sources, proportionate to their significance to allocations.
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### Stability and responsiveness

**15** The formulae themselves have evolved in response to changed circumstances and policies, but major changes can take several years to implement. For example, the Department of Health inequalities objective was set in 1999. It was first met through a separate allocation and first featured within the model in 2003-04. It is now based on a single, crude indicator introduced in 2009-10 that was intended to be an interim solution.

**16** Funding according to relative needs has to be balanced against decisions about funding stability. All of the grants reviewed include provisions to ensure funding stability. A degree of stability supports financial planning and stable service provision. Judgements about the levels of stability have not been based on objective analysis of the changes in income that organisations can cost-effectively absorb, considering their cost structures and financial positions. The operation of stability adjustments has led to some local bodies being funded significantly above or below needs-assessed levels for extended periods.

## Governance

**17** If judgements about definitions of need are a political matter, the interpretation of those needs through indicators and their incorporation into rigorous funding formulae requires technical and management expertise. All the departments use advisory bodies to help secure that expertise, although the bodies have differing roles and levels of independence. Of the three grants reviewed, the advisory bodies for the health formula have the clearest terms of reference, the most independence from departmental control within a defined technical remit, and the greatest influence over funding allocations. As a result, they are more able to provide effective advice and independent scrutiny over the formula's development. However, in contrast to other arrangements, the Department of Health does not consult publicly on changes to its formula.

**18** Given that funding formulae inform the distribution of £152 billion of public money, their operation and control should be of interest to departmental boards. Although some executive board members have been involved in decisions about the design and operation of formula funding, none of the three formulae reviewed are subject to formal oversight from departmental boards. The board could provide useful pressure on issues such as the clarity of objectives, the transparency of the model, data quality and the operation of advisory groups.

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In considering governance, departments should:

- maintain a clear distinction between factors requiring political judgement, and those which should be grounded in empirical evidence and rigorous analysis;
  - draw on technical expertise through advisory groups which have formal, precise terms of reference related to the technical and managerial aspects of the formulae, appropriate funding and support, and requirements for transparent process and reporting;
  - provide sufficient transparency over the operation of funding formulae to enable checking of allocations and challenge to the basis or operation of the formulae; and
  - ensure that formulae management and control arrangements are considered formally by departmental boards.
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