

ADR UK Annual Report 2020-21

**Administrative
data is an
invaluable
resource for
public good.
*We're using it.***

Foreword



from Professor Alison Park, Interim Executive Chair of the Economic and Social Research Council (ESRC) and Senior Responsible Officer for ADR UK

The period covered by this report clearly illustrates the importance of data, both in informing policymaking, and in monitoring the success of decision making. ADR UK was founded with the belief that providing secure access to high-quality, de-identified and linked data held by different parts of government to approved and accredited researchers has a critical role to play in enabling research that improves and saves lives. This year's annual report demonstrates how ADR UK is now shaping UK-wide, data-driven change across all major policy areas – from education, economic growth and healthcare, to crime and justice, climate and sustainability.

ADR UK investment in trusted research environments before and throughout the Covid-19 pandemic enabled immediate, rapid research responding to the many social and economic issues it brought to the surface. Now, as we emerge from the pandemic, with a focus on levelling up and resilience, ADR UK is uniquely placed to garner the insights that will be crucial for assessing the long-term impacts of Covid-19 and informing recovery strategies across the UK.

ADR UK has achieved some significant milestones this year, in addition to its direct responses to the pandemic. ADR England was launched to formalise the model of working with UK government departments and academic researchers, which was successfully developed during the ADR UK pilot period. This new portfolio of work will help us continue pursuing our goal of becoming the default choice to host linked administrative data from across the entirety of the UK by 2026.

Improving people's lives is at the heart of ADR UK's mission, and the ethical handling of data is crucial for the ADR UK model to work. In these times of heightened awareness of data usage, it is our duty to ensure that all our work remains in the public interest and is underpinned by the esteemed 'Five Safes', as developed by the Office for National Statistics; a model that ensures data is kept safe and secure. I'm delighted that the central role of public engagement has also been formalised – with the new Public Engagement Strategy, which aims to embed meaningful public engagement across all of our projects, ensuring public acceptability and opinion remain at the heart of what we do.

We look toward to continuing ADR UK's work, the importance of which has been recognised with renewed investment until March 2026. This will deliver significant benefits to the UK and devolved governments and the research community. As ADR UK, one of ESRC's central investments, sets out on its next five years, I am eager to see the partnership's renewed energy bring about important new data linkages and research. These tangible results are crucial as we look to build a stronger, more resilient society.



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1. Introduction



from Dr Emma Gordon, Director of ADR UK

In the last year and a half, data has been in the spotlight in unprecedented ways. From experts to members of the public, we have all armed ourselves with as much data as possible to forge our global, national, local and personal responses to the pandemic. It was quickly realised that timely access to high quality data was more important than ever for understanding and responding to social and economic challenges. ADR UK has played an important role in facilitating this by bridging the gap between government and academia, enabling policy to be informed by the best evidence available.

Since the publication of our last annual report, we celebrated the end of the three-year ADR UK pilot phase with a virtual half-day event in April showcasing our progress in harnessing the power of administrative data for policy-relevant research. The event provided an opportunity to reflect on how the landscape of administrative data research has changed since the genesis of ADR UK in 2018, and offered us a chance to demonstrate the growing importance of the programme and its potential for the future.

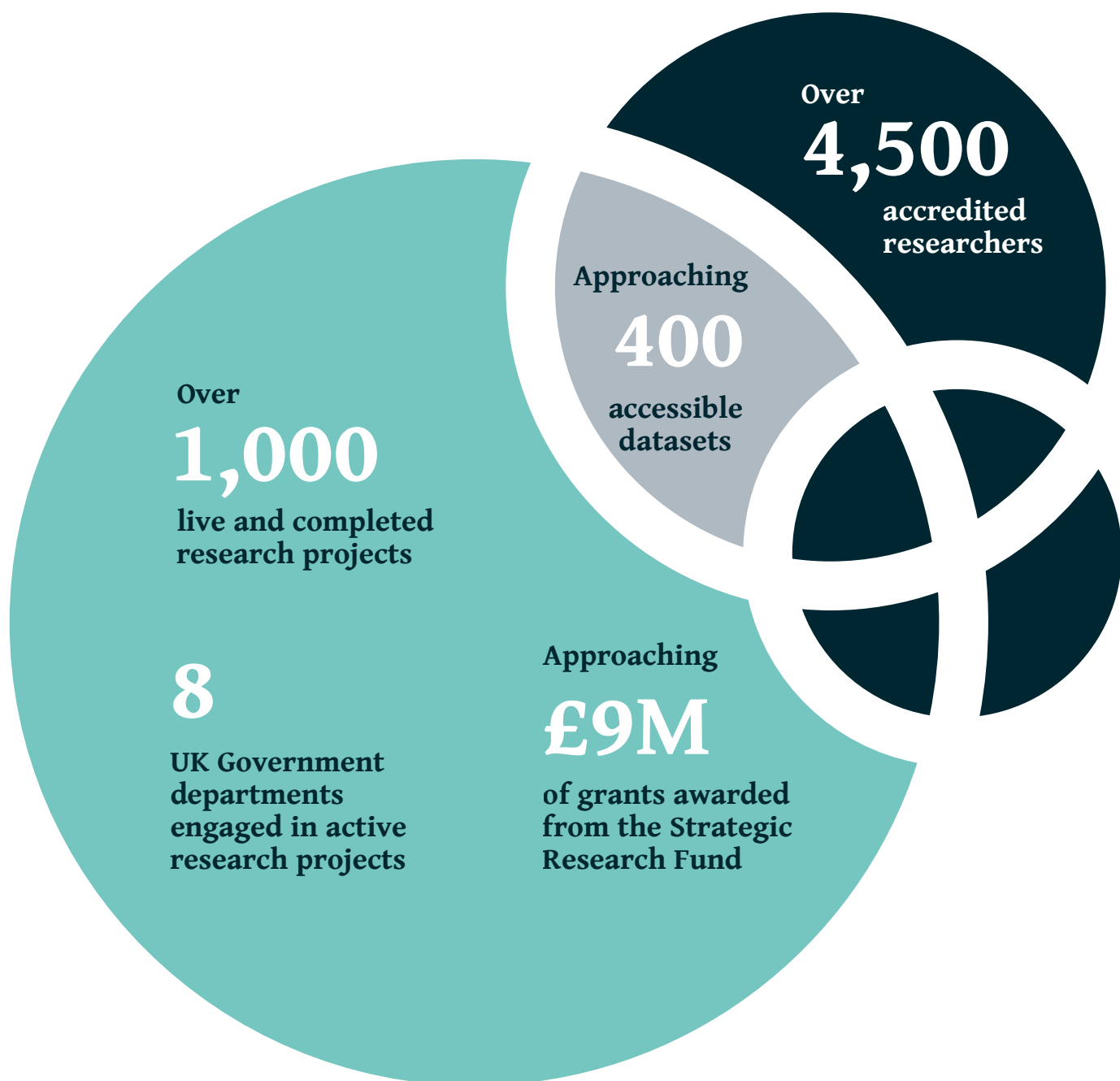
We have also introduced the first cohort of ADR UK Ambassadors: our data-driven change makers, all committed to increasing and improving the use of administrative data for research to inform policy and practice across the UK. And crucially, we launched ADR England, completing our four-nation partnership. ADR England has been crafted off the back of collaborative data linkage and research projects in partnership with Whitehall departments and academic institutions. As with our partnerships in the devolved administrations, it strategically prioritises research for public good that cuts across traditional policy boundaries, as well as creating sustainable and reusable data assets such as those featured in our research fellowship calls.

Data for good underpins everything we do and our efforts have recently been recognised with a further £90m commitment of funding to continue developing the ADR UK programme through to March 2026. The groundwork for evidencing the value of the ADR UK programme and gaining approval for long-term funding was laid in our pilot phase.

For ADR England, the pilot enabled us to test different ways of working with data owners to fund policy-relevant research using linked administrative datasets, resulting in the launch of our fellowship programme. ADR Northern Ireland's work with third sector groups across the last three years has informed how we can best engage non-governmental organisations with our work, guiding this element of the cross-ADR UK engagement strategy for 2021-26. Collaborations with public sector organisations, such as between ADR Scotland and the Scottish Police Authority, have promoted data sharing in different sectors and contributed to a growing culture change in how important decisions are made across UK and devolved government. And the links forged between ADR Wales, Welsh Government and various public health institutions have enabled cross-institutional efforts to inform policy decisions related to the pandemic.

It is on these strong foundations that we produce vital social and economic research. And now, with renewed funding, ADR UK partners will be able to maintain this momentum and provide insights crucial to recovering from the pandemic and other priorities. I am inspired by the progress made across the entire partnership, grateful for the support we've received for our work, and look forward to what's yet to come.

2. ADR UK in Numbers



3. 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 approved 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.

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 assessed for ethics, feasibility, privacy, public benefit and scientific merit.

Relevance:

ADR UK is committed to ensuring 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.

Independence:

ADR UK is a publicly-funded, apolitical partnership. The academic research we facilitate is driven by a desire to understand and improve society, rather than to advance specific agendas.

Ambition:

ADR UK is ambitious about the game-changing societal impact that can be achieved by well-implemented administrative data research. We have a vision for a future where safe data sharing for research is routine and valued.



Our Vision

“ADR UK's vision for 2026 is to be the default choice to host linked administrative data from across the entirety of UK and devolved government, making it accessible to a deep pool of trained researchers to generate insights routinely used to inform policy and practice.”

Areas of focus and goals

Trust & sustainability

Commitment and sustainability for admin data research:

strategic focus on addressing major societal challenges through administrative data research, with support throughout government for releasing data to create a sustainable research resource.



Research for public good

Measurable public good:

demonstrable impact arising from administrative data research that addresses major societal challenges.



Research access & support

Seamless researcher service:

transparent, coordinated, secure and timely access to admin data and support services for the wider research community.



Available data for research

A highly useful long-term research resource:

flow, accessibility and long-term preservation of high quality, research-ready administrative data, designed to address major societal challenges.





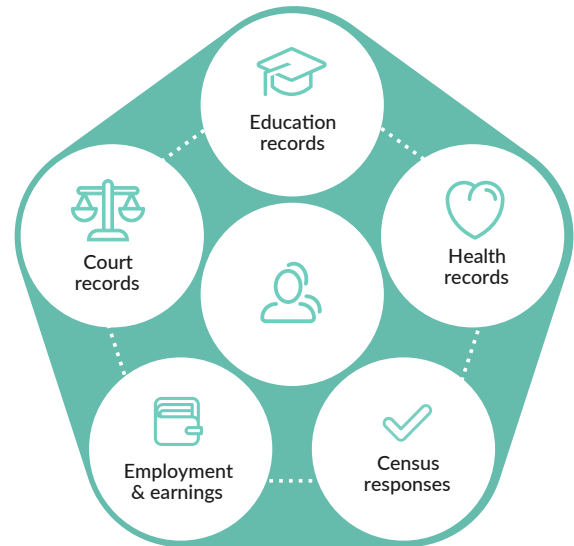
4. Administrative Data:

what is it and why is it valuable?

Administrative data is information created when people interact with public services, such as schools, the NHS, the courts or the benefits system, and collated by government. These public bodies must keep records of these interactions for operational purposes: to enable them to carry out their day-to-day work, to monitor and improve their performance, and keep providing services in an effective way.

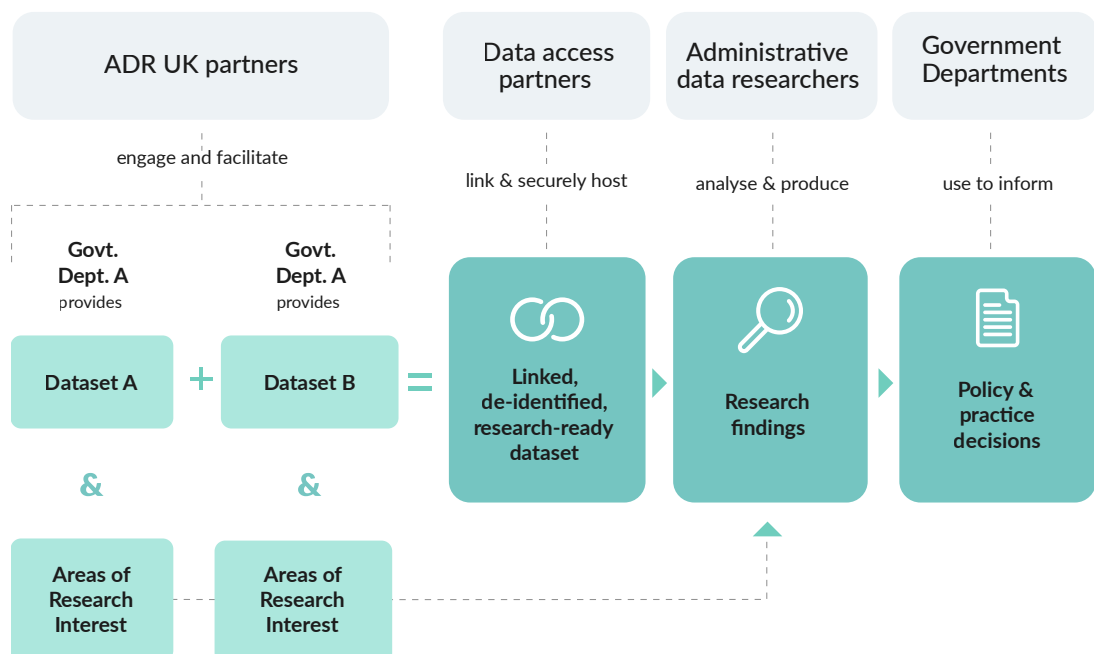
Across the UK as a whole, administrative data is currently a largely untapped, but information-rich, resource. This wealth of data, the majority of which was not originally created for research but as a by-product of government services, has the potential to create important knowledge, providing powerful insights into our society and in turn pointing to areas where change is needed.

Access to de-identified administrative data is extremely valuable to research, facilitating a far more accurate and comprehensive picture of UK society than is possible without it. Unlike survey data, for example, which is limited to those who choose to take part and can therefore mean some groups of people are underrepresented, administrative datasets include information on everyone who comes into contact with government and public services.



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, to enhance our understanding of UK society and where change is needed to improve lives.

The ADR UK process:
How we work with government to generate useful insights



5. Our Impact

As an Economic and Social Research Council (ESRC) investment, ADR UK adopts the definition of impact used by ESRC and across UK Research and Innovation as a whole:



“Impact is the demonstrable contribution that excellent research makes to society and the economy.”

This includes, for example, informing changes to government policy and public service provision that lead to better social and economic outcomes for people and communities. This impact can be at any geographic level: from the local, to the national and international.

Across ADR UK, our partners have a range of strategies to maximise impact across our ‘Five Ps’. Common approaches include:

- Partnering with government
- Aligning with national strategies and departmental Areas of Research Interest
- Dual publication in formats that are easily digestible and usable by different stakeholders.
- Engaging with stakeholders, communities and the public
- The public interest test, with research projects approved by the UK Statistics Authority’s Research Accreditation Panel. This is fundamental to enabling research that has a positive impact on people’s lives
- Making datasets available for further use by accredited researchers

Case studies demonstrating the impact of ADR UK projects are included in this report.



6. Our Data Services

Data access

Data can be accessed by accredited researchers for approved research projects that are in the public interest. ADR UK partners have rigorous safeguards in place to ensure data cannot be accessed by any unauthorised person, or for any reason other than research in the public benefit.

There are several different routes through which researchers can securely access administrative data.

The route researchers take depends on what data they want to access, where in the UK they want to access it from, and what existing accreditation they or their institution have for accessing data.

Data can be accessed:

- Via one of our trusted research environments based in each of the four UK nations
- Via an approved, secure connection (Assured Organisational Connectivity) to the ONS Secure Research Service.
- In one of a network of SafePods based at academic institutions around the UK

SafePod Network

In August 2021, we announced the launch of the SafePod Network; a major innovation that provides a network of standardised safe settings across the UK to improve secure access to data for research that benefits the public.

A SafePod is a small prefabricated room which provides the necessary security and controls to enable a researcher to access and work on data that requires secure access. In most cases, no data needs to be held inside a SafePod, and instead access is provided by a secure remote connection to the dataset-holding organisation's server. Policies and procedures are also in place for SafePod management and use.

SafePods will be primarily based at universities, removing the travel, cost and time barriers for researchers to attend the handful of existing dedicated safe settings in the UK. Researchers can book a SafePod through the new SafePod Network website, and where necessary, priority access will be given for research that is critical to society and the economy.



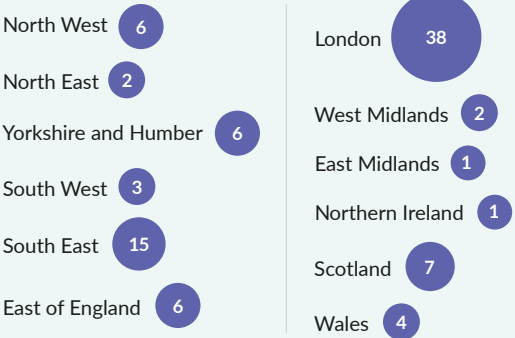
The SafePod Network is funded by the Economic and Social Research Council and run by the Scottish Centre for Administrative Data Research as part of the ADR UK programme.

ADR UK data access points



-  ADR UK trusted research environments
-  ESRC SafePod Network (live and incoming)

Assured Organisational Connections



7. Key Developments Across the Partnership

ADR UK is made up of four national partnerships – ADR England, ADR Northern Ireland, ADR Scotland, and ADR Wales – as well as the Office for National Statistics (ONS), and is coordinated by a UK-wide Strategic Hub. This structure allows each of the UK nations to have a dedicated secure research centre and research expertise, focusing in on its national policy needs whilst also enabling UK-wide research.

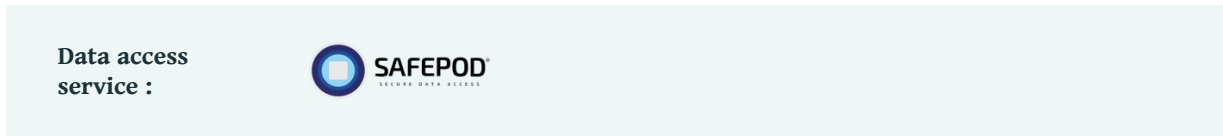
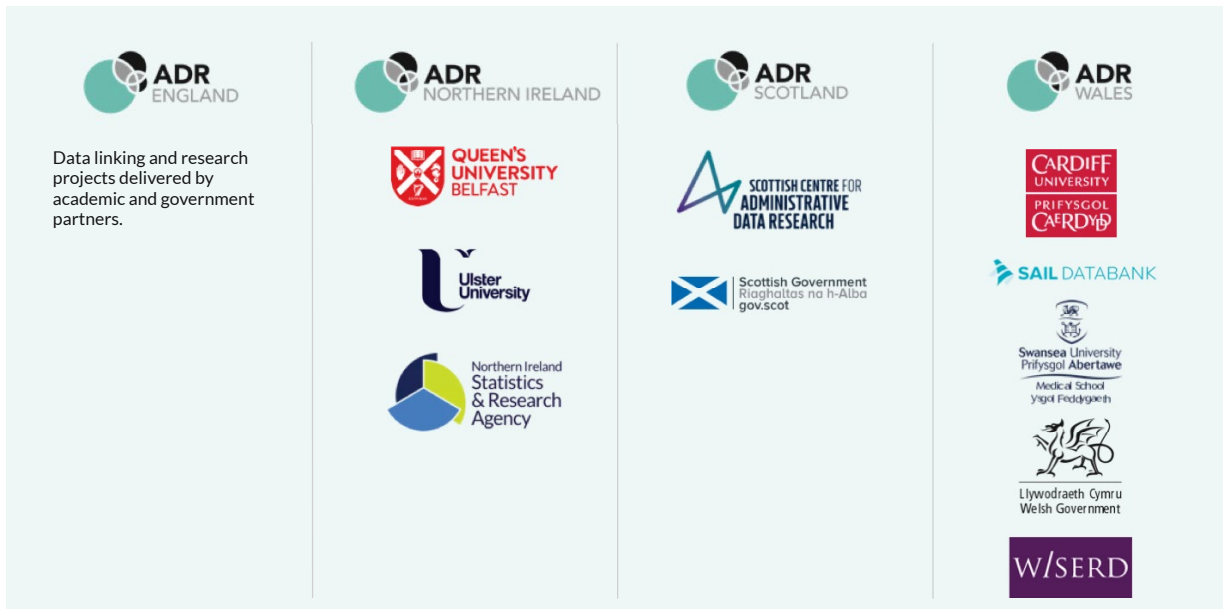
Each ADR UK partner works closely with expert researchers from academic institutions and other research bodies, as well as government data holders and policymakers, to ensure the best evidence possible is available to inform policy and practice. This helps bridge the gap between academia and government, putting us on a path to a future in which the true potential of administrative data to improve society is realised.

The growing body of knowledge being created by ADR UK research represents a valuable resource for anyone seeking to understand and improve UK society, from government policymakers to universities, voluntary and community organisations. ADR UK has increased understanding of the benefits of providing access to administrative data more widely, evidenced by the increase in government departments engaging with the programme over the past year. ADR UK works closely with both UK Government departments and the devolved administrations to fund research to fill key evidence gaps, directly informing and influencing policy and service planning.

This year, ADR UK made significant contributions to the growing body of knowledge around the Covid-19 pandemic, and we have a dedicated section highlighting this later in the report. This illustrates the importance of investing in people as well as secure data infrastructures, since it is these people – members of the research community, those managing our trusted research environments, and those ADR UK collaborates with in data owning organisations – who have facilitated the research being delivered. It is only then that the policy makers can make informed decisions based on this evidence. Having the ADR UK programme in place before the pandemic meant we were ready to step up to the huge challenge of creating these new bodies of knowledge.

Another key development for ADR UK this year has been how the concept of using data to inform policy has become widely understood by the public. As a result of the critical phase of the pandemic, it is now clear that linked administrative data can play a powerful role in informing policies that are about people and communities. We are well-placed to deliver on this, taking the public with us every step of the way. Again, there is a dedicated section later in this report that highlights how we are embedding meaningful public engagement into everything we do, to maintain the social contract to use administrative data in this way.

ADR UK Partnership



ADR England

ADR England is a portfolio of data linking and research projects. Delivered by academic and government partners, these provide policy-relevant insights using administrative data for either England, England and Wales, Great Britain or the UK. Established in April 2021, ADR England is the newest member of ADR UK, completing our four-nation partnership.

The ADR England portfolio is commissioned and managed by the ADR UK Strategic Hub team embedded within ADR UK's funder, the Economic and Social Research Council (ESRC). Projects are commissioned in line with the [ADR England Strategy](#), which prioritises research for public good that cuts across traditional policy boundaries. ADR England provides a home for projects analysing data within or across English regions and local authorities. The portfolio covers a broad range of policy areas, from crime and justice to educational outcomes, the economy and health.

Research partners delivering projects within the ADR England portfolio come from research institutions across the UK. Data holders include the Ministry of Justice, the Department for Education, the Department for Work and Pensions, HM Revenue and Customs, the Department for Business, Energy and Industrial Strategy, NHS Digital and more.

Data for ADR England projects is accessed by accredited researchers predominantly via the Office for National Statistics Secure Research Service (SRS). With the rollout of remote data access infrastructure, including the SafePod Network and Assured Organisational Connectivity, researchers accessing this data can be based throughout both England and the rest of the UK. Whether or not researchers are funded by ADR England to carry out research, this data is free to access to all approved researchers working on approved projects.

ADR England has already made a range of data available to researchers. This includes linkable datasets from across the crime and justice system, Longitudinal Education Outcomes (LEO) data that includes linked tax, benefit and education data, a range of Covid-19 related datasets that include health, survey and administrative data linkages, and much more. These, and further flagship linked datasets launched in the next year, will enable researchers to ensure that policy and service provision across England and the UK is based upon the best evidence possible.

ADR England Research Fellowships

ADR England is funding, via open competition, some of the first researchers to use our newly linked administrative datasets for research in the public interest. ADR England Research Fellows conduct research and analysis to derive insights from linked datasets, showcase their potential for policy impact and public benefit, and develop the datasets as useful research resources for future users. Data owner, policy and public engagement are all built into the scheme.

ADR England's inaugural Research Fellowship scheme, funding the first users of the Data First magistrates' and Crown Court datasets, launched in September 2020. Since then, a further two Fellowship schemes have launched, and a number of research projects are already underway. In the coming year, several more open funding opportunities are expected to launch.

ADR UK has also co-funded with ESRC two data science fellows to be seconded to the No. 10 Data Science Team to design and conduct high-priority, policy-relevant research underpinned by linked administrative data.



Dr Emma Gordon, Director of ADR England and ADR UK:



“The establishment of ADR England is an important step for ADR UK, formalising a model of working with UK Government departments that has been proven to work during the ADR UK pilot period, kick-starting a number of ground-breaking data linkage and research projects with enormous potential for public good. Alongside our existing partnerships in Wales, Scotland and Northern Ireland, ADR England will be key to realising ADR UK's vision for 2026: to be the default choice to host linked administrative data from across UK and devolved government, making it accessible to a deep pool of trained researchers to generate insights routinely used to inform policy and practice.”

ADR Northern Ireland

Administrative Data Research Northern Ireland (ADR NI) is a partnership between the Administrative Data Research Centre Northern Ireland (ADRC NI, comprising Queen’s University Belfast and Ulster University), and the Northern Ireland Statistics and Research Agency (NISRA), which is an accredited processor under the Digital Economy Act 2017. Together they support the acquisition, linking and analysis of administrative datasets, developing cutting-edge research to improve knowledge, policymaking and public service delivery.

ADR NI research has made a strong impact on the development of scientific knowledge, policy and practice in Northern Ireland over the past year, placing research outputs and activities at the highest levels of government and throughout departments and arms-length bodies.

Researchers have met and worked closely with the Minister for Agriculture, Environment and Rural Affairs, the All Party Group on Early Years and Childcare (of which one of their researchers

is a standing member), the Chair of Northern Ireland Assembly Education Committee, the All Party Group on Lung Health, among many other local government officials and elected representatives. As a result, ADR NI research has been cited in several regional and national strategies and work plans.

In addition, working closely with the Department of Health, an ADR NI research stream has enhanced the evidence-base for the development of a new alcohol and drug strategy in Northern Ireland. This research identified the most at-risk groups for both drugs-related and alcohol-specific deaths in Northern Ireland, including understanding the interplay between socio-demographic, health and area-based factors.

ADR NI has also provided a vital, rapid response mechanism to acquire detailed information on Covid-19 related deaths for research, and in response to policy need, to understand the differential impact of Covid-19 on populations.



Dr Tracy Power, Director of Analysis, NISRA



“The pandemic has presented significant challenges for ADR NI this year, particularly in managing the safe operation of the physical, secure research space and also rapidly diverting our research focus to supporting much needed Covid-19 related analyses.

“These challenges have enabled us to reflect and improve on our service delivery model and, with the support of our ADR UK partners, ADR NI will be moving forward with an enhanced capability to deliver timely and innovative administrative data research that can benefit all in our society.”

Professor Dermot O’Reilly, Director of ADRC NI and Co-Director of ADR NI



“2021 has been a testing time for ADR NI. Researchers and investigators have had to suspend their investigations of the more established societal issues and concerns to help with the immediate impact of the pandemic. However, the pandemic response throughout the UK has clearly demonstrated the utility of administrative data to inform and guide policy and the ability to mobilise quickly and operate at scale, both within and across jurisdictions.

“As we move into a new state of normalcy, these advances in how we use administrative data to aid decision making will form the foundation of even stronger evidence-bases to address the most pressing needs of society.”



IMPACT CASE STUDY: Education impact

In 2020, ADR NI supported access to the first linked administrative dataset for education in Northern Ireland, for research by Dr Erin Early. The data used in Dr Early's research, linked the 2011 household Census, School Leavers Survey and School Census for the first time to examine post-primary attainment trends (specifically at GCSE) in Northern Ireland.

The research examined the individual and collective influences of a pupil's gender, socio-economic status, religious affiliation and attended school type on GCSE attainment outcomes. The administrative data provided a unique opportunity to examine multiple individual, household and school-level factors that influence educational attainment, some of which were not previously available for educational research in Northern Ireland.

Through regular engagement with officials from the Northern Ireland Department of Education, Dr Early was invited to submit evidence to the Expert Panel on Educational Underachievement, which was set up in July 2020 by then Education Minister Peter Weir. Dr Early prepared a policy and research brief for the panel.

Dr Early has since presented her work at a wide variety of regional and national seminars, and continues to do so.

ADR Scotland

ADR Scotland is a partnership combining specialists in the Scottish Government’s Data for Research Unit with the expertise of academic researchers at the Scottish Centre for Administrative Data Research (SCADR). Together, they are transforming how public sector data in Scotland is curated, accessed and explored, so it can deliver its full potential for policymakers and the public.

This ADR UK investment has helped to push forward understanding of the utility of linking administrative data in Scotland, notably to help respond to Covid-19. For example, research on end of life care has been ongoing for years but now has real momentum behind it, driven by analysis of deaths at home in the pandemic. Similarly, the work over many years with Police Scotland demonstrating how linking data can help their own decision making and planning has, within the context of the last year, resulted in data sharing that we will now build on.

During the last year, ADR Scotland have also responded to emerging policy priorities around Covid-19 and undertaken a range of projects supporting pandemic response and enhancing understanding of the impacts of the pandemic. This includes developing a person to household linkage through the CURL – CHI-UPRN residential linkage – tool, which enables researchers to explore the many issues associated with Covid-19 where the household is an important factor.

ADR Scotland regularly engages with a range of government and third sector stakeholders to support research both across Scotland and the UK, particularly in the programmes relating to children’s outcomes and health and social care. ADR Scotland also continues to engage the public with their work and has successfully adapted the ADR Scotland Public Panel to a virtual format.

Over the past year, ADR Scotland have developed new research-ready data holdings for multiple research use in the National Safe Haven and created a new data linkage environment and infrastructure. This has initiated and driven forward a programme to restructure data governance in Scotland.



Professor Chris Dibben,
Co-Director of ADR Scotland,
Director of SCADR and Chair
of Geography at the University
of Edinburgh



“It will be very exciting to be setting up the Scottish Historical Population Platform (SHiPP) over the next two years. Being able to better understand issues such as the relationship between early life experiences and healthy ageing or how human capital is transferred between generations will significantly enhance research possibilities in Scotland.”

**Roger Halliday, Co-Director
of ADR Scotland and
Chief Statistician,
Scottish Government**



“As Governments move to supporting the recovery from Covid, ADR Scotland is moving to enable this to happen using person-centred approaches – better targeting scarce resources, and quickly understanding what works.”

IMPACT CASE STUDY: Policing the Pandemic

Research conducted by Professor Susan McVie, lead for ADR Scotland's [Safer Communities](#) programme, has produced valuable information about police use of the emergency powers introduced by the Coronavirus Regulations in Scotland, directly informing Police Scotland's response during the pandemic.

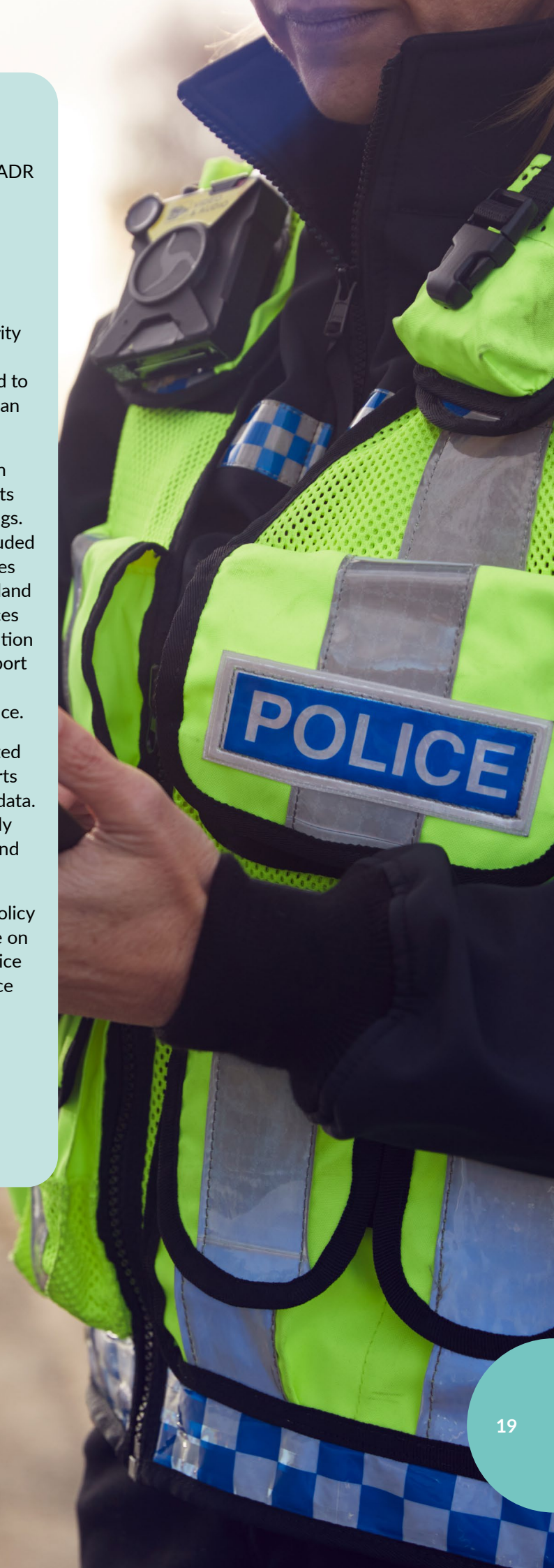
Professor McVie was invited by the Scottish Police Authority to become a member of the [Independent Advisory Group \(IAG\)](#) on Police Scotland's use of temporary powers related to the coronavirus crisis in April 2020, and continues to play an active role in this space.

Her and her team's data analysis and expertise have been used in internal briefings, webinars, and roundtable events to support wider understanding and sharing of the findings. A [range of reports](#) have been published, which have included this year: a report on the profile of all fixed penalty notices (FPNs) issued under the Coronavirus Regulations in Scotland (including changes in the characteristics and circumstances of individuals who received FPNs and the spatial distribution of FPNs) between March and December 2020; and a report on the outcomes of Coronavirus-related police charges reported to the Crown Office and Procurator Fiscal Service.

Through working with the IAG, Professor McVie conducted the first exercise in data linkage between police and courts data in Scotland and encouraged the sharing of policing data. Overall, this involvement in real-time scrutiny significantly influenced the ongoing development of police strategy and operational guidance in relation to Covid-19.

The data analysis undertaken has been cited in several policy documents including the UK Parliament Joint Committee on Human Rights [publication](#) and a Scottish Parliament Justice Sub-Committee on Policing report, providing key evidence on 'live' policing practice during the pandemic.

Crucially, this work has supported and enabled greater data sharing for research purposes of police, courts and prosecution data in Scotland and significantly influenced data sharing and usage.



ADR Wales

ADR Wales unites specialists in each field from Swansea University Medical School and the Wales Institute of Social and Economic Research, Data and Methods (WISERD) at Cardiff University with statisticians, economists and social researchers from Welsh Government. The cutting-edge data analysis techniques and research excellence developed, along with the world-renowned SAIL Databank – which is an accredited processor under the 2017 Digital Economy Act – allow the delivery of robust, secure and informative research.

ADR Wales has sought to not only deliver but surpass the aims and objectives established during the ADR UK pilot phase from 2018-2021. Over the last year, ADR Wales has produced a suite of both reactive and policy-aligned research across all seven ADR Wales policy areas, as well as rapid Covid-19 analyses.

Each of ADR Wales' thematic areas of work has continued to produce significant and notable outputs, and enhanced communication routes to key stakeholders have been made possible by excellent connections with key policy areas. The partnership has secured 28 new datasets now held within the SAIL Databank and has negotiated substantial updates on existing data. For example, 2011 Census data, a robust package of full

coverage education data and key new social care data such as the Domiciliary Social Care Workers (DCSW) and Cafcass CYMRU are all now available.

ADR Wales' reputation for facilitating policy-informing analysis continues to grow, evidenced by the direct approach from within government for analysis using the ADR Wales commissioned and Welsh Government-housed UK Secure eResearch Platform (UKSeRP) technology. Analysis includes a project to understand children and young people's vulnerabilities and involvement in crime, vaccination rates among teachers, and analysis of the outcomes of Welsh Government employability support.

Building on the development of the UK-wide AD|ARC (Administrative Data | Agricultural Research Collection) project, led by ADR Wales, and the appetite to develop further research that has a truly UK-wide reach, ADR Wales has created its New Priority Project Development Team. Working with colleagues across the UK, this team has already identified a number of new project ideas that build on expertise throughout the investment and respond to a direct policy and research need across the UK.



Stephanie Howarth,
ADR Wales Co-Director and
Chief Statistician for Wales



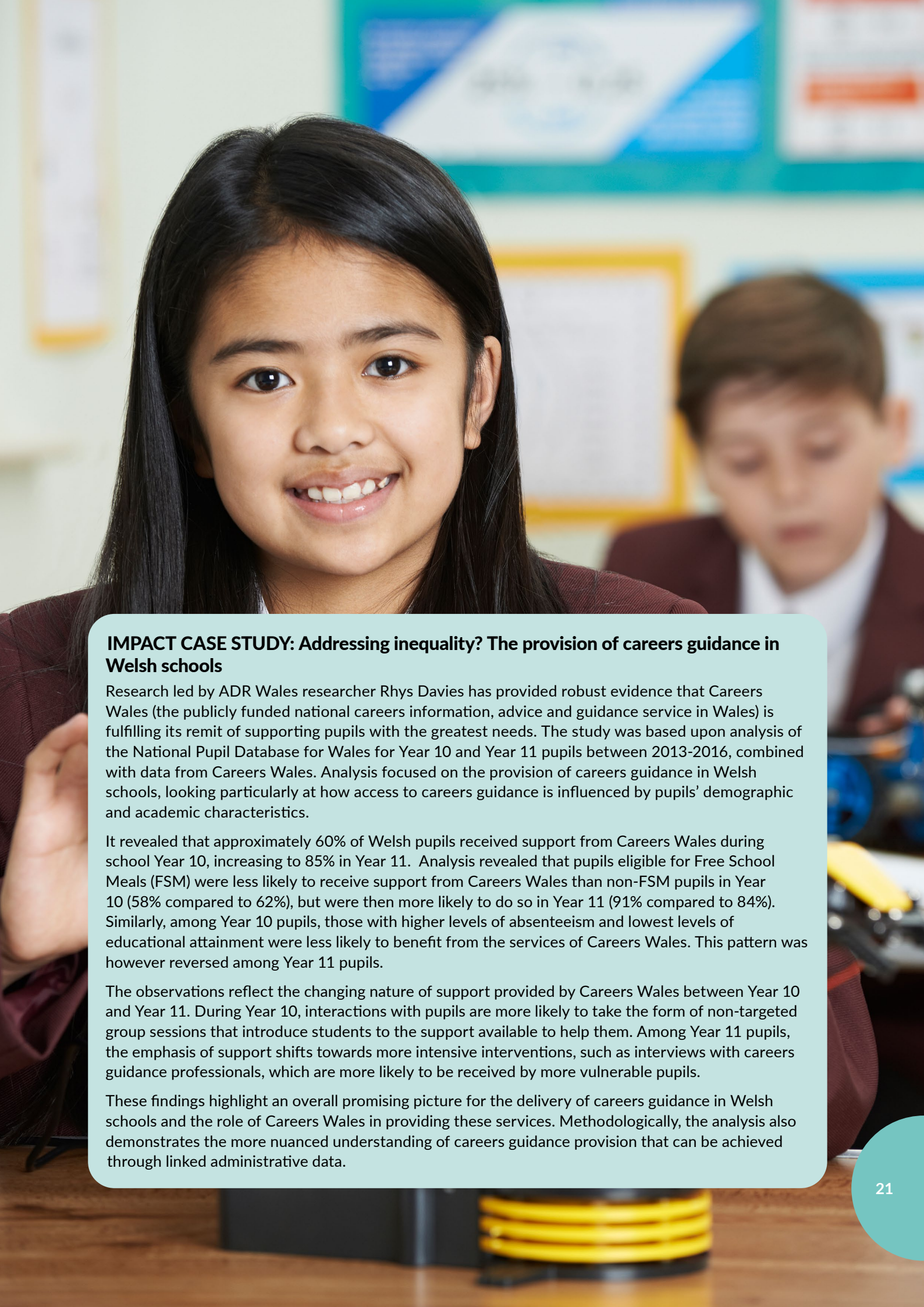
“This year, ADR Wales has pushed the boundaries, realising where our team can lead, guide and facilitate positive outcomes for others who operate within policy, research and data in Wales and the UK. “As we look ahead, we will build on this, aligning our future work with government priority areas for a greener, more equitable and prosperous society for the people of Wales.”

Professor David Ford,
ADR Wales Co-Director



“We are extremely proud of how our team has adapted during the last 12 months whilst at no point losing focus of what their expertise can bring to our research, our team and our aim.

“We will continue to build on our strengths, bringing together people in academia and government, developing our research infrastructure and supporting the One Wales mentality as we continue to demonstrate what can be achieved when we work together with a single goal.”



IMPACT CASE STUDY: Addressing inequality? The provision of careers guidance in Welsh schools

Research led by ADR Wales researcher Rhys Davies has provided robust evidence that Careers Wales (the publicly funded national careers information, advice and guidance service in Wales) is fulfilling its remit of supporting pupils with the greatest needs. The study was based upon analysis of the National Pupil Database for Wales for Year 10 and Year 11 pupils between 2013-2016, combined with data from Careers Wales. Analysis focused on the provision of careers guidance in Welsh schools, looking particularly at how access to careers guidance is influenced by pupils' demographic and academic characteristics.

It revealed that approximately 60% of Welsh pupils received support from Careers Wales during school Year 10, increasing to 85% in Year 11. Analysis revealed that pupils eligible for Free School Meals (FSM) were less likely to receive support from Careers Wales than non-FSM pupils in Year 10 (58% compared to 62%), but were then more likely to do so in Year 11 (91% compared to 84%). Similarly, among Year 10 pupils, those with higher levels of absenteeism and lowest levels of educational attainment were less likely to benefit from the services of Careers Wales. This pattern was however reversed among Year 11 pupils.

The observations reflect the changing nature of support provided by Careers Wales between Year 10 and Year 11. During Year 10, interactions with pupils are more likely to take the form of non-targeted group sessions that introduce students to the support available to help them. Among Year 11 pupils, the emphasis of support shifts towards more intensive interventions, such as interviews with careers guidance professionals, which are more likely to be received by more vulnerable pupils.

These findings highlight an overall promising picture for the delivery of careers guidance in Welsh schools and the role of Careers Wales in providing these services. Methodologically, the analysis also demonstrates the more nuanced understanding of careers guidance provision that can be achieved through linked administrative data.

Office for National Statistics

The Office for National Statistics (ONS) plays a crucial role in sourcing, linking, and curating public sector data for ADR UK, ensuring that all data is accessed by researchers in a safe and secure form. With the support of ADR UK funding, ONS continues to expand and improve its established and award-winning Secure Research Service (SRS) – the organisation’s facility for providing secure access to de-identified public sector data for research, as an accredited processor under the Digital Economy Act 2017 (DEA) – and significantly increase the range of administrative data available.

Over the last year, the investment from ADR UK has enabled ONS to respond quickly to increasing demand for the service and the unexpected changes to priorities and requirements as a result of Covid-19 pandemic. The roll out of remote access to the SRS, including a process for home access, was rapidly established and enhancements to the processing power and storage capacity of the SRS enabled research vital to the pandemic response.

ONS has played a pivotal role in sourcing datasets with high research value from across government and providing access via the SRS, for example Longitudinal Education Outcomes and Ministry of Justice Data First. In addition, ONS has continued to curate new, linked data assets, such as Growing Up in England and the Wage and Employment Dynamics project.

There has been a significant growth in the number of research-ready datasets available in the SRS, with 20 acquired and curated for research in 2020. ONS continues to demonstrate the considerable impact of the ADR UK research and a Digital Object Identifier (DOI) pilot is in progress to help improve research impact tracking. Analysis of the bodies of knowledge gained from research have contributed to the development of the ADR England Strategy, and ONS has expanded its portfolio of thematic research events focusing on policy priorities, including a three-day Covid-19 virtual workshop attracting over 400 delegates.

The Research Accreditation Service is providing an enhanced and transparent online service to over 5,000 researchers. It has been well received and contributed to a significant increase in satisfaction with the researcher accreditation process (82%, up from 55% in 2020). Satisfaction with the SRS has also increased notably in the last 12 months. Many users also highlighted the ONS rapid response, to support the continuation of research, following the initial Covid-19 lockdown. This included expansion of SRS remote connectivity and a move to online support services.



**Bill South, Acting Deputy
Director, Research Services and
Data Access Division, ONS**



“The investment from ADR UK has enabled us to significantly enhance the Research Accreditation Service and the capacity, performance and accessibility of the Secure Research Service, and to increase the range, volume, quality and complexity of data to support research vital to the response to the Covid-19 pandemic and other government priorities.”

IMPACT CASE STUDY: Informing policies to tackle inequalities

Research conducted by the Institute for Fiscal Studies (IFS) investigated the nature of changing inequalities between different groups, and the key forces that shaped them, having a significant impact on policymaking and service provision in the UK.

The work on pension automatic enrolment in particular has been hugely valuable to analysts and policymakers. It is often cited in Department of Work and Pension's annual automatic enrolment evaluation reports and used to improve their understanding of how this flagship policy is working. Their work making use of Annual Survey of Hours and Earnings data was particularly helpful for the Department to understand the impact of automatic enrolment for different employer size and provide reassurance.

The key findings included:

- Those born between the 1930s and 1950s have seen generation-on-generation increases in wealth. Those born more recently appear to have accumulated no more wealth than their predecessors had done by the same age.
- Lower-wage workers in soft skill occupations experienced faster wage progression and longer firm tenures compared to intermediate and high skilled workers.
- There is relatively greater exposure to the negative consequences of higher trade costs of Brexit amongst workers that tend to be employed in industries that are regionally concentrated, meaning they have fewer other employment opportunities in their local areas.
- Automatic enrolment into workplace pensions has particularly increased workplace pension saving for those on lower pay and for younger workers, compared to higher paid and older workers.

This IFS research was made possible through access to high-quality, linked administrative data from the Office for National Statistics Secure Research Service, including the Annual Survey of Hours and Earnings and Business Enterprise Research and Development.

Through this programme, the IFS were labelled the 'most influential' think tank by the 2019 ComRes cross-party survey of MPs and Peers. The research also won the ONS Research Excellence Award 2020.



8. ADR UK Ambassadors

In June 2021, we launched our ADR UK Ambassadors initiative.

ADR UK Ambassadors are people working in and around government who are committed to increasing and improving the use of administrative data for research to inform policy and practice, both within their own departments and bodies, and in partnership with others. They are a crucial part of our work to build the bridges between government, academia and the public that are needed to make this happen.

Our Ambassadors are drawn from a range of professions – from information management and analysis, through data and security, to policy and operational delivery – and a variety of career stages. They are united by the belief that administrative data held by public bodies holds untapped potential to create insights that can help make better decisions, improving public services and the lives of people across the UK.

ADR UK Ambassadors are publicly recognised as data-driven change-makers. They have an important role to play in making sure the potential of data for public good is harnessed, in a way that is safe, legal, ethical and sustainable, while maintaining the trust and support of the public.

ADR UK Ambassadors are committed to highlighting the benefits of administrative data research to colleagues, signposting to ADR UK.



Ed Humpherson, Director General, Office for Statistics Regulation



“People have talked for a long time about the potential of administrative data. ADR UK has gone beyond the warm words to actually make it happen – to link datasets and make them available to researchers, and to highlight the policy-ready insights that have emerged. It’s great to be able to contribute as an ADR UK Ambassador, to this mission of converting words into actions.

“In my work as head of the UK’s regulator of Government statistics, I am responsible for the standards that Government statistics and data must meet. In this work, I always emphasise the wider public benefit of the statistics and data. Being able to highlight the successes of ADR UK, on things like Data First and ECHILD, means I can point to tangible evidence of how statistics and data can serve the public good.”

9. New and Emerging Datasets

The ECHILD Database (Education and Child Health Insights from Linked Data)

ADR England is funding the creation of a research-ready database linking health, education and social care data for all children in England for the first time. The ECHILD Database will enable a better understanding of how education affects children's health and how health affects children's education.

The ECHILD project is led by researchers at UCL in collaboration with the London School of Hygiene & Tropical Medicine and the Institute for Fiscal Studies, in partnership with NHS Digital and the Department for Education, working with the Office for National Statistics (ONS).

The ECHILD Database includes de-identified, linked records for around 14 million children. It links two existing data sources:

- **The National Pupil Database (NPD)** – which is owned by the Department for Education and includes information about students at schools and colleges in England and about contact with children's social care services.
- **Hospital Episode Statistics (HES)** – which is owned by NHS Digital and includes information on hospital admissions, A&E attendances and outpatient appointments in NHS hospitals in England.

The ECHILD Database could help to answer questions such as:

- How have disruptions to services during the Covid pandemic affected children's health and education?
- How can we improve health and education for children with chronic physical or mental health conditions in England?
- How can we better understand the health-related drivers of educational outcomes in England?
- How can we improve the quality and equity of health and education provision in England?

Public engagement forms an important aspect of the ECHILD project. The ECHILD team is working with patient, pupil, parent and public engagement groups to understand different views on the use of linked health, education and social care data for research. You can find out more about this work on the [ECHILD website](#).

In April 2021, an event was also held to convene key stakeholders from within government and the third sector to hear their views on the potential of the ECHILD Database. The Database was widely considered an invaluable research resource with a unique ability to cut across domains that are deeply interrelated. You can read the full event report on the [ADR UK website](#).

The ECHILD Database is expected to be made available to approved external researchers via the ONS Secure Research Service in 2022.



Data First:

Harnessing the potential of linked administrative data for the justice system

In our 2019-20 Annual Report, we introduced the Ministry of Justice-led Data First programme, announced in March 2020. The Data First programme aims to harness the potential of the wealth of data already created by the Ministry of Justice by linking administrative datasets from across the justice system and beyond for research that aims to drive real progress in tackling social and justice issues.

In summer 2020, the magistrates' and Crown Court datasets (and a further 'linking table' enabling linkage of the two) became the first outputs of Data First to be deposited in the Office for National Statistics (ONS) Secure Research Service. Since then, two further outputs have become available for accredited researchers to apply to use as a result of the programme.

In February 2021, the [prisoner custodial journey level dataset](#) became the third research-ready dataset to result from Data First. The de-identified dataset provides information on individual instances of prison experience, allowing researchers to follow prisoners' journeys up to June 2020. The data will enable analysis of prisoner characteristics and patterns of reoffending that lead to repeat custody, to in turn inform better policy decisions to mitigate repeat custody.

In May 2021, the [criminal courts and prisons linking dataset](#) then became the fourth output of Data First. The dataset allows researchers to join up information from the de-identified prisons,

magistrates' and Crown Court datasets. It serves as a lookup to enable researchers to identify records where offenders in the prison data have appeared as a defendant before the magistrates' or Crown Court (although will not be directly linked to a specific court case). Similar to the other datasets, it will not let users identify individuals, just patterns of appearances. This linking dataset will provide powerful new insights on end-to-end user journeys across the criminal justice system.

In July 2021, we also announced the [first users of the magistrates' and Crown Court datasets](#), funded via the inaugural [ADR UK Research Fellowship](#). Four Research Fellows are being funded for seven to 12 months to explore issues such as ethnic inequalities in the criminal justice system, and the nature of serious and organised crime cases heard before the Crown Courts.

In 2021-22, further datasets are expected to be made available as a result of the Data First programme to enable even broader insights into experiences of the justice system. These datasets will provide evidence to underpin the development of government policies and drive real progress in tackling social and justice problems.

Wage and Employment Dynamics

In the last annual report, we introduced you to the [Wage and Employment Dynamics \(WED\)](#) project, a collaboration with the University of the West of England (UWE), UCL, City, University of London, and the National Institute of Economic and Social Research, which is linking data to provide important new insights into the dynamics of earnings and employment in Britain.

Over the past year the WED team have successfully negotiated with Her Majesty's Revenue & Customs (HMRC) to allow de-identified pay-as-you-earn (PAYE) and self-assessment data on individuals to be linked to data from the Annual Survey of Hours and Earnings (ASHE), which is accessible to researchers via the ONS Secure Research Service. ASHE is a large longitudinal survey with detailed information on employee earnings going back to 1997 or earlier, and central to pay statistics and to the work of the Low Pay Commission. The new HMRC data fills in the knowledge gaps beyond the information provided in the ASHE data, including information on self-employment or other modes of income, and, most importantly, how we can use this data to better understand wider patterns of earnings and employment beyond these annual data samples. The direct effect of this data linkage is to greatly increase the value in both the HMRC and ASHE datasets, which previously were only available via separate secure research services run by HMRC and ONS.

Together, these factors not only further the WED project but also potentially point to a productive way forward for easing the barriers to the ethical sharing and linkage of administrative data more generally. Not all data linkages will have the characteristics of this project, but a number of very significant datasets could potentially be unlocked by this approach.

While the addition of the HMRC dataset greatly enhances the research potential of the WED project, there are also wider lessons for ADR UK to take from this collaboration longer term. The successful agreement between ADR UK, HMRC and the WED team rested on three factors:

1. Involvement of HMRC at the early stages in discussing the feasibility and research value of the project
2. Using double-encrypted National Insurance Numbers as the link field, with all matching done within HMRC, which meant a high-quality match but with no identifying information leaving HMRC's systems
3. Sharing data with researchers that was already held in the ONS' secure servers for statistical purposes (i.e., moving data between secure spaces within the organisation, but no additional transfers between organisations)



Earnings and Employees Study 2011

A series of themed datasets are in development within ADR Northern Ireland, with the aim of providing quicker access to data for researchers and facilitating a more efficient approach to data linkage; using data that is linked once and used many times. The Earnings and Employees Study 2011 (EES, previously known as Census-ASHE 2011) linkage is one such dataset which is at an advanced stage of development and will be available to researchers later in 2021.

The EES links together variables from the Northern Ireland version of the Annual Survey of Hours and Earnings (ASHE) for 2011 with aggregated variables from the Census of Population and Census of Households 2011, and Capital Value data from the Land and Property Service. The ASHE sample is comprised of 5,770 distinct ASHE records, approximately 1% of all employees in Northern Ireland who were covered by Pay As

You Earn (PAYE) schemes. This dataset will be an important research resource in establishing pre-Brexit and pre-Covid-19 information on Northern Ireland work force structure and pay differentials. Looking forward, this linkage will be repeated using the 2021 data sources to enable post-Brexit and Covid comparisons.

The EES is part of a UK-wide initiative to provide ethically approved and cross-cutting research to inform the development and monitoring of public policy and to help ensure that decision making is evidence-based and the research is in the public interest. The dataset will be made available to fully accredited researchers in NISRA's secure environment.

Equalities dataset for Scotland

ADR Scotland is working with the Scottish Covid-19 Data & Intelligence Network to develop a research-ready dataset. This dataset will help the Scottish public sector carry out research examining how their services have impacted the ten protected characteristics groups listed in the Equalities Act (2010). Policy leads, researchers and data experts have been brought together to explore potential data sources to determine how a protected characteristics dataset can be designed and developed.

The Covid-19 outbreak in 2020 revealed gaps in the Scottish Public Sector data holdings on ethnicity. The extent of this missing data meant that understanding of the impact of Covid-19 on different parts of society was not as good as it could be. To overcome this, the independent Expert Reference Group on Covid-19 and Ethnicity made a number of recommendations, including developing linkage between healthcare and other datasets. This featured as a commitment in the 2020 Scottish Government Programme for Government.

The initial phase of work focuses on identifying variables that would be necessary to determine the characteristics listed in the 2010 Act. The second phase involves looking at the administrative datasets where these variables would be readily available. The project team has so far identified variables from the 2011 Census, hospital records and education records. Business rules are currently being developed to manage variable differences between datasets.

Given the sensitivities of the subject matter, and in common with the other ADR Scotland data acquisitions, the research-ready dataset will be held securely in Scotland's National Safe Haven, and a series of discussions with the ADR Scotland Public Panel will be undertaken about the use of this data for research in the public interest.

Longitudinal Education Outcomes

In July of this year, the Longitudinal Education Outcomes (LEO) Iteration 1 Strand Extract became available in the Office for National Statistics (ONS) Secure Research Service for accredited researchers to apply to use. ONS played a lead role in negotiating research access to this hugely valuable research asset.

LEO is a de-identified, person level administrative dataset that brings together education data with the employment, benefits, and earnings data of members of the UK public. It comprises four distinct sets of data from the Department for Education, the Higher Education Statistics Agency, the Department for Work and Pension and Her Majesty's Revenue and Customs covering:

- a. **National Pupil Database data** (school and early years data)
- b. **Individual Learner Record** (college and apprenticeship data)
- c. **Higher Education Statistics Agency** (higher education data)
- d. **Earnings, benefits and tax data**

This enables us to know how much graduates of different courses at different universities go on to earn following graduation and this includes either one, two or three years after graduating. The data also includes graduate characteristics such as gender, ethnicity, age when commencing study, and prior school attainment.

This is a unique source of information with the potential to provide transformative insight and evidence on the longer-term labour market outcomes and educational pathways of approximately 38 million learners in England. Being able to analyse these longer-term labour market outcomes together at person level enables a major leap forward in the assessment of education policy and provision, and with greater accuracy than ever before. This in turn means policy can be better informed to support good future outcomes for students.

Three research teams participated in the LEO trial service in spring 2021, to test whether the decision making and approvals processes worked efficiently and effectively. These include a project looking at how the quality of schooling affects long-term labour market outcomes; another focused on understanding earnings outcomes for free school meal students; and a third on identifying effective post-16 education pathways to Level 2 and Level 3 achievement in maths and English at Key Stage 4.



Grading and Admissions Data for England

The Office for National Statistics (ONS) has worked closely with the Office of Qualifications and Examinations Regulation (Ofqual), the Universities and Colleges Admissions Service (UCAS) and the Department for Education (DfE) to reach an agreement to make GRading and Admissions Data for England (GRADE) available to accredited researchers in the ONS Secure Research Service.

Researchers will be able to use this data to find out more about GCSE and A-level results and university admissions and applications in England. The data will enable them to, for example, scrutinise the standardisation model introduced in summer 2020, explore the impact of awarding approaches on students and schools or colleges, and explore the relationship with other measures of attainment.

Research findings produced using this data will be used to allow evidence-based lessons from 2020 assessment, and inform assessment policy on issues such as equality, to the benefit of young people across England.

In September 2021, ADR UK launched a [Research Fellowship scheme](#) to fund some of the first research using this data.

Four newly linked datasets are available for accredited researchers to apply to use as part of the GRADE initiative:

- **Ofqual data**, which includes information on each GCSE and A Level qualification as provided by awarding organisations and taken by pupils in England, regardless of their age, between 2017 and 2020.
- **Ofqual-UCAS data**, which links the Ofqual data to data submitted by applicants to the UCAS undergraduate scheme and by the higher education institution receiving prospective students' applications between 2017 and 2020.
- **Ofqual-DfE data**, which links the Ofqual data to an extract of the National Pupil Database compiled by DfE between 2017 and 2020.
- **Ofqual-UCAS-DfE data**, which links all three datasets together.



ADMISSIONS
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Ministry of Justice – Department for Education linked dataset

The Ministry of Justice (MoJ) Department for Education (DfE) linked dataset was created as the result of a data sharing agreement signed in September 2019, with both MoJ and DfE recognising the importance of building an evidence base on the factors that influence and prevent youth offending.

The de-identified, linked dataset uses information from the National Pupil Database, Police National Computer, DfE and MoJ, and has the potential to be a useful tool for measuring both short- and long-term outcomes for early interventions for violence and crime prevention, such as those funded by the Youth Endowment Fund, the Early Intervention Youth Fund and Violence Reduction Units.

The linked MoJ-DfE dataset enables research into questions such as:

- Is there an association between particular interactions with the education system and offending?
- What are the protective and risk factors for different types of crime?
- How are the relationships between educational and criminal justice outcomes impacted by demographic factors?

The MoJ-DfE linked dataset is the subject of the second ADR UK Research Fellowship funding call. Applications closed in March 2021 and the five successful research fellows will be able to access the data through the Office for National Statistics Secure Research Service later this year.



Public Health Research Database

The Public Health Research Database (PHRD) is a de-identified, person-level dataset comprised of Office for National Statistics (ONS) data from the Census and Mortality records, and NHS Digital data derived from Hospital Episode Statistics and General Practitioner Data for Pandemic Planning and Research (GDPPR).

The dataset includes information about more than 50 million people, including about age, sex, ethnicity, occupation and disability. It also includes dates and causes of death where relevant, and where successful, linkage has been made to ONS mortality data. The Census and Mortality data is then linked to health data from NHS Digital, including Hospital Episodes data covering admitted patient care, outpatients and accident and emergency, and primary care data capturing interactions with general practitioners. The development of the PHRD enables research into health in the powerful socio-economic context of the 2011 Census data. It is also specifically aimed at providing data that is of direct relevance to the Covid-19 pandemic.

Research on health and Covid-19 that uses this dataset is vital in helping to inform pandemic decision making and increase understanding of the pandemic and its effects over time. This includes the National Core Studies programme, which is enabling use of health data and research to inform the UK's near and long-term response to Covid-19, as well as accelerating progress to establish a world-leading health data and research infrastructure for the future.





10. Response to Covid-19

ADR UK has continued to enable vital research in response to the Covid-19 pandemic

The ADR UK programme strategically positioned government and academic partners across the UK to support the management of the Covid-19 pandemic through investments in both data infrastructure and people. For example, the Office for National Statistics' (ONS) joint lead of the [National Core Studies](#) on Data and Connectivity alongside Health Data Research UK, has been supported by ADR UK's funding of ONS' linkage and research access services. .

Similar contributions to Covid-19 data collection, access and research have been made by ADR UK Government and academic partners in the devolved administrations, directly leading to a suite of research outputs based on linked administrative data feeding through to the Scientific Advisory Group for Emergencies (SAGE) and devolved equivalents.

As we move out of the critical and into the recovery phase of the pandemic, ADR UK will play an increasingly pivotal role, as the need for insights based not just on health data, but education, benefits, income, homelessness, crime and justice grows.

ADR England

As a result of the ADR England-funded [Local Data Spaces](#) pilot programme, a series of reports using administrative data to analyse the local impacts of Covid-19 are now accessible to all local authorities in England for free. In the short term, it is hoped these will be used by local authorities and stakeholders to explore the impacts of the pandemic in their localities and inform their pandemic responses. Analyses undertaken as part of the Local Data Spaces programme have also fed into UK SAGE reports. The Local Data Spaces pilot [demonstrated](#) the importance of local-level data and analysis to inform local decision making during the pandemic and beyond.

The [ECHILD project](#) meanwhile involves the creation of a research-ready database linking health, education and social care data for all children in England for the first time. In a longer-term view to pandemic recovery, the data is being used by researchers at UCL to understand how disruptions to services during lockdowns have affected children's health and education. The findings of this work will help government, and the providers of services for vulnerable children, better understand children's needs and see who might be falling through the gaps.

ADR Northern Ireland

ADR Northern Ireland (ADR NI) researchers have worked closely with the NISRA Vital Statistics Unit to generate early evidence on Covid-19 related deaths by reporting on excess mortality since the onset of the pandemic, as well as on pre-existing health conditions associated with Covid-19 deaths. The research has shown how Covid-19 mortality has been unevenly distributed in Northern Ireland with age-standardised mortality rates varying by gender and area. ADR NI researchers are currently undertaking linked data research to establish if Covid-19 has disproportionately impacted people with self-reported health conditions and those from different socio-economic groups.

Researchers are also creating linked datasets in conjunction with the Northern Ireland Department of Health and the Public Health Agency, and in collaboration with Health Data Research UK (HDR UK) National Core Studies at a UK-level, to better quantify the risks and impact of Health and Social Care delivery planning in a current and post-pandemic society.

Researcher Dr Siobhan Murphy collaborated with the Northern Ireland Public Health Agency to monitor and evaluate the vaccination roll out to care homes in Northern Ireland and its impact, with a report presented to the Chief Medical Officer. Dr Murphy, Professor Dermot O'Reilly and Dr Declan Bradley have been collaborating on the National Core Study for Data and Connectivity: Covid-19 Vaccines Pharmacovigilance.

Dr Aideen Maguire and her team are working on a collection of projects exploring the mental health impact of the Covid-19 pandemic, and subsequent lockdowns, on the Northern Ireland population by examining changes in the uptake of psychotropic medications, admissions to psychiatric hospitals and presentations to emergency departments with self-harm or suicide ideation. Trends over the last 10 years will be analysed to quantify any effect associated with the pandemic.

ADR Scotland

Using the experience of building the ADR Scotland Data Linkage Infrastructure, ADR Scotland has been able to rapidly support the development of a system to hold datasets relevant to Covid-19 in Scotland. They have also provided guidance and information governance support for non-health datasets, including helping Scottish Government analysts and researchers as they seek to gain access to other UK government bodies' pandemic datasets by working with ONS.

ADR Scotland researchers have co-produced policy-critical research on Covid-19 with Scottish Government, including community-based Covid-19 mortality; socioeconomic, household and environmental risk factors for Covid-19 in Scotland, and a timely analysis on deaths at home during the pandemic. Professor Susan McVie's research on policing in the pandemic has been cited both in a UK Parliament Joint Committee on Human Rights publication and a Scottish Parliament Justice Sub-Committee on Policing report, and she has received further funding to pursue this research.

In addition, an innovative new household linkage tool – the CHI-UPRN Residential Linkage (CURL) tool – has enhanced understanding of household transmission during the pandemic. It is being further developed by Scotland's Covid-19 data and intelligence network and will be a valuable tool for future administrative data research.

ADR Wales

In March 2020, the ADR Wales work programme pivoted significantly towards the One Wales response to Covid-19, with the team playing a key role in the acquisition of datasets central to the analytical response to Covid-19 in Wales.

One Wales is a cross-institutional partnership formed after the first lockdown in 2020 when timely data-driven evidence was urgently needed for policy decision making to respond to the pandemic.

To date, ADR Wales researchers have been central to key Covid-19 analyses using de-identified data made available by One Wales. Analyses have included a geo-spatial modelling method demonstrating the near real-time prevalence of Covid-19 in Wales, a collection of rapid response projects looking at the experiences of those on the Shielded Patients List in Wales, the first population-level study of Covid-19 transmission risks between pupils and staff in schools, analysis of care home transmission, analysis of vaccination among teachers, and a rapid evaluation of vaccine uptake and blood clotting in Wales.

A number of projects within all of ADR Wales' broader thematic research areas are also incorporating Covid-19 data and research questions. In addition, ADR Wales has worked with the Welsh Government to establish a National Covid Evidence Centre.

Work undertaken by the One Wales team has since been directly informing the Welsh Government Technical Advisory Group (TAG) and UK SAGE.

Office for National Statistics

ONS and its partners have led the way in making high-quality data available for crucial analysis throughout the pandemic in its Secure Research Service (SRS). Working quickly to respond to the needs of the research community, the ONS team have enabled the delivery of timely evidence to support critical local and national policy decisions, as well as supporting vital research to continue.

Over the last 12 months, there has been a significant growth in the number of datasets available to researchers in the SRS, enabling ONS to support the research response to the Covid-19 pandemic by bringing in numerous research-ready datasets. Several new surveys were rapidly rolled out in 2020 and their findings deposited in the SRS, including the 'Coronavirus and the social impacts on Great Britain' and 'Business Insights and Conditions' surveys, which have continued to provide crucial weekly social and economic indicators on the effects of the pandemic over the last year.

Innovative linked administrative and health data assets have also been created, such as the Public Health Research Database. This linked asset, which includes data from the Census 2011, Mortality Data, Hospital Episode Statistics (HES), and GP Extraction Service (GPES) Data, has helped to develop a deeper understanding of the socio-demographic context of infections and mortality.

Other newly available datasets include the regularly updated:

- Coronavirus Infection Survey (CIS)
- NHS Test and Trace data
- Vaccination record data
- CIS linked to Valuation Office Agency (VOA) and Energy Performance Certificate (EPC)

With support from ADR UK funding, ONS has also significantly enhanced the processing power and storage capacity of the SRS which been critical in enabling ONS and partner organisations to carry out critical analyses in the SRS to inform the Government response to the Covid-19 pandemic.

Research using data within the SRS has contributed to national and local policy in response to Covid-19, including being reported directly to SAGE for real-time policy analysis, providing vital evidence on the spread of the Covid-19 virus and its effects on the UK, and informing decisions on Covid-19 business support.

11. Public Engagement

ADR UK is dedicated to ensuring people's data is used in ways that reflect the public's views and demonstrate trustworthiness, and we are pleased to have recently published our new Public Engagement Strategy for 2021-26.

We define our public engagement as a **purposeful set of activities designed to promote an ongoing dialogue with the public about administrative data research, driven by active listening and responding**. This enables us to enrich understanding for everyone and maximise the impact of research, ensuring activities are meaningful and mutually beneficial.

Public attitudes towards administrative data research

A clear understanding of the public's interests and concerns in relation to how administrative data is used for research is important for maximising the impact of the research we enable. Our literature review 'Trust, Security and Public Interest: Striking the Balance' (ADR UK, 2020) found that the public is broadly supportive of the use of administrative data for research as long as three core conditions are met. ADR UK's structure and approach ensures that each of the three conditions are at the core of everything we do.

Three core conditions of public support for sharing administrative data for research



Public interest

Research using administrative data must be in the public interest and demonstrate real potential for public good.



Privacy and security

Data shared for research must be de-identified, with protections in place to prevent it being re-identified or misused.



Trust and transparency

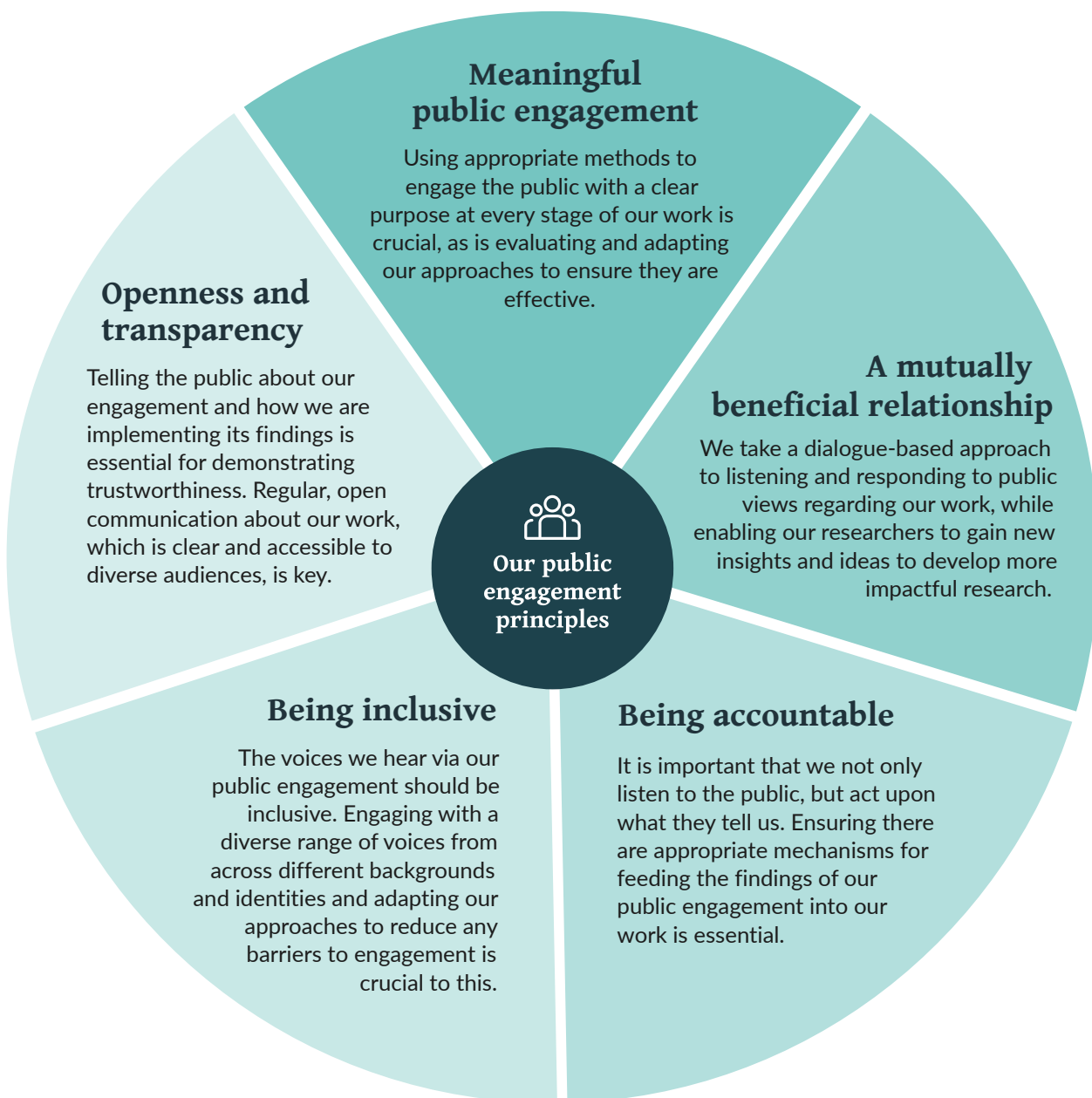
Trust in those holding and using data is paramount; and transparency around how data is held and used is essential.

Our vision for public engagement

ADR UK's mission is to harness the potential of administrative data for research in the public interest. Administrative data is the public's data: therefore, in addition to making sure this data is used ethically and responsibly, we have a duty to engage the public in how and why their data is used at every stage of our work, and to ensure our work demonstrates trustworthiness. Understanding the public's needs, interests and concerns in relation to the use of their data, and shaping research to address these, is also essential for maximising the public benefit of administrative data research.

Our public engagement is underpinned by five core principles, ensuring that our activities are ethical, designed for impact, and aligned to our values and those of the wider discipline of public engagement with research.

ADR UK's Public Engagement Steering Group, formed of representatives from across our UK-wide partnership, meets regularly to share good practice and coordinate public engagement activities.



Our public engagement activities

Over the past year, across the partnership ADR UK has undertaken a number of different activities to include the public in our work:

Public panels

Public panels have provided a platform for members of the public to offer valuable feedback about our work. The SAIL Consumer Panel for Data Linkage Research, for example, established in 2011, has continued to act as a public voice in ADR Wales' work, providing input on governance systems, public engagement plans and research practices. Over the last year, the Consumer Panel has maintained its focus and continuity, meeting five times via videoconferencing to carry out its role discussing and informing the work of various projects.

This year ADR Scotland's Public Panel, set up in 2019, has provided key feedback on emerging Covid-19 projects and helped shape future governance and public transparency for Research Data Scotland, as well as providing feedback on ADR UK's public engagement principles and strategy. ADR Scotland is currently exploring engagement with children and young people and expanding the membership of their public panel.

Public panels for England and Northern Ireland are also currently being developed to facilitate consultation and advice on specific areas research.

Engagement with the third sector

The third sector are both consumers and drivers of administrative data research and, over the last year, engagement with the sector has allowed ADR UK to understand the research needs of specific communities and sub-sectors of society. It has also empowered these groups by offering the opportunity to influence the direction and outcome of research.

ADR Northern Ireland (NI) has worked closely with voluntary, community and social enterprise (VCSE) groups through project steering committees, partnership events such as the ADRC NI Policy Symposium Series, and targeted engaged research with the communities whose lives make up the research datasets. These relationships have allowed ADR NI researchers to make further contacts with elected representatives and policymakers, supporting more impactful research for public benefit.

ADR Scotland has engaged with the third sector in various ways, predominantly through their project advisory groups. These have included a range of stakeholders from charities and organisations including Marie Curie, Poppy Scotland, The Promise and Scottish Care. This engagement has ensured ADR Scotland researchers are engaged with broader policy and practice stakeholders beyond Government and, crucially, the communities they represent.

Third sector engagement in Wales has featured heavily in ADR Wales' newer projects, including Administrative Data | Agricultural Research Collection (AD|ARC) and the EU Settled Status project. Input and guidance from third sector representatives has driven the direction of these projects, with significant representation a staple of the project stakeholder meetings. For example, the AD|ARC project has maintained dialogue with a large number of Welsh and Scottish organisations including the Scottish Tenant Farmers Association, the National Farmers Union Scotland and the National Farmers' Union Wales.

ADR England's new community representative panels are made up of third sector organisations and practitioners working directly with or on behalf of specific groups. The Data First User Representation Panel, established in December 2020, has already facilitated engagement with representatives from organisations working with or for people with experience of the justice system. The Children & Young People Representative Panel, convened in July 2021, will provide opportunities for researchers using children and young people's data for England to engage with third sector and other representatives. Finally, the Wage & Employment Dynamics Public Engagement Strategy Group brings together representatives from organisations that support people in the workforce, from employment charities to trade unions, to help the project team better understand the interests of all parties involved in the workforce in Britain.



12. Governance and Funding

UKRI/ESRC

UKRI
(CEO)

Programme Delivery Board (PDB)
Chaired by ADR UK SRO (ESRC Executive Chair)
Strategic oversight, programme assurance and performance monitoring

ADR UK

ADR UK Strategic Hub
(Director)

Independent research advice and peer review panels

Leadership Committee (LC)
(Directors from each of the partners)
Strategic direction, policy development and partner accountability

Operational Management Group (OMG)
(Project managers)
Operational implementation, monitoring and reporting

Communications Steering Group | **Public Engagement Steering Group**
(Communications and engagement managers)
Communications and engagement coordination and advice (sub-committee of OMG)

ADR UK's governance structures have been designed to be robust, flexible and responsive, to help ensure we are on track to meet our objectives and to guide good practice across the partnership.

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 Officer (SRO) 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 responsible for approving the evidence collected by the Operational Management Group to support self-assessment across the partnership.

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

The Communications Steering Group (CSG) and the **Public Engagement Steering Group (PESG)** act as central points of contact between ADR UK's core partners for the purpose of shaping ADR UK's communications and engagement strategy and public engagement strategy respectively, and coordinating these activities across the partnership.

Performance management, scrutiny and assurance

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

The PMF provides assurance about the outcomes of the investment as a whole, and is based on 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 PMF is built around five levels of performance for 11 core objectives.

Alongside the PMF, programme assurance comes in the form of monitoring and evaluation indicators and other obligations outlined in grant agreements, and shared management documents. Our approach to monitoring and evaluation is underpinned by a detailed Theory of Change for ADR UK. The Theory of Change sets out the key elements in the ADR UK process and the pathways to impact. It specifies the relationship between actions, outcomes and other factors (assumptions, barriers and challenges) that need to be considered in terms of the journey through ADR UK towards:

- the production of valuable administrative datasets and impact-focused research;
- establishing a lasting change in the culture and process through which administrative data is obtained and used in research;
- influencing policy, strategy and practice;
- generating positive impacts for the UK population

ADR UK is subject to external evaluations and assurance from UKRI and BEIS. We have established a set of indicators that we will collect on an ongoing basis, to ensure we are building an evidence base on the progress being made.

Funding

The ADR UK programme, now in its fourth year of operation, began as a pilot investment in summer 2018. In September 2020, £15.3 million of funding was approved for the 2021/22 financial year, to cover the first year of a five-year long-term investment. In September 2021, the remaining £90.12 million of funding was secured from UK Government to continue to grow the programme for a further four years, until March 2026.

This funding, approved by UKRI, the Department for Business, Energy and Industrial Strategy (BEIS) and HM Treasury, ensures policy-relevant data linking and research projects across the UK can continue with no loss of the vital skills, infrastructure and momentum that have been built up during the first three years of ADR UK.



Amanda Solloway
Science Minister



“As we build back better from the pandemic, it’s vital that we support UK scientists and researchers in unlocking the wealth of public sector data which can provide crucial insights into how we improve every aspect of our society, from healthcare to education. That’s why today we’re committing a further £90m of government funding to Administrative Data Research UK, allowing our best and brightest to continue their work in transforming our lives for the better.”

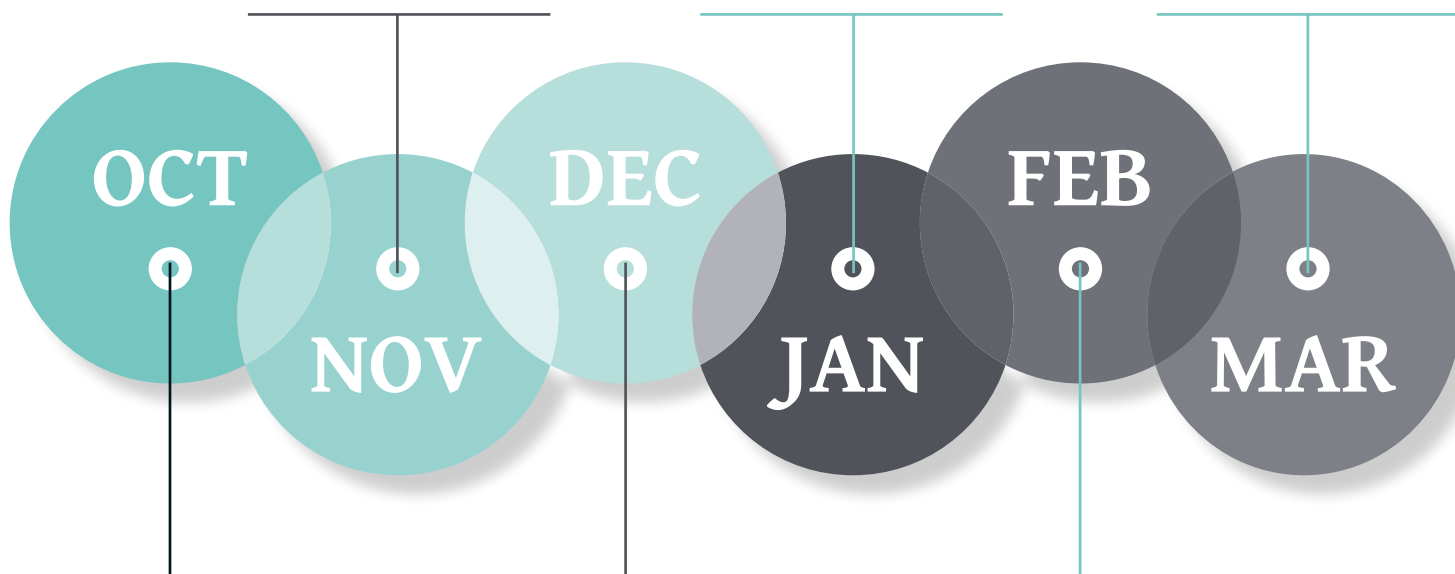
13. Achievements and Milestones

OCT 2020 – SEPT 2021

- ADR Scotland develops new infrastructure to enable faster, more efficient data access for research.
- ADR Scotland, ADR Northern Ireland and ADR Wales hold the 'Public data for public good: Towards a better understanding of children's lives' event to showcase research synergies across the nations.

- ADR UK launches its second funding opportunity, accepting applications for 12-month Research Fellowships to conduct analysis using the Ministry of Justice - Department for Education linked dataset.
- Research Fellows begin work on the methodological developments within administrative data research fellowships.

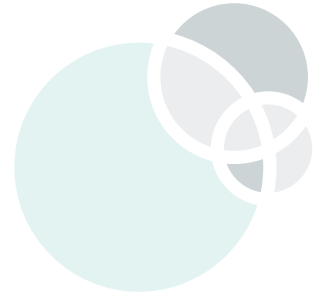
- SCADR holds 'Understanding the dynamics of the nursing workforce' event to explore the potential of Nursing and Midwifery Council data and engage a range of nursing stakeholders.
- ADR NI holds the fourth event in its policy symposium series, titled "Working and caring through Covid: how the pandemic has impacted carers' and workers' mental health".



- ADR UK takes over the Directorship of the [International Population Data Linkage Network \(IPDLN\)](#) for 2021-22.

- ADR UK Strategic Hub holds its first showcase event presenting several flagship Hub-funded projects in partnership with government and academia.
- A report is published applying behavioural insights to the challenge of linking and sharing government administrative data for research.
- ADR Wales analysis of European Social Fund (ESF) data in the UK Secure eResearch Platform (UKSeRP) is underway.

- ADR UK Director Dr Emma Gordon and ADR Wales Co-Director Professor David Ford recognised in [DatalQ's 2021 100 most influential people in data](#).
- Analysis carried out by ADR Wales directly informs the reopening of Welsh schools.
- ADR NI approves work to enable accredited researchers remote access, via the ONS SRS, to de-identified datasets held within the NISRA secure research facility.



- Free Covid-19 impact analysis reports for all local authorities in England become available as a result of the Local Data Spaces programme.

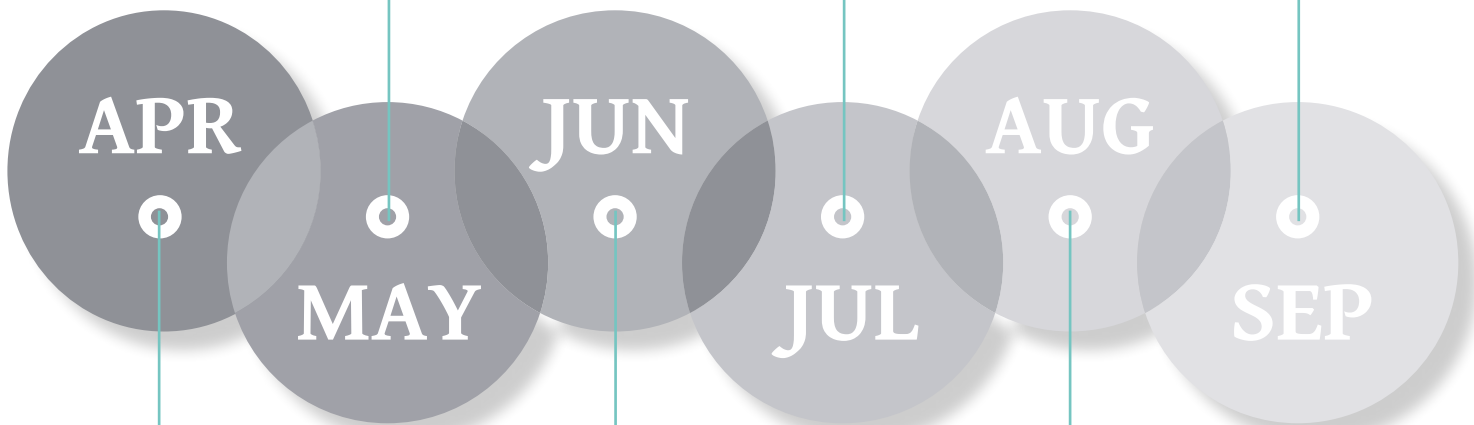
- The de-identified Criminal Courts and Prisons linking dataset becomes fifth output from Data First to be available in the ONS SRS for accredited researchers to apply to use.

- UK Research and Innovation (UKRI) establish a new partnership between Health Data Research UK (HDR UK) and ADR UK to scope requirements for UK-wide data infrastructure.

- The de-identified Longitudinal Education Outcomes (LEO) Iteration 1 Standard Extract (LEO I1SE) becomes available in the ONS SRS for accredited researchers to apply to use.

- ADR UK announces renewed funding until March 2026.

- The ADR UK Public Engagement Strategy for 2021-2026 is launched, showcasing what's already underway and what's yet to come.



- ADR UK hold a virtual event to showcase progress in harnessing the power of administrative data for policy-relevant research, marking the end of ADR UK's successful three-year pilot programme.

- ADR England launches, completing ADR UK's four-nation partnership.

- ADR Wales recognised as an exemplar for data collaboration in the new Welsh Government Digital Strategy for Wales.

- The ESRC/ADR UK co-funded 10DS fellowship scheme is launched.

- The first cohort of ADR UK Research Fellows begin their fellowships analysing magistrates' and Crown Court data.

- ADR NI holds the fifth event in its policy symposium series bringing together researchers, policymakers, data owners and communities, titled 'Using data for better education policy'.

- ADR England publishes the Local Data Spaces pilot evaluation report, demonstrating the importance of access to local-level data and analysis to support local decision making.

- The SafePod Network launches, providing a countrywide network of standardised safe settings to enable approved researchers across the UK to securely access data.

- ADR Wales partner the SAIL Databank retains international information security management system standard ISO27001 certification for a further three years.

- ADR England launches its third funding opportunity for Research Fellowships to conduct analysis using the linked GRading and Admissions Data for England (GRADE).

14. Looking Forward

In September we secured a £90.12 million commitment from the Department of Business, Energy and Industrial Strategy to support a further four years of the ADR UK programme, ensuring policy-relevant data linking and research projects across the four nations can continue with no loss of the vital skills, infrastructure and momentum that have been built up during the first three years of ADR UK.

ADR UK's vision for 2026 is to be the default choice to host linked administrative data from across the entirety of UK and devolved government, making it accessible to a deep pool of trained researchers to generate insights routinely used to inform policy and practice. And now, with thanks to the commitment to a further four years of operation, the ADR UK partnership can continue to focus on contributing toward that vision.

In the next four years, ADR UK will become a key player in training and capacity building around quantitative data analysis skills, to ensure researchers have the appropriate skills and knowledge to analyse even our most complex linked administrative datasets. In September, we published the ADR UK Public

Engagement Strategy for 2021-2026, laying out the foundations for our partnership-wide commitment to maintaining public trust and maximising the public benefit of our work. We also look forward to funding more ADR UK Research Fellowships using newly created data from our flagship data linkage programmes.

Public dialogue is key to understanding the views of the wider public on the use of administrative data for research more broadly. As part of our new Public Engagement Strategy for 2021-26, public dialogues – for example in the form of focus groups and workshops – will help us work in a way that demonstrates trustworthiness to the public and maximises public benefit.



Dr Emma Gordon,
Director, ADR UK



“We are delighted to have secured this continued funding, giving all of our partners the certainty they need to continue vital administrative data linking and research to inform policy decisions, improve public services, and improve the lives of people across the UK. This funding extension is testament to the expertise and hard work of colleagues across the ADR UK partnership. It demonstrates that we now have a tried-and-tested model that works, funding a network of trusted research environments across the UK including the Secure Research Service at ONS, working with government and researchers, and delivering tangible benefits for both public policy and the wider research community.”

ADR England

As the newest member of the partnership, launched in April 2021, ADR England is setting out its trajectory to deliver data-driven research and promote administrative data research skills and capabilities to ensure policy decisions are informed by the best evidence available. The ADR England portfolio will be delivered in close collaboration with the Office for National Statistics (ONS).

The wheels are already in motion to implement the strategic goals outlined in the ADR England Strategy across the next four years, including to:

1. Develop a research-ready data linkage programme which enhances, enriches and makes administrative data more accessible for research for public good.
2. Enable a substantial increase in UK research that crosses public policy boundaries and enhances bodies of knowledge for public good.
3. Increase the number of UK economic and social scientists with the skills to use rich, linked administrative data for public good.
4. Maintain widespread acceptance among publics and data owners of the value of linking administrative data for research.

ADR Northern Ireland

ADR NI is now starting to see government departments making the first approach to ask about extending or developing research ideas. They are also increasingly keen to engage in ADR NI-led dissemination and outreach activities. This is a means of working that we aim to foster, not only as a way of delivering research, but also as a way of developing partnerships beyond academics and policy, such as inter-departmental or agency interaction. Most of our research priorities over the next two years have been developed in collaboration with departments and other stakeholders that constitute our current Project Steering Committees.

We will continue to centre public engagement and involvement in our research, working to deepen the direct involvement of communities in research using their data and impacting their lives. Moving forward, more and more of our research priorities will be shaped by representatives of the public and directly involving them in the set-up, design, delivery and interpretation of the work, paving the way for more robust and wide-ranging impact.

Work has also commenced on the provision of remote access through the ONS Secure Research Service. This will enable Northern Ireland researchers to have easier access to data, and will increase our user base with other UK researchers. A series of themed datasets are planned, with a number already well into development to provide quicker access to data for researchers and allow data to be linked once and used many times. Health research continues to be a priority and we will continue to work with officials in the Department of Health and ONS to establish a legal gateway to facilitate health research in Northern Ireland.

ADR Scotland

The shifts in policy focus and data needs have helped shape their future planned research areas, ensuring their relevance to support understanding of the impact of the pandemic. For example, on young people's education and wellbeing; increasing inequality; patterns of commuting; and workforce planning for health and social care.

Over the coming two years, ADR Scotland will continue cross-cutting research programmes that are aligned with Scotland's National Outcomes and recovery from the Covid-19 pandemic, as well as respond to emerging policy priorities. This will include expanding the current ADR Scotland data acquisition programme and using existing datasets to curate high-value linked data assets. They will also explore new and effective ways to deliver and maintain appropriate data management and curation methods and tools.

ADR Scotland will also develop an entirely new data platform containing administrative data from the 19th and 20th centuries. This will allow the reconstruction of family relationships in modern data, new population cohorts and intergenerational datasets.

To support data access ADR Scotland will implement its plans to streamline the data access process. Researcher capacity across Scotland will also be built through a programme of skills training and raising awareness of administrative data research.

ADR Wales

In the next year, ADR Wales will focus on using their learning and experience to date to deliver intelligent and informing projects on the key policy areas in Wales. ADR Wales will continue to pursue opportunities for UK-wide research collaborations as they galvanise their resources to acquire UK-level data to support these in a research environment that can safely and securely produce research outcomes for the public good.

Using the new Programme for Government as their starting point, onward research themes will be crafted and scrutinised to ensure ADR Wales projects provide maximum policy impact, public benefit and academic excellence.

ADR Wales will ensure their work is aligned to look at the broader impacts of major societal challenges including the impact of Covid-19 on the population, climate change and Brexit, with attention paid to the Welsh Government's commitment to maximise social justice and fairness for all and eliminate inequality at every level of society.

In addition, ADR Wales will be supporting an ADR UK-ESRC funded Fellowship utilising CAFCASS (Children and Family Court Advisory and Support Service) and Ministry of Justice linked data to deliver research on family and child outcomes.

ADR Wales will also continue to facilitate and directly deliver research to support the policy agenda of both the government in Wales and across the UK, paying close attention to the ongoing impact of the pandemic on all aspects of society as outlined by the Covid-19 Five Harms approach.

Office for National Statistics

The ADR UK Pilot investment was a considerable success in unlocking access to data from across Government, where previous initiatives had failed. ONS's role, working collaboratively with the ADR UK Strategic Hub and other partners and colleagues across Whitehall, was a valuable part of that success.

With this renewed investment, we will build on those successes by increasing the range, volume and complexity of data sourced for research. This will play a significant role in the new activities outlined in the ADR UK Vision for 2026, and ensure that ADR UK is aligned to, and integrated with, other government data initiatives we are involved with, notably the Integrated Data Service programme and the National Data Strategy.

ONS will continue to support the strategic objectives of ADR UK, working in collaboration with its partner organisations in all four UK nations, to facilitate the acquisition, linkage and sharing of administrative data held across government departments and other public bodies. ONS will also continue to develop and enhance its Secure Research Service and Research Accreditation Service to maintain confidence that these solutions offer cost-effective, high performance and sufficient capacity to meet future research demands.





Economic
and Social
Research Council

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:

✉ hub@adruk.org

🐦 [@adr_uk](https://twitter.com/adr_uk)

ADR UK
Economic and Social Research Council
Polaris House
North Star Avenue
Swindon SN2 1UJ