

How actuaries support the health and care system

GAD focuses on actuarial analysis

The Government Actuary's Department (GAD) has been focussing on the ways in which actuaries can support the development and future structure of the health and care system.

Chris Bull from GAD presented as part of a recent webinar on how actuarial analysis can be used within population health management. Delegates heard about the work actuaries undertake in these areas and how data driven planning can improve health outcomes.

GAD's expertise

With the move to integrate health and care provision – through the development of integrated care systems – there's an opportunity to use data holistically to understand a population's health and care needs. These integrated systems bring together local organisations, including local government partners, to redesign care and improve population health.

Actuaries use a mix of maths, economics, statistics and predictive modelling to bring meaning to data. Their expertise is therefore hugely valuable in helping to make evidence-based decisions about the services to provide.

GAD's expertise includes areas such as:

- risk – analysing a range of options and developing risk management strategies
- pricing – looking at how to put a value on future events today
- provisioning – estimating what future budgets and pay-outs will cost
- modelling – undertaking assurance work to ensure modelling being relied upon is appropriate

As Chris explains: "We're highly skilled at quantifying and presenting the effects of uncertain outcomes. We can analyse and advise on the best approaches to take. This can include providing insights on ageing and retirement, improving healthcare and reducing costs, as well as solving complex business problems."

GAD's role

GAD supports effective decision-making and robust reporting within government by providing actuarial and specialist analysis, advice and assurance to public sector bodies. This takes many forms across the health and care sector. As an example, we support the Department of Health and Social Care in understanding the pensions costs of the NHS workforce and support [NHS Resolution](#) in estimating the size of future clinical negligence claims.

Next steps

Integrated care systems continue to be developed along with other changes to health care. And actuaries and analysts are working together to provide the analysis and advice to help inform these developments. Further analysis of the outcomes of changes already made, will be necessary to help deliver the most effective improvements to the system in future.