

Proposed predictive analytics workstream

Purpose of report

For direction.

Summary

This report invites members' guidance and support for our proposed workstream on predictive analytics, for the remainder of this financial year.

Recommendations

That members agree the suggested workstream, and comment on any refinements they would like to see.

Actions

That officers will deliver the workstream agreed by members.

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Proposed predictive analytics workstream

Background

1. Predictive analytics is the use of historic data to predict new instances or cases. This is done by 'training' computer programs with existing data and outcomes, to enable the program to find patterns and relationships, which are then applied to new cases. It can usefully be employed in situations where there is a large data set of historical observations and where decision-making is difficult, time-consuming, or outcome-critical; or where human operators can give a computer program a closed question to answer such as requesting the software to sort cases into different categories, or provide a risk score for each case.
2. Some councils are beginning to use predictive analytics in a range of ways, from identifying which hot water systems in council houses are likely to fail first, in order to prioritise them for replacements, to helping to identify levels of risk for children's safeguarding. These techniques have much potential for improving outcomes and, through that, for using resources more efficiently; but they do come with important considerations about risk and ethics, and the potential for negative perceptions, which must be properly addressed.
3. We are proposing to continue our work, started last year, to guide and support councils on the use of predictive analytics within their organisation. Last year we commissioned Shared Intelligence to bring together two action learning sets of authorities who had started to make use of predictive analytics, and to produce a guide for using predictive analytics in a practical, legal and ethical way. This guide is due to be launched on 10 November at the LARIA Webinar (LARIA is the officers' society for researchers and analysts).
4. As part of this project, we brought together a number of external organisations with an interest in analytics to join an advisory group. This included representatives from the Ada Lovelace Institute, the Turing Institute, the Centre for Data Ethics and Innovation, and MHCLG's director of analytics. All of them welcomed the fact that the LGA is working with authorities now, before the use of predictive analytics is widespread in the sector, to help them use it appropriately.

Issues

5. Members will be aware that there was a lot of coverage over the summer of what may happen when predictive analytics are not used well: central government was criticised for its handling of algorithms in three separate areas: visa applications, housebuilding numbers and exam results. A number of journalists and the Centre for Data Justice at

the University of Cardiff are now regularly investigating and reporting the use of predictive analytics within local government. Their tone is often negative and challenging, suggesting authorities should not be using predictive analytics at all.

6. With this in mind, we would welcome members' guidance and support for our proposed work programme below.

Proposed workstream

7. We propose to continue the work during the remainder of 2020-21, focusing on the following elements to help councils with the practical, technical, ethical and legal considerations at each stage of the predictive analytics process:
 - a) the establishment of a practitioners' network, possibly as a joint exercise with the Centre for Data Ethics and Innovation (in which case, this may be widened to be a group for predictive and advanced analytics more generally)
 - b) a programme of two or three webinars for the practitioners' network about elements of the new predictive analytics guide, in more detail
 - c) the establishment of a knowledge base of resources for councils, providing information both for analysts but (in time) also for council leaders/chief executives/service directors and those responsible for implementing predictive analytics
 - d) the development of content for that knowledge base, such as case studies, guides and emerging lessons from good practice within the public sector.

Implications for Wales

8. The outputs from our workstream would include the involvement of and be used by our Welsh member councils as well.

Financial implications

9. This programme will be delivered using existing funding from the MHCLG grant. No additional resources are required.

Next steps

10. Members are asked to:
 - a) consider whether this predictive analytics workstream should continue at all
 - b) if so, review our proposed programme and make suggestions for any changes which may be needed for the remainder of the year (either in the overall direction of the work, or for individual elements)
 - c) consider whether this workstream should form part of our three-year offer for 2021-24 and, if so, identify any particular elements they would like to see included.