

Data Accelerator Briefing

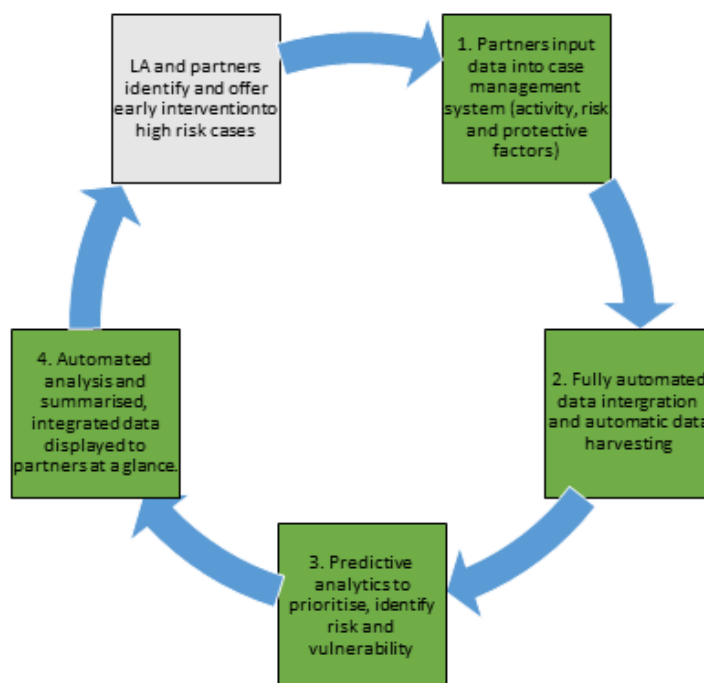
Analysis and Insight (September 2021)

Nottingham City Council has successfully bid for government funding to enhance data systems. This will improve the way information is collected, processed and used by the council and its partners operating within the 'Supporting Families' initiative.

The successful delivery of the programme will streamline frontline and back office processes, bringing benefits to families in the City and potentially informing national practice in regards to a digital strategy. A total of £525,500 (paid over two years) has been awarded to Nottingham by the Ministry of Housing, Communities and Local Government (MHCLG) as part of the Local Data Accelerator Fund. Only 10 bids across the country were successful in securing funding.

The Analysis and Insight Team developed the proposal and will lead a 'data partnership' comprised of Leicestershire County Council, Doncaster Council and the University of Nottingham. Nottingham City Council are the lead partner and sharing skills and ongoing collaboration will be a central theme throughout the programme.

There are four elements to this work (Figure 1):



▲ Figure 1. Overview of the proposed end-to-end project. Green boxes are the proposed project streams. Grey represents the outcome.

1. Development of a partner gateway providing direct read/write access to case management system(s)

Partners deliver valuable early help interventions within the City. However, despite their contribution, data collection remains inefficient, piecemeal and the systems can be

frustrating for users. As such, data is not always robustly collected and not fully utilised. Consequently, opportunities to identify best practice can be lost. The solution is to reconfigure the existing case management system and allow partners to directly input and case manage families alongside council staff. This will facilitate partnership working and bring a range of professionals closer together for the benefit of disadvantaged families.

2. Enhance data integration and automated data harvesting

Analysis and Insight already integrate data which allows advanced analytics across multiple systems. The programme aims to expand the range of integrated data to improve analytical capabilities. The outcome of this work will facilitate any analysis on need, service evaluation and allow the organisation to provide more comprehensive information to practitioners.

3. Develop a machine-learning model to identify families who require early help and support, particularly around the risks of financial difficulty and homelessness

The correlation between deprivation and poor outcomes is well documented and identifying and acting upon the early signs of financial stress can be key in preventing families reaching crisis point. Financial crisis is becoming a growing concern for many LAs, particularly as the impact of COVID-19 and lockdowns are felt. Working with data scientists at the University of Nottingham and building on the existing skills within the council, the data partnership will use machine-learning techniques to develop predictive models to identify families at risk of financial crisis. This will facilitate data driven early intervention to improve family outcomes and reduce the number of families reaching crisis point.

4. Develop a secure 'at a glance' dashboard for stakeholders

At present accredited practitioners need to access four case management systems and make multiple calls to partner agencies to collate information on the cases they are working. Most of this data is already accessible to analysts but practitioners do not have a comprehensive, immediate, and interpretable 'at a glance' overview.

The data partnership will develop a secure dashboard for accredited practitioners. This will focus practitioners, enhance decision-making and enable a more proactive and timely identification of need.

Delivery

The programme is scheduled to run until April 2023. During this time the MHCLG will hold regular monitoring meetings with Data Partnerships to ensure timescales are met and all lead authorities operate within the agreed Memorandum of Understanding. Allied to the delivery of programmes will be the Centre for Data Ethics and Innovation and an externally commissioned evaluation partner headed by Ecorys. Therefore transparency, accountability and strong information governance is assured.