



# eNews from GAD

Actuarial analysis from the public sector

Issue 25, October 2016



**Welcome to eNews** – GAD's regular newsletter. We are proud to announce that GAD has been [accredited](#) under the UK actuarial profession's Quality Assurance Scheme (QAS). Quality actuarial advice is at the heart of our GAD values; particularly our dedication to delivering first class customer service; and our expertise in providing analysis and assurance to robustly support our clients' and partners' decision making. The QAS assessment process has provided a further opportunity to ensure our way of working is in line with the best practice in our profession. In this issue Aidan Smith, GAD's Head of Technical and Professional and now our QAS Senior Quality Assurance Representative, explains further.

Quality analysis providing support for our partners' decision making has been an important aspect of our collaboration with the Department for Education. We are supporting their initiative to offer a risk protection arrangement to academy schools as a cost effective alternative to commercial insurance. Matt Kirkpatrick outlines the context and how we have used our expertise to make a valuable contribution to the ongoing success of this project.

Decisions on financial and social policy issues are rarely simple. One size may not fit all nor result in the fairest outcome. Barbara Sinkinson looks at how tailoring the financing of social care costs to the circumstances of different generations could be an effective path to fairer, more balanced, and ultimately more affordable solutions.

I hope that you enjoy this issue. As always, previous issues of eNews are available on our website [www.gov.uk/gad](http://www.gov.uk/gad).

MARTIN CLARKE, GOVERNMENT ACTUARY

## NEWS FROM GAD

### LGPS: GAD's Section 13 'dry run' report

The Local Government Pension Scheme Advisory Board has [published](#) GAD's 'dry run' section 13 [report](#) and [appendices](#) based on the 2013 valuations. [Section 13\(4\) of the Public Service Pensions Act 2013](#) will first apply for the 2016 valuation round.

GAD had been appointed to report on whether the local fund valuations of the LGPS achieve four main aims: compliance, consistency, solvency and long term cost efficiency.

The 'dry run' was designed to help administering authorities and their advisors prepare for the 2016 round of valuations. Although the dry run report has no statutory force, GAD's report highlighted issues and identified a number of areas where recommendations may have been made.

GAD and DCLG have presented at a variety of locations around the country to explain further the process they went through and to seek feedback from stakeholders.

## DEVELOPMENTS

### Lifetime ISA

At [Budget 2016](#), the government announced that the Lifetime ISA would be introduced from April 2017 (see GAD's [Technical Bulletin](#)). Legislative plans are developing with the [Savings \(Government Contributions\) Bill](#) recently introduced to Parliament. Both the Lifetime ISA [factsheet](#) and [technical note](#) have been updated to reflect discussions with industry, although the key features of the product remain broadly unchanged. The FCA is expected to consult on the regulatory framework for the Lifetime ISA later this autumn.

### The Pensions Regulator update

TPR's new [Code of Practice](#) for defined contribution pension schemes has [come into force](#), setting out the standards expected of pension trustees. The Code is accompanied by a number of [guides](#) designed to help trustees with implementation. In July, TPR issued a [guidance statement](#) to pension trustees following the UK's vote to leave the EU as well as a [discussion paper](#) on 21<sup>st</sup> century trusteeship and governance.

### Pensions advice allowance

HMT has [published](#) a [consultation](#) on 'Introducing a Pensions Advice Allowance', following on from Budget 2016 commitments to implementing certain recommendations of the [Financial Advice and Market Review](#). The allowance will permit individuals to withdraw up to £500 tax-free from their defined contribution pension, before age 55, to pay for financial advice. The consultation invites comments on the government's preferred design and outstanding policy questions.

### PPF long-service compensation cap

DWP has [published](#) a [consultation](#) on draft regulations to increase the cap on compensation from the Pension Protection Fund for individuals who were a member of their pension scheme for more than 20 years. The changes are expected to come into effect in April 2017.

### Work and Pensions Select Committee inquiries

Following its [report](#) into the circumstances surrounding the collapse of BHS, the Work and Pensions Select Committee has [invited](#) written submissions on the regulation of defined benefit pension funds.

Any material or information in this document is based on sources believed to be reliable, however we can not warrant accuracy, completeness or otherwise, or accept responsibility for any error, omission or other inaccuracy, or for any consequences arising from any reliance upon such information. The facts and data contained are not intended to be a substitute for commercial judgement or professional or legal advice, and you should not act in reliance upon any of the facts and data contained, without first obtaining professional advice relevant to your circumstances. Expressions of opinion do not necessarily represent the views of other government departments and may be subject to change without notice.

## GAD RECOGNISED UNDER ACTUARIAL QUALITY SCHEME

GAD has recently been **accredited** under the actuarial profession's Quality Assurance Scheme, following an independent assessment of our processes, practices and culture. This achievement demonstrates our commitment to high quality actuarial work. Here we look at what the scheme involves and how it is helping us to improve our services.



Aidan Smith



*“the assessment process also highlighted how being a part of government helps to ensure quality”*

### The Quality Assurance Scheme

The **Quality Assurance Scheme** (QAS) is a voluntary accreditation which actuarial firms can apply for to demonstrate their commitment to the quality of actuarial work.

The scheme has five key themes:

- quality assurance, including work review
- managing conflicts of interest
- development and training
- speaking up about identified issues of concern
- relationships with users of actuarial advice

### Background to the scheme

The Institute and Faculty of Actuaries (IFoA) is the UK's professional body dedicated to educating, developing and regulating actuaries, with a Royal Charter dating back to the 1880s. All of GAD's actuaries and trainee actuaries are members of the IFoA, part of a global community of over 28,000 professionals.

The IFoA regulates its members to assure public confidence in the actuarial profession. Its regulatory activity spans an actuary's career – from how we acquire the skills to qualify as an actuary, to how we keep our competence up to date. The IFoA sets ethical and professional standards for actuaries and operates a disciplinary process where members fall short of the standards required.

Whilst actuaries are regulated by the IFoA as individuals, the IFoA recognises that the environment and culture of actuarial employers has a big impact on the quality of an actuary's work. With this in mind, the IFoA launched the QAS in late 2015.

### The application process

This new scheme provided GAD with an opportunity to review our processes and practices and to check how we measure up to the IFoA's standards. We have identified and implemented improvements to our policies and internal documentation and provided additional training where needed. We also asked our internal auditors to review our approach.

We submitted our QAS application earlier this year, pulling together evidence of how we work. This evidence was tested by the IFoA's independent assessors who built up a picture of how GAD operates during a 4-day assessment visit, which involved reviewing our policies and procedures, and interviewing staff at all levels.

High quality actuarial work goes far beyond getting the technical details right. The assessment reflected this, with a remit which included looking at our staff appraisal system, how we deal with complaints and how we manage and mitigate conflicts of interest. Many of the QAS's requirements could apply to any organisation, not just to actuarial firms.

### Helping us to deliver better service

The benefits of seeking external review are well known – an outsider's viewpoint gives a fresh perspective and helps to identify strengths and weaknesses. At each stage in the process we have been keen to learn where we stand relative to good practice and other actuarial firms, and to make improvements – even beyond the requirements of the QAS.

The assessment process also highlighted how being a part of government helps to ensure quality. The Civil Service Code, the Security Policy Framework and scrutiny through the Freedom of Information Act are all examples of cross-government initiatives which supported our application.

The accreditation is an ongoing commitment to quality. GAD will be subject to monitoring throughout the initial six year term. As GAD's Head of Technical and Professional, I will act as our Senior Quality Assurance Representative and will attend events with others from accredited organisations and the IFoA.

At GAD, we are always looking for ways to improve and develop, seeking to deliver better client service and work more efficiently. The QAS requirements and process have provided a framework to help us with this. We look forward to continuing this development as a QAS accredited organisation.

## AN ALTERNATIVE TO INSURANCE FOR ACADEMIES

Schools with academy status are responsible for managing a variety of risks ranging from minor property damage through to serious injuries to pupils and staff. Academies looking to transfer the financial consequences of these risks have two options: purchase a commercial insurance policy or participate in the Department for Education’s (DfE) risk protection arrangement (RPA). GAD has been working with DfE to understand and quantify the risks accepted by the RPA.

### What is the RPA?

The RPA was set up in 2014 following a study which suggested that considerable savings could be made if the UK government met the costs (ie losses and expenses) from risks that would otherwise have been transferred to the commercial insurance market. The RPA covers costs arising from property damage, employers’ liability, third party liability (which includes pupil liability), and travel within the United Kingdom.

Academies who participated in the RPA during its first two years of operations (1 September 2014 to 31 August 2016) had £25 per pupil deducted from their general annual grant to help fund the costs which are generated as a result of providing this cover. This has been reduced to £20 per pupil for the next two years of the arrangement (1 September 2016 to 31 August 2018).



### Estimating the costs of the RPA

A key challenge for DfE is estimating the costs of running the RPA in order to set the reduction to each participating academy’s annual grant. Additionally, supporting DfE’s annual budgeting and financial reporting exercises is an important requirement. The two main factors driving the overall costs are the number of pupils being covered by the arrangement and the expected costs per pupil. We have worked with DfE to better understand both of these considerations.

Looking at the pupil numbers first, we have assisted in this area by building a model to estimate the number of academies joining the RPA and the number of pupils within each academy. In the process of developing this model, and through our subsequent discussions with DfE, we have

identified the following features which we believe are important drivers of the overall number of pupils covered by the RPA:

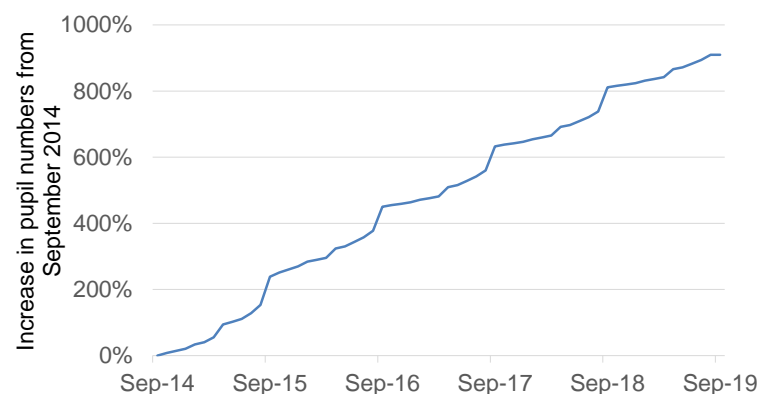
- Existing academies are transitioning from commercial insurance to the RPA.
- Recently created academies are likely to join the RPA (either existing schools becoming academies or new schools being created as academies).
- New schools that are academies will see growth in pupil numbers from a low base.
- Seasonal effects mean that uptake is more likely at the start of the academic year in September.



Matt Kirkpatrick

Our model captures all of the features listed above. Figure 1 below represents our projection of the number of pupils covered by the RPA which we expect to increase significantly between the inception of the arrangement in 2014 and September 2019.

Figure 1: GAD estimates of pupils covered by the RPA

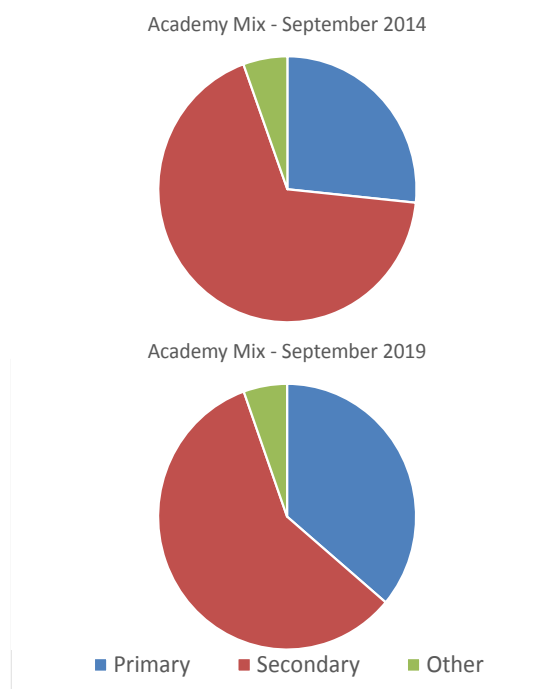


*“A key challenge for DfE is estimating the costs ... to set the reduction to each ... academy’s annual grant”*



## AN ALTERNATIVE TO INSURANCE FOR ACADEMIES

**Figure 2: GAD estimates of RPA covered pupils by type**



The pie charts in figure 2 above show how the proportion of pupil numbers from different academy types (primary, secondary and other) changes over time. These show that primary school pupils are expected to form an increasingly large proportion of the RPA membership whilst the proportion (but not number) of secondary school pupils reduces. This process also highlights the collaborative nature of the project as discussing the preliminary results with DfE creates a better understanding of the results and enhances the model parameterisation.

When the RPA launched in 2014 the cost per pupil was based on a pricing analysis performed by an external consultancy which looked at historical claims experience from the wider academy population and other industry benchmarks. We provided an independent review of this analysis in order to provide additional insight and assurance for DfE when setting up the arrangement.

Following on from the launch of the RPA, the challenge has evolved to monitoring the initial estimate of costs to ensure that it is still appropriate for future years. Changes may be needed for a variety of reasons such as responding to trends in the claim environment, the effects of inflation, and better risk management techniques being employed by academies. There may also be differences between the academies which have joined the RPA and the wider market benchmarks from the original study.

We have assisted with this process by providing regular estimates of the future claim costs. To do this we have developed a reserving model which takes standard actuarial techniques and adapts them to make best use of the available data. This bespoke model allows us to blend benchmark

information taken from the wider academy population with the specific claims experience which is emerging from the RPA. Furthermore, this blend can be controlled so that the RPA's own data becomes increasingly influential as time progresses and more data is accrued. This approach has allowed us to identify trends in the claims and RPA membership information which are then discussed with DfE to better understand the underlying causes and whether any further actions are appropriate.

*“Working in partnership with DfE, GAD is helping to implement ... changes”*

### Quality assurance, quantifying uncertainty and responding to changes

The future membership and claim costs estimated as part of our work help to support DfE's annual budgeting and financial reporting exercises. By verifying processes are correct and fit for purpose (quality assurance), we have assisted DfE with ensuring that both of these exercises are operating according to expectations and appropriately integrate our output.

In addition to providing central estimates of claim costs, we have helped DfE to better understand the potential for improvements and deteriorations by performing sensitivity and scenario tests on key assumptions. We further explore uncertainties by calculating a range of potential outcomes using statistical distributions. DfE were able to consider our analytical insights when making their decision to reduce the per pupil deduction from £25 to £20.

The nature of the RPA itself is also evolving over time as the arrangement comes under review, and features such as the scope of the coverage offered are reassessed. Working in partnership with DfE, GAD is helping to implement these changes by undertaking exploratory analysis to better understand the potential impacts and reduce any associated risks. More information regarding the actuarial analysis of the RPA is available on DfE's [website](#).

### Other insurance work

We provide insurance-related advice to a number of other public sector organisations, utilising our knowledge of actuarial techniques and our experience of the insurance market. For example, we advise public sector bodies on the reasonableness of insurance costs for various risks, appropriate pricing of government guarantees they provide, as well as on alternative approaches to commercial insurance. If you are responsible for managing risks, government guarantees or insurance costs at other organisations, we may be able to help you. Please contact us to find out more.

## WHAT TO DO WHEN ONE SIZE DOESN'T FIT ALL? A COHORT APPROACH TO POLICY DEVELOPMENT

When considering how to approach difficult financial or social problems, it is unusual to start with a blank sheet of paper. Previous policies and decisions can mean that a single solution is rarely workable across all groups of people.

Examining the issue and developing solutions by generation group (or cohort) can yield solutions with wide enough reach for financial markets and policymakers, while reflecting the real variations in individual circumstances.

Social care funding in England is one example that illustrates this approach, but we believe there are many other potential applications.



### Developing social care funding in England

Social care (or long-term care) is an umbrella term used to refer to a wide variety of services to meet non-medical needs of people with a chronic illnesses and disabilities. It also covers some medical needs which do not fall under the auspices of the NHS. At present it is the responsibility of the individual to meet the costs of their own social care, although some state support is provided by way of a safety net.

The need for social care will increasingly be an issue for both individuals and wider society. More people are living to be “very old”; the risk of devastating illness at younger ages seems to be increasing, in part due to increasingly sedentary lifestyles; and increasing numbers of adults live alone as a result of social and demographic changes. Taken together, these trends mean that the need for some form of paid care for help with daily living will become a reality for many.

A lack of understanding of the issue and the uncertainty in how needs may develop (which will be influenced by many factors including demographics, the proportion of life spent in poor health and changes in social attitudes) as well as the potential scale of the cost mean the importance of finding workable solutions should not be underplayed. While it has received a fair amount of attention, and indeed the recommendations of the [Dilnot Commission](#) are currently due to be implemented in 2020, when balanced against the costs or potential costs and social impact the subject remains relatively unexplored.

Various solutions have been developed but it is clear that none fit the needs of everyone. However, there are commonalities within generations. We suggest that considering each generational group separately, and developing solutions for the group, will enable a more robust, practical and workable set of solutions to be developed for the longer term.

### The cohorts:

- Pre baby boomers (those currently aged from 69 or over) have seen significant longevity advances in their lifetime. They now have neither the time nor the capacity (income) to save for the cost of care, but they tend to have relatively good housing and pension wealth. Therefore solutions that utilise these reserves such as immediate needs annuities, the equity bank and equity for insurance will be useful for this group.

- Baby Boomers, aged from their early 50s to late 60s, have significant housing and pension wealth and will benefit from solutions using these assets. For younger baby boomers future savings mechanisms can also play a limited part.
- People in Generation X, currently aged from their early 30s to their early 50s, are the last generation with significant housing and pension equity, albeit less significantly than enjoyed by previous generations. People in this cohort also have some time to save. Therefore they are most likely to benefit from an approach which combines aspects of those targeted to older and younger generations.
- The Millennials (also known as Generation Y) are currently aged from 16 to their early 30s. As a group they tend to be asset poor and are likely not to enjoy the same level of pension provision as previous generations. Saving to meet social care needs will be important for this group but must be looked at in the context of the overall savings picture.
- On current evidence the Post Millennials (or Generation Z) seem to be in a very similar position to their Millennial peers. As they are currently aged under 16, relevant trends and issues are yet to emerge. A watching brief is required.

### Applications to other situations

As mentioned in the introduction, such a cohort approach should not just be considered for the social care arena. It could be used in many different areas to improve understanding of the developing challenges and help find workable long-term solutions.

At first sight taking a generational approach to a large economic issue such as this seems unusual. However it is not without precedent and has parallels with the way thinking has evolved in other areas. For example:

- In the area of pension provision older generations are relatively well provided for, and auto-enrolment/New State Pension have been developed to address gaps in provision at younger ages.
- In the personal savings area the new Lifetime ISA seeks to meet an identified need for the under 40s.

A more comprehensive paper discussing the cohort approach to social funding is available on our [website](#). Please contact us if you would like to discuss these issues further.