

COVID-19 – Exceptional Volunteer Response!

By Gary McInally and Mohammed Khan for

COVID-19 Actuaries Response Group – Learn. Educate. Inform. Influence.

Introduction

One week ago, on the last day of March, the member-led COVID-19 Actuaries Response Group issued "a call to arms" to actuaries across the profession. The exceptional request for volunteers to support government agencies requiring mathematical and statistical skills across the health service and wider public sector, has been met with an exceptional response from members across the profession.

The Volunteer Response

At the time of writing more than 400 actuaries had expressed an initial interest in supporting this effort, with more than 350 of those responding positively to an initial short screening email. This is a truly exceptional response from the profession.

In addition to individual members, we have also had unsolicited offers of support from a number of significant actuarial employers. The volunteer group initiated by Gary McInally and Mohammad Khan have also joined forces with a small but active group of pro-bono actuaries led by Jonathan Halstead, who have been supporting decision making by an NHS Clinical Commissioning Group in the North West of England.

The initial assessment of the pool of volunteers from across life, pensions, general insurance and wider fields, provides an almost ideal with mixture of experience and skills:

- 30% senior qualified actuaries (typically 20+ years' experience), with a great depth of knowledge and management skills;
- 50% qualified actuaries who have evidenced great technical skills and breadth of experience; and
- 20% are student actuaries at senior and junior levels, all of whom have stated a clear commitment to helping however they can.

The majority of the volunteers are resident in the UK and whilst all of the UK-based work is expected to be remote, we expect that EU residency will be a requirement for volunteers to directly support the public sector in the UK. We will be considering how to engage volunteers from other parts of the world, including Africa, the Americas, and Asia as well as more than 50 actuaries in India.

Current Activity

Given the volume of volunteers and requests for help we have had, we wanted to give you all a brief update on what we are doing. There are two main areas of focus:

- 1) Considering where best we can help;
- 2) Organising our volunteers into teams to best support the potential areas of help.

Considering where best we can help

There are currently three areas where we are already starting to provide support and where we believe we are best placed to use our actuarial skills to make a difference:

- a) Supporting NHS Regions we have already agreed a basis of engagement and commenced activity to "bring the volunteers up to speed" with the requirements of an NHS Regional Planning Team and we will be doing this for more NHS Regions. The first tasks relate to improving the efficiency and usefulness of data capture and the production of daily "nowcasting" reports on the utilisation of critical resources. The team have also begun to understand the requirements for making best use of the epidemiological modelling carried out centrally to inform the planning and decision making at the regional, Trust and Hospital Level.
- b) Supporting an NHS GP Commissioning Group we have developed two "transition state" models for a GP Commissioning Group in the North West of England to support decision making around the deployment of GPs. The modelling helped to determine that, even under a wide range of assumptions for uncertain factors such as infection transmission rates, a strategy of deploying a smaller number of GPs to the "front-line" with high-quality protection would provide lower GP sickness rates than if all GPs spent some time on the front-line.
- c) Rapid Assistance in Modelling the Pandemic (RAMP) we have submitted details of the strength of volunteer resource available within the COVID-19 Actuarial Response group to the RAMP initiative, a centralised call for modelling and analysis expertise being co-ordinated by Royal Society. Our submission, along with those submitted by others, is being considered to prioritise areas that can best support the national effort to tackle the pandemic. The extent of the support that can be usefully provided by our volunteers will be better understood in the coming days and weeks.

In addition to the above we have also registered our member-lead group on the UK government volunteer register.

Organising our volunteers into teams to best support the potential areas of help

We are currently collating sufficient information about each of the members to support us putting together suitably structured teams of volunteers that can support decision makers in the public sector in an effective manner. We expect that each volunteer team will typically comprise:

- a lead senior actuary to help make communication effective and to co-ordinate the effort of the volunteer team;
- a number of qualified actuaries/data experts with an appropriate mix of skills for the task being supported; and
- one or more student actuaries to provide general support to the team.

We would ask all of our volunteers to bear with us whilst we organise a larger pool of resource than anticipated given the fantastic response. We expect to call on additional volunteers to help with this important activity to support those already as assisting in this way.

Next Steps – Continue to Build Links

We recognise the challenges being faced by government at the current time, managing the demand for critical resources and also making best use of offers of support from across the UK and beyond. This makes effective interfacing with organisations and groups challenging, and we have found that building contacts based on member networks has been the most effective way to date of providing support.

The current immediate challenges being faced by the health service in particular will be replaced by a new set of medium-term problems where our skills can continue to be useful for some months into the future.

The volunteer group will continue to self-organise and build out our links via existing contacts to ensure that the hundreds of actuaries willing to support our public sector have as much opportunity to do so as possible.

On a final, more personal note, we would like to add that the selfless response from volunteers across the whole profession has made us proud to count ourselves within your ranks.

Gary McInally and Mohammed Khan

7 April 2020