

Annual Report 2018–19

# Administrative data is an invaluable resource for public good. Let's use it.

### Foreword

from Jennifer Rubin, Executive Chair of the Economic and Social Research Council (ESRC) and Senior Responsible Officer for ADR UK

Economic and social research has the power to address some of the UK's most pressing challenges and opportunities, informing policy and changing lives. The need for excellent social science that addresses such issues is clear, but high-quality research requires access to high-quality data. By linking together de-identified data held by different parts of government, and by facilitating safe and secure access for accredited researchers to these newly joined-up datasets, ADR UK (Administrative Data Research UK) is addressing this need.

ADR UK is one of ESRC's most important investments: the creation of linked administrative datasets is a critical step in facilitating economic and social research, and ESRC will be at the forefront of this significant, infrastructural change. These datasets will form a sustainable and rich resource, enabling more nuanced and insightful research, and ultimately informing public policy and improving lives across the UK. By linking data, we are able to find patterns and trends that allow us to gain a deeper understanding of the relationships between circumstances, experiences and opportunities.

Whilst this annual report is predominately forward-looking, an important part of planning for the future is reflecting on the past, and so we will examine the progress of the previous year, as well as reflecting on the lessons learnt from the Administrative Data Research Network (ADRN), ESRC's previous investment and predecessor to ADR UK.

Over the past year ADR UK has made significant progress. The central coordinating body, the Strategic Hub, is fully operational and all positions have been filled. A governance structure made up of three bodies (the Programme Delivery Board, Leadership Committee and the Operational Management Group) has been established and is now embedded in the way ADR UK works. The Research Commissioning Board (RCB) has been created in order to coordinate ADR UK's dedicated research funds. We have eight official partners, including the Welsh, Scottish and Northern Irish governments, the Office for National Statistics (ONS) and the academic partners of ADR Scotland, ADR Wales and ADR Northern Ireland. Leading academics from a number of other UK universities are also involved. Across the partnership, our network of collaborative organisations, academics and research institutions is growing rapidly.

ADR UK is a hugely exciting investment with growing momentum. The need for this work is clear, and I look forward to working with our partners, researchers and the public to demonstrate and realise the enormous potential of the data we already hold, to inform public policies and decision making that work better for all.

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## Introduction

#### from Emma Gordon, Director of ADR UK



The ADR UK programme represents an extremely timely opportunity to realise some of the benefits of data-driven change, for the UK Government, devolved administrations, and society as a whole. As Director of the Strategic Hub, I am honoured to have such a pivotal part in driving the programme towards success.

To date, I have had opportunities to analyse administrative data as an academic researcher, and also to be an analyst within government advising academics on what administrative data can be accessed for research, for what purpose and under what conditions. Having contributed to the set-up of the new cross-government Analysis Function, I also understand the risks to government around data sharing, as well as the collective efforts within government to find secure, efficient and strategic ways of realising the potential for administrative data to help meet evidence needs.

As a result of the previous investment, the ADRN, the devolved administrations proved the value of working with academics to find solutions to data sharing, access and linkage problems, to meet evidence needs that support policy development. That is why the ADR UK programme was approved by UK Research and Innovation (UKRI), whilst also acknowledging that there was still much to learn about how best to support UK Government departments in these areas.

So, while the devolved administrations can use ADR UK as a springboard to build on everything they learned from ADRN, there is acknowledgement that the model for engaging Whitehall departments needed to change completely, to ensure they can reap the benefits of the programme. This is why a central part of my role, working in collaboration with the other partners, is to work with UK Government departments to understand their evidence needs, and to agree if and how these can be met via analysis of de-identified, linked administrative datasets, hosted within accredited secure settings.

In the first year of operation, there has (rightly) been a focus on ensuring we are set up to effectively deliver the ADR UK programme on time and to budget. Throughout this year, we have also built strong relationships with a wide range of government departments and related organisations. This means we are in a strong position to deliver across a range of initiatives that probably would not have been developed were it not for ADR UK. Moving forwards, the tracking and development of these new initiatives will be key for a UKRI decision on the future of the programme, along with the work the devolved administrations are taking forwards as part of this current investment. I look forward to continuing to work with all partners and stakeholders to deliver over the coming year and beyond.

### **Our Mission**

Good government policy – policy that solves social and economic problems and improves lives – needs good evidence.

ADR UK (Administrative Data Research UK)'s mission is to transform the way researchers access the UK's wealth of public sector data. By joining up the abundance of administrative data already being created by government and public bodies across the UK, and facilitating safe and secure access to this data for accredited researchers, ADR UK is creating a sustainable resource that will provide valuable insights into how our society and economy function. This approach is tailored to give decision makers the answers they need to solve important policy questions, driving change that has the potential to improve lives across the UK.

ADR UK is made up of three national partnerships (ADR Scotland, ADR Wales, and ADR Northern Ireland), and ONS. The partnerships are coordinated by a UK-wide Strategic Hub, which also promotes the benefits of administrative data research to the public and the wider research community, engages with UK government to secure access to data, and manages a dedicated research budget.

#### **Our Values**

ADR UK is committed to a set of values that are central to the partnership's activities and progress, guiding how we work together with our partners and defining how we engage with stakeholders and the public. Our core values are:

- Responsible and ethical data use: ADR UK is dedicated to ensuring the data we
  enable access to is used ethically and responsibly for research projects with real
  potential to make a positive difference to society. Access to and use of data is
  strictly controlled and monitored, with projects continually assessed for ethics,
  feasibility, privacy, public benefit and scientific merit.
- Independence: ADR UK is an apolitical body and remains committed to impartiality and non-partisanship. The academic research that we facilitate is driven by a desire to understand and improve society rather than to advance specific agendas.
- Relevance: ADR UK is committed to ensuring that the research we enable is relevant to the needs of society. We do this by aligning our research themes with the UK's most pressing issues and by closely reviewing all project proposals to ensure they hold potential for public good.
- Ambition: ADR UK is ambitious about the game-changing societal impact that can be achieved by well-implemented administrative data research and has a vision for a future where safe data sharing for such research is normal and valued. We are willing to work hard to bring the public, policymakers and researchers alike on a journey to achieve this vision.

#### Funding

ADR UK is initially a three-year investment from July 2018 to July 2021, supported by £44 million drawn from the National Productivity Investment Fund (NPIF) via the ESRC, part of UKRI.

### Administrative Data: Benefits and Impact

#### Benefits

Access to administrative data is extremely valuable to research, facilitating a far more accurate and comprehensive picture of UK society than is possible without it.

However, the greatest benefits from the use of administrative data for research come when data created by one government department or public service is linked to that from others. Linking data from across government is the essence of ADR UK's work. It enables researchers to study how different aspects of life interact with one another, enhancing our understanding of UK society and highlighting where change is needed to improve lives.

Academics and other researchers spend significant amounts of time and money on primary data collection. Access to administrative data can therefore be a major time and money saver, allowing researchers to use rich data that has already been collected and to invest greater resources elsewhere in the research process.

#### Impact

Administrative data research has already enhanced the lives of people across the UK.

ADR UK's ultimate goal is to improve public service provision across the UK by enabling administrative data research that offers new and valuable insights into society.

We therefore measure impact partly according to the effects that the research we enable has on public policy, and in turn on the lives of the people that these policies affect. Impact in this sense means tangible, real-world change that makes a positive difference to life in the UK.

Alongside impact on policy outcomes, it is also important to ADR UK that we have a lasting impact on the underlying process by which administrative data is accessed for research and used to inform policy, strengthening the link between academics and government and creating a sustainable research resource. In this way, ADR UK can develop a legacy that enables others to build on our success and create further policy impacts in the future, potentially far outliving the life of this investment.

#### Case Study: Tackling fuel poverty in Wales

ADR Wales' research using linked administrative data has provided valuable insights into the connection between fuel poverty and health.

In partnership with the Welsh Government, ADR Wales discovered that those who accessed the government's Warm Homes Nest scheme were less likely to seek help from the NHS and be admitted into hospital for cardiovascular and respiratory health issues. The 'NEST' measures appeared to have a protective effect, which was observed across all age groups.

This research suggested that fuel poverty schemes have a powerful impact beyond helping people heat their homes. Additionally, it led to an extension of funding for the scheme between 2018–21, as well as funding for the House Conditions Evidence Programme and the Housing Stock Analytical Resource.

#### Case Study: Improving the lives of farmers in Northern Ireland

One of the most impactful pieces of research undertaken by ADR Northern Ireland involved both academic researchers and researchers from the Northern Ireland Department for Agriculture, the Environment and Rural Affairs (DAERA).

One of DAERA's key goals was to improve the lives of rural dwellers and farming communities, with prior research indicating that farmers are at a higher risk of health issues due to long working hours, physical labour, isolation and accidents. Another key target was to improve expertise and education among farming populations; in particular, IT literacy.

In conjunction with the Administrative Data Research Centre Northern Ireland Statistical Methodological Officer at Queen's University Belfast, this research project sought a better understanding of health and educational issues within farming communities, linking these to DAERA policies and programmes. This allowed for comparison of the individual circumstances of farmers and farming families in order to better understand their livelihoods.

Utilising ADR Northern Ireland's ability to link data from the Northern Ireland Agricultural Census and the Population Census, researchers discovered key evidence to inform government policy, establish robust baseline information, provide evidence of need, and aid in research targeting and outcome monitoring.

This research has already saved DAERA £350,000 (the cost of conducting their own survey).

### Our Evolution: Lessons from ADRN

ADR UK is the successor to the Administrative Data Research Network (ADRN). ADRN was funded by the Economic and Social Research Council (ESRC) in 2013, bringing together experts from all over the UK to prepare an infrastructure that allows social researchers to use administrative data in a safe, secure setting. The project came to an end on 31 July 2018. ADR UK's approach has changed significantly from that of ADRN; we have taken onboard the lessons learnt from the previous investment and adopted the recommendations in the end of grant reports. ADRN proved that administrative data research must be modelled on the 'Five Safes': Safe People, Safe Projects, Safe Settings, Safe Outputs and Safe Data. Addressing each of these 'safes' is essential to maintaining trust. ADRN demonstrated that an integrated and comprehensive service is required; none of the 'five safes' are truly independent of the others.

Over the course of the ADRN investment, it became clear that there was little incentive for data owners to grant access to data; most of the costs were on the sides of the data owners, whereas most of the benefits were on the side of the research teams.

#### Lessons learnt from ADRN

- ADRN demonstrated that investment in departments to help them prepare data for research is a necessary precursor to investing in administrative data research projects.
- The programme showed that partnerships between departments and academia, working together on shared research objectives, are essential.
- It proved that administrative data research must be modelled on the 'Five Safes': Safe People, Safe Projects, Safe Settings, Safe Outputs and Safe Data.
- ADRN clarified that significant investment in the infrastructure for administrative data must be explicitly tied to supportive legislation, national policy, and Codes of Practice.
- The programme established that the statistics offices of the four UK nations must be built into the data acquisition, linking, curation and data support functions of an integrated administrative data service.
- The 'create and destroy' model was not the most sustainable or cost-effective way of sharing data for research, and should be replaced by the use of reusable themed datasets.

The lessons learnt through ADRN have been instrumental in the design of ADR UK as a successor investment, and we have made a concerted effort to take on board those lessons and reassess our approach. Although ADRN supported the costs of carrying out the research incurred by the academic community, there was comparatively little support for the difficult and expensive tasks faced by data owners in preparing and extracting data for those projects. Further, there wasn't sufficient recognition that one of the most important research users of data are the public authorities themselves, and that a partnership between analytical teams in departments and research teams in academia is an effective way to improve evidence for policy.

ADRN also operated largely under a 'create and destroy' model, whereby data was shared by government departments for individual research projects, on the condition that the linked data be destroyed after the project was complete. This can be regarded as an inefficient investment of resources, and can be a disincentive for data owners and researchers alike. By the end of ADRN, it was agreed that this was not a sustainable or costeffective approach.

Under ADRN, it became clear that a coherent legal and policy framework is needed before ambitious work with identifiable administrative data can get underway. The legal and policy situation was different in each of the countries of the UK, complicating the landscape when viewing the UK as a whole. Through the period of the ADRN investment, data protection legislation changed drastically; the issues around opt-in and consent for health data changed, the Digital Economy Act gained Royal Assent, and the UK Government embarked on a transformational programme which included measures for the better use of data.

Lastly, the ADRN period saw the full adoption by the UK's statistics offices of strategies to dramatically increase the use of administrative data in official statistics. The UK's statistics offices are part of the intrinsic structures of government, and ADRN found that their greater involvement, especially that of ONS, was necessary to make good progress with government stakeholders.

The lessons learnt through ADRN have been instrumental in the design of ADR UK as a successor investment, and we have made a concerted effort to take on board those lessons and reassess our approach. We are now tailoring our programmes of work around government departments and devolved administrations Areas of Research Interest (ARIs), transitioning away from the 'create and destroy' model and towards the creation of sustainable, curated datasets. ONS have become a key partner, and we now have a Strategic Hub, responsible for coordinating work across the partnership.



## Public Engagement

ADR UK's work is fundamentally about improving people's lives. Collaborating with the public is an essential part of what we do, and we are committed to working closely with members of the public from all walks of life.

We are dedicated to ensuring that our work is carried out in an ethical and responsible way that people are comfortable with, and that our research is focused on the issues that matter most to the public. Public engagement is an important way of maintaining transparency in all that we do. In addition, it is crucial to ADR UK that our engagement with the public is a genuine dialogue.

ADR UK partners are already working and engaging with members of the public across the UK:

#### **Public panels**

Public panels are an ongoing and growing element of ADR UK's public engagement work, providing a platform for members of the public to offer valuable feedback about our work. ADR Wales' Consumer Panel for Data Linkage Research was established in 2011, and acts as a public voice in the partnership's work, inputting on governance systems, public engagement plans and research practices. In Scotland, the Administrative Data Research Public Panel for Scotland exists to ensure that members of the public are consulted on and involved in the administrative data research taking place.

#### **Events and exhibitions**

ADR UK participates in and runs a number of external public events and exhibitions throughout the year to raise awareness about our work and engage with interested communities around the UK. ADR Wales, for example, works closely with the Swansea University Data Science Building to deliver workshops in schools for both staff and pupils. These aim to inspire, as well as to motivate people to engage in administrative data research. ADR UK is sponsoring the 2019 International Conference on Administrative Data Research, taking place in Cardiff in December.

#### Working with Voluntary, Community and Social Enterprise (VCSE) organisations

Engaging with VCSEs as both the consumers and drivers of administrative data research allows ADR UK to understand the research needs of marginalised groups and empowers these groups by offering the opportunity to influence the direction and outcome of research.

For example, ADR Northern Ireland runs an ongoing Data Workshop series in collaboration with Detail Data. This was designed to connect NGOs with academia in order to ground research in the community and develop awareness of the power of data. Each workshop was organised around a theme of interest including: carers and caring; mental health; and reproductive rights.

#### Connecting researchers to the public

Supporting the public engagement activities of researchers using ADR UK data for their projects is another key aspect of our work. For example, ADR Wales' public engagement officer provides bespoke training and advice to researchers on how to disseminate knowledge and engage with the public.

The public's contribution to the work of ADR UK is hugely important for a number of reasons:

- Dialogue: Public engagement allows ADR UK to foster a constructive, mutually beneficial conversation with the public. We believe that one of the best ways to understand the public's concerns and issues is to simply ask and listen.
- Awareness: To get the most from our engagement with the public, raising awareness of the work that we do is paramount. People have a right to know what public sector data is being used for, and this represents a key part of our engagement work.
- **Empowerment:** We are dedicated to empowering the public to have a say in what their data is used for, to help drive research that fits firmly within the public interest.
- Inclusivity: The best engagement involves all voices. That's why ADR UK is committed to diversity, to making sure that individuals from all walks of life have a say in influencing our work.

Plans are underway for the Strategic Hub to undertake a body of public engagement work exploring attitudes towards the use of administrative data for research, culminating in the publication of a report in 2020.

### ADR UK's Partners and Governance

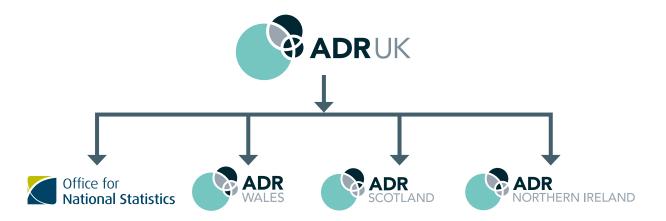
ADR UK is made up of three national partnerships – ADR Scotland, ADR Wales, and ADR Northern Ireland – coordinated by a UK-wide Strategic Hub, and ONS, which is a key partner in linking and curating data and ensuring data provided by government bodies is accessed by researchers in a safe and secure form. This structure allows each of the UK nations to have a dedicated centre and team, focusing in on its individual policy needs whilst also enabling UK-wide research.

ADR UK employs a tiered governance structure to guide good practice across the partnership and ensure that we remain on track to meet our objectives. **The Research Commissioning Board (RCB)** acts as a commissioning panel for the creation of new research-ready linked administrative datasets, and new research based on pre-existing datasets. The RCB is responsible for reviewing research proposals to ensure that they are in the public interest, identifying new opportunities for research, championing administrative data as a research resource, and both supporting and scrutinising the work of the Strategic Hub. Members of the RCB are all external to ADR UK and come from a variety of organisations.

The **Programme Delivery Board (PDB)** oversees overall delivery of the strategic objectives of ADR UK, including the development of an effective partnership. The PDB provides programme assurance to the Senior Responsible Office (SRO), Jennifer Rubin, through its oversight of the strategic development of ADR UK, scrutiny of its plans and milestones, and monitoring of its delivery performance.

The **Leadership Committee (LC)** brings together the accountable leads from ADR UK's partners to develop and agree the strategic direction of ADR UK, and to develop the policies necessary for successful delivery. It is also responsible for approving the evidence collected by the OMG to support self-assessment across the partnership.

The **Operational Management Group (OMG)** is the forum for the monitoring and reporting of all operational matters of ADR UK. It takes actions arising from the ADR UK Performance Management Framework, and is responsible for gathering evidence to support self-assessment across the partnership.



### ADR UK Targets and Performance Management

ADR UK has developed clear and specific targets, as well as a Performance Management Framework (PMF) that allows us to accurately and fairly assess progress across the partnership.

Programme assurances provide information to those who sponsor, govern and manage ADR UK's work, helping these parties and stakeholders make better informed decisions. Subsequently, this helps to reduce the number of failures and promotes the conditions for success.

Effective programme assurance as adopted for ADR UK is based around three core principles:

- It is proportionate and well planned: the appropriate level of assurance activity is incorporated into the project so that it occurs at the right points in the project's lifecycle.
- It implements the recommendations made: the recommendations from a review are discussed, agreed and implemented where necessary.
- It is well timed: time is given to allow the findings from any assurance activity to be taken forward and incorporated into both the project and any subsequent business cases.

Three assurance categories have been established for ADR UK to support the identification and collation of evidence to demonstrate progress towards achieving the programme's vision and goals.

- The Performance Management Framework (PMF) provides assurance about the outcomes of the investment as a whole. Assurances are founded upon the objectives of ADR UK and a 'maturity model' approach. A maturity model is a way of considering performance against an agreed set of graded indicators where targets can be set for each ADR UK objective. Achieving or exceeding target levels of maturity becomes a measure of success for the programme.
- The grant agreements category reports the delivery of each ADR UK partner with respect to their KPIs, milestones, financial, risk and other obligations.
- The shared management documents category consists of shared documents that are the building blocks of delivery.

#### Our vision A highly regarded portfolio of investments (infrastructure) which engages government and academic communities in innovative research to address major societal challenges by releasing the potential of the UK's wealth of administrative data

#### (t) Trust &

sustainability

Commitment and sustainability for admin data research: Built acceptance in government of the imperative to release data and laid foundations for a sustainable research resource by focusing on addressing major societal challenges through admin data research Areas of focus and goals

#### Research for public good

Measurable public good: Demonstrable impact arising from admin data research that addresses major societal challenges

#### Research access & support

Seamless researcher service: Transparent, coordinated, secure and timely access to UK admin data and support services for the wider research community

#### مرمر Available data for research

A highly useful long-term research resource: Flow and availability of high-quality, research-ready UK admin data, designed to enable research to address major societal challenges and preserved for the long-term In addition to the assurance activity and performance management practices described above, ADR UK also recognises the importance of conducting independent assurance, organising an independent review in May 2019 which concluded that:

There is widespread support for the ADR UK programme among the stakeholders and delivery partners. They remain committed to the programme and fully engaged as it moves from initiation into the implementation and delivery phase.

> The programme has made considerable progress in the last three months. Key appointments have been made and the programme is led and supported by a highly professional and experienced team who have the confidence and respect of all the major stakeholders and delivery partners.

Important lessons have been learned from the earlier ADRN programme and these have been embedded in the programme's business model and approach.



## The ADR UK Strategic Hub

The ADR UK partnership is coordinated by a Strategic Hub team within ESRC. Headed by Dr Emma Gordon as Director, the Hub is a small core team providing strategic leadership to facilitate effective data acquisition, promote impact and create wider recognition of the potential benefits of research using administrative data across government, academia and society.

The Hub is responsible for managing the governance processes of ADR UK, including programme and investment management, research commissioning, and coordination of programme-level communication and engagement activities. As such, the Hub plays a key role in engagement with key stakeholders from government, academia and beyond to collaborate on shaping strategic priorities, delivering impactful research and promoting the benefits of using administrative data for research.

#### Progress

The Strategic Hub has made significant progress since the beginning of the investment. The governance structure has been established and is now embedded in the work of ADR UK. Detailed meetings and workshops are regularly taking place which facilitate partnership working, problem solving and decision making.

Delivery plans for the work outlined in the grant proposals for the devolved administrations are scoped, in line with the data acquisition plan. These are being fully integrated across the partnership by the Strategic Hub team.

A large part of our focus in this first year has been to establish positive relationships with public authorities delivering critical public services, and to understand how ADR UK can support their data-driven changes.

#### The Strategic Hub Fund

The Strategic Hub manages a dedicated fund for commissioning projects using administrative data in line with ADR UK's research themes, working with the RCB to do this. The fund includes:

- the Research Ready Data Fund (RRD Fund), dedicated to enabling the creation of novel high quality, long-term linked administrative data research resources, and;
- the Strategic Research Fund (SR Fund), supporting research to address research priorities related to public service delivery.

The RRD Fund is accessible by invitation only. The SR Fund is currently also accessible by invitation only, although some focused open calls around administrative data research may be commissioned in the future.

Potential invitation-only calls begin with an initial discussion arising from contact made with any partner of ADR UK, a stakeholder engagement event, a meeting of a professional group in government, at a conference, or in any other forum. These would typically be where there is already significant energy or interest from government and partners to engage in the creation of novel administrative data linkage for public benefit. Potential invitation-only applicants are asked to demonstrate their eligibility to the relevant Strategic Hub Fund and produce a 'strategic case' for their proposal. Research proposals must be in the public interest and demonstrate real potential to inform policy decisions to improve the lives of people living across the UK.

#### **Emerging programmes**

The Strategic Hub Fund has access to more than £8 million, to be spent across a three-year period starting in April 2019. After the first RCB assessment round, we plan to award funding to the following organisations:

**Ministry of Justice:** This is one of the first strategically important programmes for ADR UK driven by a Westminster government department. We are investing substantially in this department by funding the methodological work to enable linkage of the administrative data outputs from the full range of services. This investment would enable the Ministry of Justice to link information about the users of civil justice and criminal justice systems at the individual level, so that for the first time they will be able to analyse how different cohorts of Justice users move around the system, in England and Wales.

The operational benefits are significant; the insights from this research will enable the Ministry of Justice to test 'what works' to support people in moving out of the system – for the benefit of these individuals as well as the taxpayer. The resulting de-identified, research-ready datasets would be available to accredited researchers to apply to access via ONS Secure Research Service (SRS).

The latter stages of this programme of work include considering linkage to other sources of government administrative data (such as educational outcomes, health, benefits and income), to enable a much wider longitudinal analysis of drivers of frequent use of public services, using pre-linked, de-identified data.

University of the West of England, in collaboration with the Low Pay Commission and Government Equalities Office: this award is designed to address a long-standing problem around data on low and unequal pay. The Annual Survey of Hours and Earnings (ASHE) is the go-to source for such research, having many and varied existing users. To address its limitations this investment would match other data sources, and link those data longitudinally, to improve the evidence base for addressing low and unequal pay and pay progression for all those existing ASHE users, and many more in the future. This research is conducted in collaboration with academics for University College London (UCL), City University and the National Institute of Economic and Social Research (NIESR).

**Scottish Government:** this award is designed to address a long-standing problem around data on low and unequal pay. The Annual Survey of Hours and Earnings (ASHE) is the go-to source for such research, having many and varied existing users. To address its limitations this investment would match other data sources, and link those data longitudinally, to improve the evidence base for addressing low and unequal pay and pay progression for all those existing ASHE users, and many more in the future. This research is conducted in collaboration with academics for University College London (UCL), City University and the National Institute of Economic and Social Research (NIESR).

#### **Developing opportunities**

With the next RCB meeting taking place in October 2019, further areas of research that the Strategic Hub continues to engage on include:

- Collaborating with the Children's Commissioners Office for England and a range of practitioner, academic and government stakeholders through the Data for Children Partnership. This work will shape potential bids to unlock the value of administrative data in support of the needs of children, particularly the most vulnerable.
- Working with NHS Digital to investigate whether the ONS SRS, or similar, would be appropriate to host linked and de-identified administrative and health datasets.
- Collaborating with government departments and devolved administrations to agree which research-ready administrative datasets already in existence could be made more widely accessible via the ONS SRS, or similar.

### The Office for National Statistics National Statistics (ONS)

ONS have played a leading role in engaging with departments across Whitehall to significantly increase the range and volume of data available for research use. Some successes in this area include:

- Making the SRS the primary route for researchers seeking to use data from the Department for Education (DfE), including the National Pupil Database.
- Agreeing a strategy for making data from the Higher Education Statistics Agency (HESA) available.
- Developing the Data for Children Partnership with the Children's Commissioner for England.
- Bringing together 2011 Census data with attainment data from DfE to create a longitudinal dataset on children under ADR UK's Children & Young People research theme.
- Finalising the acquisition arrangements for the NEED (National Energy Efficiency Data) from the Department for Business, Energy and Industrial Strategy (BEIS).
- Creating and facilitating stakeholder groups to increase engagement from across government and ensure that data being developed meets broader needs.

ONS have made significant progress in refreshing the technology used to support research use of government data. For the first time, we have made it possible for accredited researchers, from outside of government, to access the SRS from their own premises, while maintaining data security at all times. We are continuing to increase system capacity and processing power, enabling us to 'futureproof' the service. We recently tested and launched the first phase of our development of an online application system and data catalogue, to significantly improve researcher experience.

ONS have also initiated the Annual Survey of Hours and Earnings (ASHE) review project, aiming to improve the quality of ASHE data in the SRS by expanding availability and fixing issues with longitudinal linkage. ASHE is one of the most used data resources in the SRS, with more than 200 active projects, 50 of which are from within government.

ONS will continue a programme of active engagement with stakeholder groups across government to help drive data sourcing. We will continue to work closely with users of data, and our ADR UK partners, to ensure we remain focused on research needs, and we look forward to the continued development of SRS infrastructure.

Pete Stokes, Deputy Director: Research Service and Data Access at ONS: ONS has made a significant contribution to the early successes of the partnership, which gives us all a strong platform to build on. We look forward to playing a key role in the wealth of exciting work taking place across ADR UK.

## ADR Scotland



ADR Scotland is a collaboration comprising of academic researchers from the Scottish Centre for Administrative Data Research and Scottish Government. Together, we are transforming how public sector data in Scotland is curated, accessed and explored so it can deliver its full potential for policymakers and for the public.

ADR Scotland's research programmes have been designed to address key societal challenges both in Scotland and the UK, and translate linked administrative data into impactful research. They have been developed in partnership with government and its agencies, via ongoing discussions and a series of 'frontier' meetings, which brought together and engaged a range of stakeholders to explore the focus of our work. As a result, our programmes include research centred around safer communities, the world of work, poverty and fair work, health, social and informal care, lifelong health and wellbeing and a crosscutting programme of 'eCohorts' work, which will explore the development of linked data across extended periods of a person's life.

#### Our achievements

Since the beginning of the investment in 2018, ADR Scotland has been laying critical foundations and paving the way for important new research.

ADR Scotland has already begun analysing administrative data across a number of our research programmes and has started to share insights and outputs. For example, we presented findings from local authority data to leading academics, data providers and policymakers at a recent workshop on placement stability for looked-after children in Scotland. The discussion from this workshop led to the development of a successful bid to ADR UK's RCB in order to fund the creation of a body of research-ready data relating to children in Scotland.

We have moved away from the 'create and destroy' model for linking data towards hosting sustainable datasets that can be reused to answer a variety of research questions, increasing the efficiency and usability of linked data. As part of this shift, we initiated a significant 'proof of concept' exercise to test this approach through the development of a new and robust hosting environment for research-ready data in Scotland. This will be completed and evaluated later in 2019 and will inform the

development of a new, enhanced secure data linkage service for Scotland.

We have engaged with a number of data controllers in Scotland to secure access to datasets for reuse, and already have initial agreement from two sources which will be key to a suite of early deliverables under the new and enhanced data linkage model. At a UK level, we have maintained regular contact with the Department for Work and Pensions (DWP), and have agreement in principle for data sharing in relation to one specific project. We have also been working with ONS on access to UK-wide collections of DWP and HMRC data which may meet a wide range of analytical needs.

ADR Scotland has also developed and launched a programme of researcher-facing workshops and events to build capacity and skills in delivering impact and policy-focused research. So far, we have run four tailored workshops for individual research teams, supporting them to map their stakeholders and maximise pathways to impact through targeted engagement and relationship building; and a wider session to build expertise in engaging and communicating with policymakers. Further sessions will be held across 2019–20.

#### Looking ahead

Over the next year, ADR Scotland will continue to build on the work it has completed so far. We will further develop and pilot a range of approaches to engaging with policymakers in Scotland, highlighting and maximising the impact that research using administrative data can have.

We will focus on approaches to co-creation of research areas where new data or projects are available, and on relationship building and creation of effective outputs where analysis has been completed. We will continue to build an enhanced model of data linkage for Scotland – finding ways to improve and increase efficiencies in the flow of data and how it can be accessed. Brokering relationships with data owners and promoting the benefits of administrative data will help to secure key data assets and provide research-ready datasets.

ADR Scotland will continue to contribute towards the development of a researcher support service, advising researchers about what data is available and its quality. We will also help secure permission

#### **Case Study: Veterans in Scotland**

ADR Scotland's veterans' study is part of the innovative e-cohorts research programme, which is linking data from the Ministry of Defence (MoD) and the Census. The use of MoD data is an exciting acquisition and will enable us to explore the social circumstances of the Scottish veterans' population, as well as learn more about a demographic for which no data source currently exists that provides a basis for analysis. The Scottish Government's recent 'Strategy for our Veterans' presents 'Data on the Veteran Community' as a core cross-cutting theme, committed to enhancing the collection, use and analysis of data to build an evidence base to effectively identify and address the needs of veterans.

The project lead, Dr Iain Atherton, has built an engaged team of leads and stakeholders, including representatives from the Defence Policy Unit in Scottish Government and charities such as the Royal Airforce Association, garnering interest from the Veteran's Commissioner and Chief Medical Officer.

Dr lain Atherton, Reader at Edinburgh Napier University and ADR Scotland lead for the veterans project, said: "The wellbeing of veterans is central to our society. I am delighted that our expertise will enable insights into the circumstances and wellbeing of those who have served in the forces. Findings will provide government as well as non-government organisations with evidence that can enable more robust planning that can ensure critical needs are addressed."

to use that data, and arrange a secure way of accessing it. On top of this, we will continue our work to review complex information governance processes, to make them more efficient, and build trust and confidence in the way public data is used, while at the same time ensuring speed, convenience and proportionality of the data access processes.

We will select and train members for our new public panel, through which we will explore public perceptions around administrative data research, issues and ethics around future strategy and the direction of administrative data and policy. The panel will provide advice on how to engage the broader public more effectively; this will be critical to ensuring our work remains focused on the wider social good.

The ADR Scotland team has spent this initial period laying the foundations for an entirely new approach to access, storage and use of administrative data in Scotland. From piloting and developing a new infrastructure for access to administrative data tailored to the Scottish context, to forging new relationships and ways of working with data owners, academics and policymakers. This is a sea change in the Scottish data landscape. The task is not an insignificant one; but a number of small steps have been taken and progress is already being made.



#### Roger Halliday, Chief Statistician for the Scottish Government:

Scotland is fortunate to have some of the best data in the world. Bringing this data together can help address complex social challenges and fill vital evidence gaps to systematically improve the lives of the people of Scotland, saving time, money and lives. I am very excited about the opportunity to play a key part in this UK-wide transformation programme revolutionising access to public sector data.

My ambition is to build on our current high-quality approach: enhancing support services for researchers to enable quicker access to a much broader range of datasets, whilst maintaining Scotland's reputation for secure and ethical use of data.







### ADR Northern Ireland

ADR Northern Ireland is a partnership between the Administrative Data Research Centre Northern Ireland (ADRC NI) – comprising of statistical experts from the Queen's University's Centre for Public Health and the School of Management and Ulster University's Bamford Centre for Mental Health, with the support of the Health and Social Care Research and Development (HSCR&D) Unit - and the Northern Ireland Statistics and Research Agency (NISRA). Together, ADR Northern Ireland supports the acquisition, linking and analysis of administrative datasets, developing cutting-edge research to improve public knowledge, policymaking and public service delivery.

ADR Northern Ireland's research programmes cover a wide range of issues addressing crucial societal issues, and policymakers and community stakeholders are closely involved in the development and delivery of this research. Our research includes a policy evaluation of inequalities in access to health services (supported by both policymakers and health practitioners), outcomes for looked-after children (developed in partnership with the relevant government policy unit and with support from several children's sector organisations), how mothers' exposure to air pollution affects infant health (a crucial issue in a time of climate crisis) and how neighbourhood and family factors affect adolescent mental health and education (developed in response to indicators under the Belfast Agenda of Belfast City Council).

In this investment, NISRA will also develop and support analysis of a government-led research programme, underpinned by the draft Programme for Government (PfG) and its twelve priority themes. In collaboration with policy leads across Northern Ireland Civil Service (NICS) departments, around 15 rapid and impactful research projects have been formulated. Alongside development of these programmes, we have reached out to departments to seek renewed commitment to continue to make data available and a number of new data acquisitions are being negotiated, including in the areas of justice and infrastructure.

#### Our achievements

In the first year of the investment, ADR Northern Ireland has made significant progress towards linking new datasets and enabling vital research.

Over the past year, ADR Northern Ireland's Centre secured access to new datasets, including the Northern Ireland registry for self-harm (the only registry of its kind in the UK) as well as the Social Services Care Administrative and Records Environment (SOSCARE) database. Both these datasets are being used by Dr Aideen Maguire, in the Centre for Public Health at Queen's University Belfast, for ground-breaking and vital research into outcomes for children and young people in care, and factors affecting self-harm and suicide in young people. This work will provide crucial insights and evidence for policymakers working to help and support vulnerable and marginalised children and young people.

NISRA is also progressing development of the first ADR Northern Ireland 'themed dataset' linking Population Census and the Annual Survey of Hours and Earnings (ASHE). This dataset will enable complementary research questions to be answered relating to the theme of earnings and pay progression in Northern Ireland. The benefit of this approach is to reduce lead in times for data access and provide researchers with more certainty about timelines and data coverage. This linked data will be used as an initial proof of concept with a view to further develop our stock of themed datasets in the future, contingent on agreement of relevant data custodians.

A key achievement has been our accreditation, in May 2019, under the terms of Part 5, Chapter 5 of the Digital Economy Act 2017. Becoming an accredited processor enables the NISRA Research Support Unit to deliver on future research priorities in the Northern Ireland Civil Service through ADR Northern Ireland, as well as providing a secure linkage service for academic research projects.

Over the year, NISRA has continued to host and manage the secure environment to enable agreed, ethically approved and cross-cutting departmental research to be conducted. This includes provision of the Trusted Third Party (TTP), responsible for data matching and linkage; and the Research Support Unit (RSU) that includes a supervision, clearance, training and advice service to researchers. As of the end of June 2019, 26 approved projects were at various stages of development or had data provided to researchers.

#### Looking ahead

ADR Northern Ireland has exciting work planned for the next year of ADR UK's investment. Our research programmes will be receiving data and conducting analysis, from which we will begin to have interim results. ADR Northern Ireland's engagement model ensures that these results will almost immediately start to have an impact on problem identification and understanding, as well as policy formation, as each project has a member of a relevant government department or arms-length body on its steering committee who can begin to use even interim results to address crucial societal issues. This model allows for the best available data-driven evidence to reach decision makers even with the current lack of a devolved administration in Northern Ireland.

To strengthen the impact of our research we have several Knowledge Exchange activities planned for the coming year: a symposium on migrants and health inequalities, co-designed with a migrants' NGO in October 2019; a seminar on looked-after children in January 2020; and finally, an event celebrating the impact of our legacy work in Spring 2020.

Research from ADR Northern Ireland supports the ADR UK vision of using cutting-edge linked datasets to develop and deliver research that is geared towards policy change. By linking policymakers and key stakeholders directly in with our researchers at all stages of the research process – from conception to analysis and dissemination – we maximise the benefit our data research for the public, whose data we use.

#### Dr Dermot O'Reilly, Director, ADRC NI

ADR Northern Ireland shares the vision of increasing the use of public data for public good and is proud to be part of an initiative driving positive change in the field of administrative data research.



#### Siobhan Carey, Chief Executive & Registrar General, NISRA

ADR Northern Ireland offers an exciting opportunity for us to maximise the value of collaboration across government and academia in order to enable data-driven change to benefit all in our society.



Ulster University



### Case Study: Maternal Employment and Childcare

In the Spring of 2019 ADR Northern Ireland partnered with the Children for All Coalition to deliver an exciting conference on childcare policy at Queen's University, showcasing ADRC-NI legacy research from Dr Corina Miller on factors affecting maternal employment and the positive role that co-resident grandparents can have in enabling mothers to get back into full and parttime employment.

This research was formed in partnership with several local NGOs after a series of thematic data workshops delivered by our Public Engagement and Impact Manager during the ADRN period. It has continued to flourish as a partnership, delivering results for the NGOs involved in the form of data-driven, Northern Ireland-specific research to use as evidence in advocacy and lobbying, and for the researcher, whose research benefitted from additional datasets gained through these stakeholder relationships.



## ADR Wales

ADR Wales draws on the individual expertise of each of its team members to create a unique combined capability. We bring together data science experts, leading academics and cuttingedge technical teams from Swansea University Medical School and the Wales Institute of Social and Economic Research, Data and Methods (WISERD) at Cardiff University, with government researchers, statisticians and economists from the Welsh Government. Together with the world-renowned SAIL Databank, our unique partnership paves the way for the production of secure, credible and relevant research.

ADR Wales' research programmes address the priority areas for action in Wales as identified in the Welsh Government's national strategy 'Prosperity for All', the 'Well-being of Future Generations Act' and emerging government priorities. The areas identified as having the potential to make the greatest contribution to long-term prosperity and wellbeing in Wales include: early years, housing, social care, mental health, wellbeing, skills and employment and emerging government priorities such as decarbonisation.

Our research programme teams have been carefully constructed to draw upon both academic and policy expertise with each team supported and steered by user groups of key stakeholders. This structure ensures that research and policy are in a position to complement, enhance and inform each other, ultimately leading to research with a greater potential for impact and benefit to society.

We devised our research programmes with overlaps and interdependencies to encourage collaborative working between them, and to establish a wider and deeper evidence base so as to better address the complex challenges presented in Wales.

#### Our achievements

During our first year we have made great strides to establish a strong foundation from which we will build our success for the remainder of the ADR UK investment.

With a focus on data acquisition at both a Welsh and UK level, we have been successful in securing a number of datasets that will enrich the work of our researchers in Wales and throughout the UK.



Some of our successes include:

- agreements to host social care datasets on Looked After Children, and Children Receiving Care and Support in Wales;
- agreements to host Higher Education Statistics Agency data for the UK;
- transfer of additional Welsh attainment data as part of the National Pupil Database (NPD);
- agreements to host Pupil Level Annual School Census data; and
- transfer of new Gypsy and Traveller Caravan Count data

We realise the importance of acquiring data for use across the ADR UK investment and have already made significant progress in making new data available for researchers throughout the UK. We have held two successful task and finish group meetings with the Ministry of Justice, and in a major step forward for the ADR UK partnership – and thanks to a successful collaboration of support from both departments within Welsh Government and the academic community in Wales – we have secured access to the 2011 Census for research throughout the UK.

While securing access to quality, rich data for UK research is at the heart of our plans, we continue to be driven by the potential impact that our research continues to have directly with policy and in the academic environment. ADR Wales will shortly publish papers on the Early Years programme 'Flying Start', the housing programme 'Supporting People', the Dataflow Development Project and a number of research notes that outline the possibilities of emerging research in our research areas.

Stakeholder participation is imperative to the success of the work carried out by the team in Wales, and as a result engagement with these parties plays a meaningful role in steering our work. We have worked to ensure that the requirements and guidance of key stakeholders are central to our decision making. The ADR Wales model has placed policy and academic specialists at the heart of each research theme, with research working groups chaired by experts within each area. This model serves to provide directly relevant research straight to those that require the findings, while taking steps to create inclusive, legitimate research that benefits society.

Safe access to administrative data for research continues to underpin the work in Wales with more than 40 new researchers now accredited by the Safe Researcher Training.

#### Looking ahead

ADR Wales has identified several key priorities for the year ahead. Firstly, our approach to data sourcing will continue to improve. Having established new data sharing processes, we will seek to work with new and existing data providers to enable secure access to further datasets for safe researchers. We will also develop supporting materials for those using each of the datasets, to ensure that high-quality research is maintained. Secondly, we are working to develop impactful publications across each of the Welsh research programmes. The 'impact pathway' for each project is tailored to enable use of evidence in policy development, monitoring, or evaluation; enable additional research; and ensure academic impact.

Thirdly, our engagement with the Welsh population regarding the secondary use of their data will continue, and feed into a research programme where we strive to develop and test ways of improving privacy in the work of our Centre and others like it.

Finally, we will continue to develop the capacity of data matching and linking research within the academic and public sectors, supporting them at all levels by providing new opportunities to interact with real data on real projects wherever possible.

#### Case Study: Early years support in Wales

Flying Start is the Welsh Government's flagship early years programme for families with children under four years old living in some of the most disadvantaged areas of Wales.

The ADR Wales' Flying Start project builds on previous evaluative work carried out by our team. Our early work found that linked data could provide Welsh Government with a unique insight into the impact that Flying Start involvement was having on the health and educational outcomes of the children involved.

By looking at and linking individual level Flying Start intervention data from local authorities across Wales – together with hospital admissions, A&E attendances, and education absence data – the project aims to provide a picture of the outcomes of families whose children are eligible for the Flying Start programme compared to those who live outside of Flying Start eligible areas. The next stage of the analysis will look at education attainment and levels of engagement with the Flying Start programme. As a result of the range of policy areas involved in this project, this work sits across several of ADR Wales' identified research programmes.

Led by our researchers working within academia and Welsh Government, this project has demonstrated the richness that can be drawn when linking data from policy areas and organisations that would otherwise have remained separate. The project has built an engaged stakeholder group, with representatives from the six local authorities involved in the pilot. The group has played a key role in guiding the direction of the project, including analysis based on their experiences of delivering the programme.

We are due to publish emerging findings in August, with further results expected in October. It is anticipated that the findings of this project will help policymakers to evaluate the impact of the Flying Start programme which may, in turn, shape future policy and direction. The findings will also be relevant to other research to evaluate area-based initiatives and early interventions to tackle poverty.





Llywodraeth Cymru Welsh Government



À SAIL DATABANK





#### Professor David Ford, Co-Director ADR Wales

In the last year ADR Wales has taken significant strides to make our work, and that of colleagues working with administrative data research, a success. We have built on our already strong relationships with our partners within Welsh Government and academia, along with our colleagues working throughout the UK, as we strengthen the quality and breadth of the data available to researchers in order to produce outstanding policy relevant research.

Our work to process data such that it becomes, with approval, instantly linkable to all the other assets acquired by ADR Wales, provides a fantastic opportunity to support a multiplicity of wide-ranging research with very little administrative or technical delay. We look forward to the year ahead as we continue to drive forward the appropriate and secure use of administrative data to better inform policymakers about the lives of people in the UK."



#### Glyn Jones, Co-Director ADR Wales

To deliver evidence-based policies that enhance lives in Wales, we need evidence which considers the complex needs of individuals whilst also providing a strategic picture. This is what ADR Wales will deliver. In the last year we have made considerable progress with our first publications due in the coming month and there is a refreshing excitement throughout our team. We are grateful for the continued support of officials across the Welsh public service, academia and partners in ADR UK.

Integration and joining up services beyond traditional boundaries are at the heart of public policy in Wales; and a priority for delivering better outcomes for people now, and in future generations. This collaborative vision is at the heart of the ADR Wales approach.

### Achievements and Milestones

ADR UK and its partners have made significant progress and have laid critical foundations for the years ahead. Milestones so far include:

### 2018

**July:** The Strategic Hub is in place since July 2018 and is now fully operational, with all positions filled in July 2019.

**September:** ADR UK has begun attending events across the UK to raise awareness for our work and promote potential collaboration with researchers, data owners and policymakers.

### 2019

**January:** ADR UK's governance boards are now wellestablished, with defined roles and responsibilities. These include the OMG, the LC, and the PDB.

**March:** Our PMF is approved by the PDB and has proved an effective tool for evaluating progress. This framework is closely aligned with the strategic data acquisition plan.

**March:** A strategic data acquisition plan has been approved by the PDB and is updated routinely.

**April:** The Communications Steering Group (CSG) is bringing together communications specialists from across the partnership to collaborate on and coordinate communications and engagement work.

**June:** The RCB is established, with the first round of proposals and presentations for research and infrastructure projects now underway.

**July:** ADR UK responds to the UK Government's call for evidence on the new National Data Strategy, setting out how our vision for data-driven change can be made a reality.

**July:** The ADR UK website, adruk.org, is launched at the end of July to provide a focal information hub for the partnership.

**August:** The first wave of the Strategic Hub-funded research and infrastructure projects is underway.

## Looking Ahead

Building on the achievements of the past year, ADR UK has identified several key goals and upcoming milestones:

- Feedback and recommendations from the external review held in May 2019 will continue to be embedded and actions completed. A further external review for investment assurance will be held in February 2020.
- The ADR UK Strategic Hub will finalise the awards made by the RCB in June and arrange corresponding grant agreements, and the RCB will receive its second round of applications in October.
- As well as speaking at a range of conferences and events, ADR UK is co-sponsoring the ADR 2019 Conference: Public Data for Public Good, this December in Cardiff. ADR UK will be running its own workshop as part of this conference.

By the end of the year, ONS will have acquired data from a number of key sources:

- UCAS undergraduate data
- National Energy Efficiency Data (NEED)
- Understanding Childhood dataset 2011 Census linked data extracts
- Welsh 2011 Census data to enable linkage to other datasets held in SAIL
- An updated version of the Annual Survey of Hours and Earnings (ASHE)

# **£44** million investment over 3 years

**Our partnership spans 4 nations** and includes 11 organisations:







Across the partnership, ADR UK is working to co-produce research with more than

academic, government and third sector organisations.











UK Research and Innovation

ADR UK (Administrative Data Research UK) is a partnership transforming the way researchers access the UK's wealth of public sector data, to enable better informed policy decisions that improve people's lives.

To find out more, visit adruk.org.

Get in touch with us via: Email: hub@adruk.org Twitter: @adr\_uk

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