Centre for Longitudinal Studies

CLS register of approved DAC projects

Reference	DAC / 263
Project title	The association of childhood ADHD traits and genetic risk with menopausal symptoms at age 51: results from a longitudinal birth cohort study
Institution	Queen Mary, University of London
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	Individuals with ADHD may be more vulnerable to adverse experiences during times of hormonal change, as evidenced by higher risk for poor mental health outcomes associated with the postnatal period and with initiation of hormonal contraception among women with ADHD. Another important time of hormonal change is the menopausal transition, however very little research has examined how women with ADHD experience this hormonal change, due to a historical focus on ADHD as a condition mainly affecting boys. Here we propose to investigate the association between ADHD and the menopausal transition with two approaches: first we will investigate whether ADHD traits, as measured at age 10, are associated with menopausal symptoms at age 51. Second, we will assess whether genetic risk for ADHD, as measured by the ADHD PRS, is associated with menopausal symptoms at age 51. Childhood ADHD traits and genetic risk for ADHD will be assessed as proxies for adult ADHD, as ADHD traits in adulthood are not available. Previous research has found childhood ADHD symptoms are predictive of adult symptoms, and ADHD PRS is associated with ADHD symptoms in the general population. The menopausal transition is a significant concern for women with ADHD, and in the proposed study we aim to shed light on this under-researched topic using this unique longitudinal data source.
Keywords	Administrative health records, consent, linkage, intersectionality, and young people
Date received	31 July 2026
Date approved	3 August 2026

Reference	DAC / 262

Project title	Inequalities in young people's use of NHS mental health services in England from an intersectional perspective: evidence from three linked population studies
Institution	King's College London (KCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	Next Steps and MCS
Abstract	Research shows that lots of young people have mental health problems. Getting help early is important because it can help people feel better. However, some young people are less likely than others to get help. In this project, we will look at who gets help from the NHS. Getting help can be linked to things like being a boy or a girl, or a person's ethnic background. In this project, we will look at these things together. For example, there may be differences between Black and White girls. Or there might be differences between boys from different ethnic backgrounds. We need to look at these differences. This can help us see who does not get the support they need. We can look at these differences by linking survey information with people's NHS records. This lets us compare young people's mental health with the support they get. It also means we can see which groups are less likely to get help. The NHS can use these findings to help more young people.
Keywords	Mental health
Date received	17 July 2026
Date approved	21 July 2026

Reference	**DAC / 260**
Project title	An intersectional analysis of consent to administrative health record linkage among young people in England
Institution	King's College London (KCL)
Application type	Data access
Data access method	Direct release
Cohort	Next Steps and MCS
Abstract	Many studies link (join) survey data with NHS health records. These 'linked' datasets are important for learning about people's health. However, not everyone agrees to their data being linked (data linkage). Knowing who is more or less likely to agree is important. Agreeing could be related to things like people's gender or ethnicity. In this project, we will look at how these things might work together. For example, there may be differences between Black and White girls. Or between boys from different ethnic backgrounds. We will use data from the Millennium Cohort Study, Next Steps, and Understanding Society. We will answer two questions. (1) Are some groups of young people less likely to agree to data linkage? (2) Does this depend on a combination of people's sex/gender, ethnicity, sexual orientation, and how much money

	they have? The findings will help improve future research using linked datasets to learn about health.
Keywords	Administrative health records, consent, linkage, intersectionality, and young people
Date received	10 July 2026
Date approved	14 July 2026

Reference	**DAC / 259**
Project title	Evaluating the long-term impacts of NHS Talking Therapies on mental health, physical health, and labour market outcomes
Institution	UK Government Department of Health and Social Care (DHSC)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	NHS Talking Therapies (NHSTT) is the main NHS service in England for helping people with common mental health problems like anxiety and depression. In 2024/25, about 1.21 million people used the service. Many people feel better soon after treatment, but we do not yet know enough about how people do in the long term. Because NHSTT helps so many people and uses a large amount of public funding, it is important to understand whether these benefits last over time. The Department of Health and Social Care wants to look at the long-term effects of NHSTT on mental health, physical health, and work and employment. The study will also look at how the COVID 19 pandemic affected people's outcomes, as the pandemic had a major impact on mental health, access to services and everyday life across England. The research will use the UK Longitudinal Linkage Collaboration to compare people who received NHSTT with similar people who were eligible but did not receive treatment. The research will begin with a feasibility stage to check whether the data and methods can answer these questions. A full study will go ahead if the data can clearly identify relevant groups and provide reliable results.
Keywords	Mental health
Date received	10 July 2026
Date approved	14 July 2026

Reference	**DAC / 258**
Project title	Measuring and explaining the intergenerational earnings persistence of women and men (Early Adopter Group)
Institution	University of Surrey
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	MCS

Abstract	How much money people earn as adults is linked to how much money their family had when they were growing up. Although many other factors are important, the strength of this link indicates whether people have equal chances to succeed in life. Education is an important part of the story. People from wealthier families are more likely to get better qualifications, which can help them earn more later in life. Our early results suggest this works differently for men and women. Women from richer families tend to earn more mainly because they gain better qualifications. Men from richer families also earn more, but they often do better in the job market even when they have the same qualifications as others. This research helps us understand why family background still affects people's opportunities and whether this happens in different ways for men and women. Our analysis to this point has been based on earnings reported by cohort members in surveys (age 30, 34, 38, 42, 46, 51). Access to administrative data will dramatically improve the accuracy of the earnings measures and allow us to understand patterns in earnings between surveys.
Keywords	Earnings, gender, and income
Date received	6 July 2026
Date approved	7 July 2026

Reference	**DAC / 256**
Project title	Creating Healthy Jobs: Job Quality and Health Inequalities (Early Adopter Group)
Institution	University of Warwick
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	BCS70
Abstract	"This project will look at whether the quality of people's jobs is linked to differences in health across the UK. We know that health varies by income, education and place, but we know less about how working conditions such as job security, pay, workload, control over work and support at work help explain why some groups experience worse health than others. Using large UK studies that follow people over time, mainly Understanding Society and, where feasible, the 1970 British Cohort Study, we will compare people's job conditions with their mental and physical health. We will examine whether the links between job quality and health are different for different groups of people, for example by age, sex, ethnicity and education, and whether they vary by type of job, work sector and broad region. The results will help identify which job conditions are most strongly linked to poor health, and which workers are most affected. This evidence can support practical actions by employers, local areas and government to improve job conditions and reduce health

	inequalities. The work uses existing data only and does not involve contacting or recruiting anyone."
Keywords	Health inequalities, population, public health, and social determinants of health
Date received	21 May 2026
Date approved	6 July 2026

Reference	**DAC / 254**
Project title	Harmonisation of Diet and Nutrition Data in the UK LLC
Institution	Newcastle University
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	BCS70
Abstract	The UK LLC includes diet data from many studies. These studies have collected diet data using different tools. By merging all these data together health scientists will have more powerful data to understand links between diet and disease. This is important as there are gaps in our knowledge. Gaps include how sex, social group and age may change people's diet and health. The dietary data in UK LLC were obtained with different tools. An important first step is to merge these data. We have a proven method to do this. We will first assess the range of tools used. Next, we will assemble a group of experts to agree how to combine data. Finally, we will write computer code to merge the data in a consistent way. When we finish, future researchers will be able to do important studies. This will lead to better diet advice and better health.
Keywords	Diet and nutrition
Date received	13 May 2026
Date approved	20 May 2026

Reference	**DAC / 253**
Project title	Activity Fingerprinting from Wearable Sensors: A Machine Learning Framework for Behavioural Profiling
Institution	University of Salford
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	Wearable activity monitors are now widely used in research and healthcare, but the data collected is often reduced to simple measures such as daily steps, calories used, or time spent sitting. These measures can miss important differences in how people move, rest, and build up activity across the day. This project will develop a new way to describe people's daily activity patterns using data from activPAL activity monitors worn by participants in the 1970 British Cohort Study. Instead of looking

	only at single summary measures, the project will identify a wider range of behaviour patterns and use machine-learning methods to group people with similar activity "fingerprints." These fingerprints will be tested alongside health outcome data to see whether particular fingerprints are linked to specific health outcomes. This could help researchers understand how everyday behaviour relates to health and may support more personalised approaches to prevention and care.
Keywords	Activity fingerprints, activity monitoring, behavioural phenotyping, health outcomes, machine learning, physical activity, and sedentary behaviour
Date received	12 May 2026
Date approved	20 May 2026

Reference	**DAC / 252**
Project title	Raising Generation New Era (R-GNE) Pilot Study
Institution	Anna Freud National Centre for Children and Families
Application type	Data enhancement
Data access method	UCL Data Safe Haven (DSH)
Cohort	GNE
Abstract	This project is a qualitative pilot study – Raising Generation New Era (R-GNE) – which will be linked to the Generation New Era (GNE) pilot. This study will explore how parents and carers of babies experience family life in the early years and how these relate to early social and emotional development. In-depth interviews will be carried out with parents and carers, and will focus on how their relationship with their baby is developing, their hopes for their children, everyday parenting, work and care, and contact with services. The study will help us understand aspects of family life that are difficult to capture through survey questions alone. We will invite a small and diverse group of families from the GNE pilot to take part in interviews. The main purpose of this pilot is to test and improve recruitment procedures, participant materials, and interview methods for a larger future qualitative study. We will also examine how different interview formats, including joint, separate, online and in-person interviews, work in practice.
Keywords	GNE, interview methods, parent-infant, pilot, qualitative, and social and emotional development
Date received	1 May 2026
Date approved	6 May 2026

Reference	**DAC / 251**
Project title	BMI Change During the Life Course: Evaluating the Determinants and Adverse Health Effects
Institution	University College London (UCL)
Application type	Data access

Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, and MCS
Abstract	We want to find out how and why people's body mass index, a measure of weight relative to height, changes from their teenage years into middle age, and what health problems these changes might cause. We will use information from British studies that have followed groups of people since birth, that are linked to their medical records. This will allow us to track individuals' weight over time and see how factors such as family background, diet, and emotional wellbeing influence different weight patterns. We will then create and test risk ratings based on people's weight and other characteristics in their teenage years to predict who is more likely to become overweight or obese as an adult. Finally, we will examine and quantify the extent to which lifestyle factors like physical activity, diet, and smoking habits directly impact the risk of developing conditions such as diabetes and heart disease over the life course. Our findings will help inform the design of better prevention programmes, especially for communities with higher rates of obesity and related diseases, offer support to people at higher risk sooner, and guide future public health policy to improve health for everyone as they age.
Keywords	BMI, health, and population and systems medicine
Date received	30 April 2026
Date approved	5 May 2026

Reference	**DAC / 250**
Project title	The Long-Term Effects of Breastfeeding on Child Outcomes
Institution	Lancaster University
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	While previous attempts have attempted to find causal links between breastfeeding and cognitive outcomes for the child, it is unknown if these effects are substantiated further in life. This project will use new and novel instruments to determine the causal effect of breastfeeding on later life educational outcomes. We will also explore the impacts on risk-taking behaviours, mental health, physical health, and explore the mechanisms through which these may occur, such as socioeconomic status, and family dynamics.
Keywords	Breastfeeding, cognitive ability, education, health, and socioeconomic status
Date received	1 April 2026
Date approved	26 April 2026

Reference	**DAC / 248**

Project title	Health Trajectories and Service Utilization Patterns Among Children with Special Educational Needs: A Multi-Cohort Analysis Using Linked Health Records
Institution	Cardiff University
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	MCS
Abstract	Children with special educational needs (SEN) represent a substantial and growing population, with over 2 million of pupils identified with SEN in England and Wales identified at some point during schooling. While research documents poorer mental health, educational, and social outcomes, the healthcare pathways underpinning these disparities remain poorly understood. Using the Millennium Cohort Study linked to NHS records, this project examines healthcare utilization trajectories among children with SEN across ages 4–18. Through longitudinal multilevel models, interrupted time series, and sequence analysis, it will characterize service use patterns, identify critical periods of need, and inform integrated care models.
Keywords	Health, SEN, and special educational needs
Date received	23 March 2026
Date approved	25 March 2026

Reference	**DAC / 247**
Project title	The role of adverse experiences in shaping racial inequalities in treatment for mental illness
Institution	University of Manchester
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	BCS70, Next Steps, and MCS
Abstract	This project investigates the extent to which adverse work-life experiences influence racial inequalities in treatment for mental illness (MI). We are also interested in understanding how racial inequalities vary when other social groups are considered (e.g. women versus men). Applying advanced quantitative methods to linked data from NHS England and selected Longitudinal Population Studies, we anticipate worse treatment experiences and outcomes, particularly for Black and Asian groups, alongside heterogeneity between intersections of social groups. Findings will highlight the role of structural disadvantage in shaping racial inequalities in treatment for MI.
Keywords	ACE, adverse childhood experience, racial inequality, mental health, mental illness, and public health
Date received	23 March 2026
Date approved	25 March 2026

Reference	DAC / 246
Project title	Parental Work Flexibility and Child Development
Institution	Washington University in St. Louis (United States)
Application type	Data access
Data access method	Direct release
Cohort	MCS
Abstract	Parental investments are central to children's development, yet parents in different occupations face very different time demands and income risks. This paper examines how parental occupational choices — particularly self-employment — shape cognitive and non-cognitive skill formation in early childhood. Using data from the British Household Panel Study and the Millennium Cohort Study, I document that self-employment becomes more prevalent following childbirth and partially offsets the earnings penalty mothers experience in paid employment. With a young child, time investments differ sharply by occupation and gender: self-employed fathers maintain their pre-child balance of work and home production, while self-employed mothers work fewer hours and devote more time to home production. I develop and estimate a life-cycle model of occupational choice with child skill production to address self-selection. Policy experiments show that childcare subsidies generate substantially larger improvements in child outcomes than business subsidies, which effectively draw mothers into self-employment but produce skill gains an order of magnitude smaller.
Keywords	Cognitive and non-cognitive skills, human capital formation, occupational choice, parental investments, and structural models
Date received	17 March 2026
Date approved	18 March 2026

Reference	DAC / 245
Project title	The Relationship Recession: Are Gen Z really retreating from couple intimacy?
Institution	University College London (UCL)
Application type	Data enhancement
Data access method	Direct release
Cohort	Next Steps and MCS
Abstract	
Keywords	Generational change, inequality, intimacy, sexuality, and young people
Date received	19 January 2026
Date approved	17 February 2026

Reference	DAC / 244

Project title	From the First 1,000 Days to Adolescence: Early Parent-Child Relationships and Socio-Emotional Development Trajectories Among Children With and Without Disability
Institution	University of Luxembourg (Luxembourg)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This study looks at how early relationships between parents and their children shape young people's emotional and social development as they grow up. Using information from the Millennium Cohort Study, we focus on the first 1,000 days of life (from birth to age 3), a period known to be especially important for children's development. We will examine how warm, positive, or sometimes challenging interactions between parents and children in these early years relate to children's later wellbeing, from age 5 to 17. We are also interested in whether these patterns differ for children with and without disabilities, recognising that families may face different experiences and challenges. The study will follow children's development over time, taking into account factors such as parents' psychological wellbeing. Overall, this research aims to improve understanding of how early family experiences influence children's long-term emotional and social outcomes, helping to inform better support for families.
Keywords	Early childhood (first 1,000 days), disability, longitudinal trajectories, Millennium Cohort Study, parent-child relationship, and socio-emotional development
Date received	21 January 2026
Date approved	2 February 2026

Reference	**DAC / 243**
Project title	Integrating omics data to support future family-based genetic studies
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, and MCS
Abstract	This project will help prepare genetic and omics data for future research using the UK Longitudinal Linkage Collaboration. Omics data are large sets of biological information, such as data about genes or proteins. The UK Longitudinal Linkage Collaboration is a safe system where approved researchers can study existing research data. We will move these data into the safe system. We will check their quality. We will also test whether the data and software work properly.

	This project will not make new claims about children's health, education, or wellbeing. Its aim is to prepare the data for future studies. In future, these data may help researchers study how genes, families, and wider society shape health, education, and wellbeing. This is important because genetic studies can sometimes confuse the effects of biology with the effects of family or social background. Better data and methods can reduce this risk. They can help make future research more accurate, fair, and useful.
Keywords	Cellular medicine, molecular medicine, and methodological
Date received	19 January 2026
Date approved	9 June 2026

Reference	**DAC / 242**
Project title	Evaluating the performance and bias of Electronic Health Record transformers for predicting cardiovascular outcomes following COVID-19
Institution	University of Bristol
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	AI is likely to be a big part of healthcare in the future. This includes dealing with future pandemics. AI models created using patient data might be unfair. Patient data is collected when people contact doctors for support. This means AI models might not work as well for people who don't ask doctors for help. We can't test if these models are unfair using just patient data, because we don't know what is missing. Longitudinal Population Studies (LPS) contain extra data about people's health. This extra data could help us test the fairness of AI models. COVID-19 is not well-recorded within patient data but is well-recorded in LPS. Heart attack and stroke are well-recorded within patient data. We will create an AI model using patient data. We will use the model to predict heart attack and stroke risk. We will see if the model is worse when COVID-19 is missing. We will then add the missing COVID-19 records using LPS data. We will see if this makes the model fairer. We will also compare it to an existing non-AI model that doctors already use. This will show how trustworthy AI is when patient data is incomplete.
Keywords	Electronic Health Record (EHR)-transformers, health, and natural language models
Date received	12 January 2026
Date approved	9 April 2026

Reference	**DAC / 240**

Project title	Childhood attention deficit hyperactivity disorder, health behaviours, and adverse health outcomes in adulthood in the 1970 birth cohort study
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	While people with attention deficit hyperactivity disorder (ADHD) appear to have a higher burden of psychiatric disorders such as depression and substance misuse, the impact of this neurodevelopmental disorder on physical illness is uncertain. There is a strong prima facie case to anticipate a raised risk of an array of adverse physical outcomes, including vascular disease, injury (intentional and unintentional), and selected cancers. Associations are beginning to emerge in the scientific literature. The correlations between childhood ADHD and these health endpoints may, at least in part, be ascribed to the observation that people with ADHD tend to have a higher prevalence of unfavourable health behaviours than unaffected controls: they are more likely to smoke, be obese, sedentary, and consume harmful levels of alcohol. Following comprehensive and methodical processes, colleagues from University of Cambridge have developed a childhood ADHD symptom score in members of the 1970 birth cohort. Alongside other data from across the life course, the study is therefore well-placed to address some of these described inter-relationships.
Keywords	ADHD, illness, and risk factors
Date received	5 January 2026
Date approved	6 January 2026

Reference	**DAC / 238**
Project title	Causal effects of childhood poverty and socioeconomic conditions on adult health
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, and MCS
Abstract	We want to understand whether growing up in poverty affects people's health when they become adults. We are investigating how children's experiences of financial hardship shape their education, job opportunities, and health throughout their lives. We will follow people from birth to adulthood using existing data including Understanding Society and other UK datasets. This lets us see whether poverty directly harms health or whether effects are partly explained by disrupted education and limited opportunities. Linked health records show what health conditions people develop over their lifetime, and linked socioeconomic data capture changes

	in schooling and work. This research will help governments design policies that reduce child poverty and support children to succeed in education, improving both health and life chances. We will put our results into a computer model that can test different ways of increasing household income (e.g. changes to benefits/tax credits/minimum wage) and examine when interventions work best during childhood. The findings will help policymakers decide which measures to prioritise, and when to act, to build healthier and fairer societies.
Keywords	Population and systems medicine
Date received	5 December 2025
Date approved	17 December 2025

Reference	**DAC / 237**
Project title	Parental social class and children's educational outcomes: A longitudinal analysis of the Millennium Cohort Study and administrative data
Institution	University of York
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	The examination of social class inequalities is a central research theme within the sociology of education. This project combines innovations in data and advances in statistical methods. The project will tackle the difficult challenge of developing suitable measures that reflect educational outcomes and the wide array of school-level qualifications throughout the school life course. In addition, the project will appropriately measure social class and other inequalities in contemporary families. A primary analytical aim is to understand social class inequalities in education within a multifaceted longitudinal context.
Keywords	Administrative data, educational outcomes, GCSE, Millenium Cohort Study, NS-SEC, and social class
Date received	4 December 2025
Date approved	5 December 2025

Reference	**DAC / 236**
Project title	Early environments, birth weight, and school attainment in the Millennium Cohort Study
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	Being born preterm or with low birth weight can affect a child's development and school performance. Early exposure to air pollution may worsen outcomes, while access to green spaces and

	supportive home environments may help children do better. This study uses UK cohort and population data to explore how birth weight and environmental factors influence school attainment and whether positive environments can reduce disadvantages for children at risk.
Keywords	Birth outcomes, educational attainment, green space, housing, and school absence
Date received	21 November 2025
Date approved	24 November 2025

Reference	**DAC / 235**
Project title	20-minute neighbourhood type and health
Institution	University of Glasgow
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS and MCS
Abstract	20-minute neighbourhoods are an increasingly popular idea in planning in the UK and worldwide. They aim to support people to live well locally, with key services and amenities—such as shops, green spaces and public transport—reachable within a 20-minute round trip from home. This approach is thought to help reduce carbon emissions and improve fairness in access to everyday needs. Some policy bodies also argue it will improve health and reduce health inequalities, however, there is currently little evidence for these impacts. We have created a classification of neighbourhood types across Britain based on the number, range, and mix of local services available within a 20-minute round trip walk of each postcode, and we will link these neighbourhood types to existing cohort studies to explore whether people's health differs depending on what kind of 20-minute neighbourhood they live in.
Keywords	Health, inequalities, local services, neighbourhood, and planning
Date received	12 November 2025
Date approved	9 December 2025

Reference	**DAC / 234**
Project title	The prospective association between greenspace exposure and emotional symptoms from childhood to adolescence
Institution	University of Exeter
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Many young people experience depression and emotional problems, which can lead to adverse future outcomes if they remain untreated. The aim of the proposed study is to understand if growing up in a greener neighbourhood can protect their mental

	health. We will link data from the Millennium Cohort Study with satellite data measuring the greenness of where cohort members lived. Our study will explore if more greenspace nearby is linked to fewer emotional difficulties. We will also explore how greenspace might work – for example, by providing more opportunities for peer relationships? Finally, we will see if these benefits are different for boys and girls, for families with different financial backgrounds, or for families residing in different types of local environments (e.g., heavily built-up city areas, or greener, rural settings). This research could provide valuable evidence for policymakers and city planners for creating healthier environments for children and adolescents.
Keywords	Childhood and adolescence, depressive symptoms, emotional difficulties, gender, greenspace exposure, Millennium Cohort Study, parental psychological distress, peer relationships, and socio-economic status
Date received	14 October 2025
Date approved	11 November 2025

Reference	**DAC / 233**
Project title	OSC-ENTRUST Driver 2, UKDS-SANE Pilot - Testing the SURF Secure ANalysis Environment (SANE) for UKDS Secure Access: Feasibility, Usability, and Process Evaluation.
Institution	GESIS – Leibniz Institute for the Social Sciences (Germany)
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	Next Steps
Abstract	This application is for an evaluation of infrastructure and processes, not a substantive research study. EOSC-ENTRUST Driver 2, UKDS-SANE Pilot will be testing the SURF Secure ANalysis Environment (SANE) for UKDS Secure Access, its feasibility and usability as well as evaluating the process. We aim to test, in practice, whether a provider-managed, auditable hosting arrangement, in which the UK Data Service (UKDS), as Data Service Provider, lawfully transfers/ingresses licensed real Controlled Data into SANE (operated by SURF, Netherlands, EEA) and retains full provider control, can deliver secure, cross-border access under the Five Safes Framework. Historically, cross-border remote analysis in social sciences has been impossible or difficult, with remote desktop access via Safe Rooms being a newer option enabled by initiatives such as the International Data Access Network (IDAN) and SSHOC (The Social Sciences and Humanities Open Cloud project). This closed EOSC-ENTRUST Driver 2 Pilot assesses whether SANE can serve as an additional secure setting for UKDS and other Trusted Research Environments by validating end-to-end operations: licensing and provider-managed ingress, interactive analysis (Tinker SANE), non-

	interactive analysis/ code-only peer review (Blind SANE), controlled import of external artefacts, and SDC-governed egress.
Keywords	Methodological project
Date received	8 October 2025
Date approved	8 October 2025

Reference	**DAC / 232**
Project title	Evaluating Data Quality in the Linked BCS70 – HES Dataset
Institution	University of Manchester
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	The integration of survey and administrative data can provide access to rich and deep linked datasets for applied and methodological researchers alike. However, the quality of linked survey and administrative datasets should be examined to evaluate potential sources error in the representational and measurement inference process. This project seeks to evaluate data quality in the linked 1970's British Cohort Study (BCS70) and Hospital Episode Statistics dataset, using a replicable data quality framework established by Silverwood et al. (2024).
Keywords	Administrative data, data integration, data linkage, data quality, survey data
Date received	12 September 2025
Date approved	7 October 2025

Reference	**DAC / 231**
Project title	Did New Labour's Social Policies Change the Life-courses of Millennials?
Institution	University of Nottingham
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	BCS70, Next Steps, and MCS
Abstract	This project explores the long-term impact of New Labour's social and economic policies on the life-courses of those born in the early-1990s and -2000s using the 1970, Next Steps and Millennium Cohort Studies. We are especially focused on those cohort members who grew up in New Deal for Communities (NDC), Sure Start Local Partnerships (SSLPs) (both of which ran in England) and Social Inclusion Partnerships (SIPS) (in Scotland). We will assess if New Labour's general policies (Working Family Tax Credits, Education Maintenance Allowance) and the area-based interventions (such as NDCs, SSLPs and SIPs) affected the familial, educational and economic contexts for these children, and the extent to which these policies shaped their attitudes, engagement

	in 'anti-social behaviour', offending, drug use, and their risk of becoming socially excluded. The objective is to explore the ways in which a government's social and economic agenda can shape the lives of those who grow up during its tenure.
Keywords	Crime, Blairism, legacy effects, New Labour, politics, and social and economic policies
Date received	2 September 2025
Date approved	14 October 2025

Reference	**DAC / 230**
Project title	Early Risk Factors Influencing Educational Attainment for Children with Special Educational Needs: findings from Millennium Cohort Study
Institution	University of Reading
Application type	Data enhancement
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	This study will examine how the early home environment at age 3 influences children's later educational outcomes and the likelihood of being identified with Special Educational Needs (SEN). Using data from the Millennium Cohort Study, the research will explore whether specific aspects of the home environment—such as learning opportunities, parent–child interaction, and discipline practices—predict academic performance at ages 5, 7, 11, and 14. It will also investigate whether these factors are linked to SEN identification and how this may shape educational trajectories. The findings will provide insights into how early family settings can support or hinder learning, with the aim of informing early intervention and education policy. Access to the HOME-SF variables is essential for this analysis, as they provide unique and detailed measures of children's home environments, including sensitive items that are not available in the public dataset.
Keywords	Early childhood risk factors, educational attainment, Millennium Cohort Study (MCS), and Special Educational Needs (SEN)
Date received	11 August 2025
Date approved	21 August 2025

Reference	**DAC / 229**
Project title	Do Early Drawings Predict Later Life Outcomes? Exploring the Role of Developmental and Socioeconomic Determinants
Institution	Stockholm University, Sweden
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	This project plans to use novel tools from artificial intelligence to analyse and code the drawings of the 'Draw-a-Man-Test' in the

	BCS70 Age 5 data. Image analysis and other coding approaches would be used to identify patterns. These patterns will be then correlated with concurrent measures of child development. We also aim to explore whether specific features in the drawings at age 5 are predictive of later-life outcomes such as employment, earnings, and overall well-being at ages 10, 16, 26, 30, 34, 38, 42, 46 and 51. Finally, we will explore if there are gender gaps in these drawings as participants were asked to both a man and a woman.
Keywords	Child development, drawings, gender gaps, and life-course outcomes
Date received	9 July 2025
Date approved	11 July 2025

Reference	**DAC / 228**
Project title	Investigating the Association Between Sit-to-Stand Velocity and Stepping Patterns with Health Outcomes
Institution	University of Sherbrooke, Canada
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	Physical activity has well known benefits to preserve overall health as we age. Physical activity can prevent and reverse frailty, defined as the vulnerability to adverse health outcomes. Beyond simply investigating physical activity, stepping cadence and postural transitions can provide insights into health. Newly developed programs permit extraction of specific metrics during postural transitions including sit-to-stand velocity, or the speed at which an individual moves from sitting/lying to standing as well as the speed of stepping. In laboratory conditions STSv (sit-to-stand velocity) and gait speed are associated with better physical performance and balance. Limited evidence exists to examine STSv and cadence in free-living conditions, which supports that lower STSv is associated with worse health (Parkinson's, stroke, etc.). We intend to extract STSv and stepping cadence from accelerometer data in the 1970 British Cohort Study to investigate the association with health outcomes, such as frailty, cardiovascular health, and cognitive outcomes.
Keywords	Accelerometery, cadence, frailty, habitual physical behaviours, and postural transitions
Date received	9 June 2025
Date approved	8 July 2025

Reference	**DAC / 227**
Project title	Impact of physical activity on physical fitness and attention deficit hyperactivity disorder symptoms: A focus on the moderation effect of greenspace
Institution	Imperial College London

Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Attention deficit hyperactivity disorder (ADHD) in children and young people is of great concern for public health because ADHD can potentially have life-long consequences. ADHD can impact cognition and emotional function and can result in lower school performance. Some studies also suggest that physical health including physical fitness and obesity, is closely related to ADHD symptoms. The severity of ADHD symptoms has been linked to both genetic and environmental factors. There is scientific evidence that, for example, increased physical activity and greenspace can interact with each other and have a protective effect on ADHD. Therefore, this study aims to examine the impact of physical activity on ADHD symptoms and physical fitness considering the moderation effect of greenspace on the impact of physical activity.
Keywords	ADHD, greenspace, physical activity, and physical fitness
Date received	23 May 2025
Date approved	10 June 2025

Reference	**DAC / 226**
Project title	The Risk Prediction on Winter Respiratory Diseases and the Burden on Healthcare Systems: Pre-, During, and Post-COVID-19 Pandemic
Institution	University of Edinburgh
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	Attention deficit hyperactivity disorder (ADHD) in children and young people is of great concern for public health because ADHD can potentially have life-long consequences. ADHD can impact cognition and emotional function and can result in lower school performance. Some studies also suggest that physical health including physical fitness and obesity, is closely related to ADHD symptoms. The severity of ADHD symptoms has been linked to both genetic and environmental factors. There is scientific evidence that, for example, increased physical activity and greenspace can interact with each other and have a protective effect on ADHD. Therefore, this study aims to examine the impact of physical activity on ADHD symptoms and physical fitness considering the moderation effect of greenspace on the impact of physical activity.
Keywords	COVID-19 and health
Date received	16 May 2025
Date approved	22 May 2025

Reference	DAC / 225
Project title	Harnessing Generative AI for questionnaire design, evaluation and testing
Institution	London School of Economics and Political Science (LSE), University of London
Application type	Data access
Data access method	Direct release
Cohort	Next Steps
Abstract	Many surveys, including the decennial census, need to measure the occupations of respondents. This is done for a wide number of reasons relating to understanding the changing labour market and the performance of the economy. Yet measuring occupation is a very difficult task because people cannot generally tell you what their occupation is. Instead, most people think in terms of their job title, the industry they work in and the tasks they carry out. To measure occupation accurately, this information must be recorded from survey respondents then 'translated' into occupations through a detailed process of classification or 'coding'. This coding task has traditionally been carried out by teams of human coders, which makes it time-consuming, costly, and error-prone. In this project our objective is to develop a new tool using generative Artificial Intelligence (AI) to carry out the coding task. Generative AI is very well suited to this sort of task because it can quickly process very large volumes of text and classify it in complex ways. We will assess the ability of the new tool to accurately code occupation data by comparing its performance with codes applied by trained human coders on the Next Steps study.
Keywords	AI, Large Language Models, and occupation coding
Date received	9 May 2025
Date approved	9 May 2025

Reference	DAC / 224
Project title	MCS age 23 Initial Findings Project
Institution	University College London (UCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	One of the key deliverables of the MCS8 core ESRC grant and co-funding is a set of substantive initial findings from the latest sweep (MCS Age 23) across all aspects of data collected on policy-relevant topics, including: post-16 transitions and destinations; mental health and wellbeing; risky behaviours, offending and victimisation; families and parenting. The work will first be published in a set of initial findings briefings to accompany data deposit and also in CLS working papers (and latterly) in academic journal articles.

	The planned work will have a strong methodological element, for example improving data quality by correcting any errors that we find in our data before it is deposited at UKDS, and the generation of weights and a suite of derived variables. This work will also improve our knowledge and understanding of the new data, which will help improve the user support we are able to provide through queries, training and user guides.
Keywords	Families and parenting, mental health and wellbeing, offending and victimisation, post-16 transitions and destinations, and risky behaviours
Date received	24 April 2025
Date approved	24 April 2025

Reference	**DAC / 223**
Project title	The association between breastfeeding and subsequent adolescent mental health problems
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release
Cohort	MCS
Abstract	This study explores whether breastfeeding in infancy is linked to better mental health during adolescence. There is some evidence that breastfeeding provides psychological benefits, supporting brain development and socio-emotional wellbeing. Some research suggests a link between breastfeeding and later mental health, but results are unclear. A key challenge is that breastfeeding is more common in families with higher incomes and education levels, which also influence mental health. To address this, we will use an approach that separates the effects of breastfeeding from other factors. Research shows babies born on weekends are less likely to be breastfed due to differences in the support available. We will use this naturally occurring difference in day of birth which goes onto influence breastfeeding rates to see whether breastfeeding itself plays a role in reducing depression and self-harm later in life, independent of other factors like family background. This approach has previously been used to investigate the relationship between breastfeeding and early childhood cognitive development in this cohort.
Keywords	Breastfeeding, Mental Health, Adolescence, Depression, Self-Harm, Instrumental Variable, Millennium Cohort Study
Date received	27 March 2025
Date approved	14 April 2025

Reference	**DAC / 221**
Project title	llc_0037: The role of sociodemographic factors in attendance at cancer and cardiovascular disease screening and in emergency

	cancer diagnosis before, during and after the COVID-19 pandemic in people with severe or complex mental illness
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	People with severe or complex mental illness (SCMI) are less likely to attend cancer screening and more likely to experience delays in cancer diagnosis. Cardiovascular risk factor screening is also lower than for people with other conditions that put them at risk of cardiovascular disease. We aim to investigate the impact of sociodemographic factors on attendance at screening programmes and on emergency cancer diagnoses in patients with severe or complex mental illness, and whether the impact of these factors changed during the COVID pandemic. Findings from this research will inform strategies to improve screening access and uptake in this population.
Keywords	COVID-19, diagnosis, mental health, and screening
Date received	3 March 2025
Date approved	3 March 2025

Reference	**DAC / 220**
Project title	Understanding associations between ADHD traits in childhood and outcomes across the life course
Institution	University of Liverpool
Application type	Data access
Data access method	Direct release
Cohort	BCS70
Abstract	About 2.6 million people in the UK have Attention Deficit Hyperactivity Disorder (ADHD). ADHD affects how the brain works, making it difficult to pay attention and control impulses. Little is known about the experiences of people with ADHD across the life course up to midlife. The aim of this research is to understand the relationship between ADHD traits in childhood and a range of outcomes (e.g. mental and physical health problems) up to middle age. To do this, we will use data from the BCS70 cohort and run a range of statistical analyses to understand the potential longer-term impacts of ADHD.
Keywords	ADHD, life-course, longitudinal, mental health, midlife, neurodivergence, physical health, quality of life, and wellbeing
Date received	10 February 2025
Date approved	14 April 2025

Reference	**DAC / 219**
Project title	Secondary data analyses of the Early Life Cohort Feasibility Study
Institution	University College London (UCL)

Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	ELC
Abstract	As part of the outputs for the Early Life Cohort Feasibility study, we will conduct survey methods research as well as research on initial findings of the data. These will include methodological findings from incentive experiments, the data linkage consent approach experiment, saliva collection, and initial findings, including substantive cross-cohort comparisons. The research will be used to inform design decisions for a possible Main Study as well as for the other cohorts, and in order to maximise the quality of the data we collect and will make a leading contribution to best practice in survey methods both nationally and internationally.
Keywords	Cross-cohort comparison, early childhood, experiments, secondary analysis, and survey methodology
Date received	6 February 2025
Date approved	21 February 2025

Reference	**DAC / 218**
Project title	llc_0035: External validation of SNOMED-based mental health phenotypes, and their patterns of clinical presentation in the context of the COVID-19 pandemic
Institution	Swansea University
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	Our project aims to understand how visits to primary care for mental health issues, like depression and anxiety, changed over time due to the COVID-19 pandemic. To do this, we will first improve how we identify mental health conditions in medical records. We will use SNOMED CT—a detailed dictionary of clinical codes for various diseases, symptoms, and treatments. We have created lists of these codes specifically for mental health diagnoses. As part of the project, we will first check how well these code lists (called "phenotypes") reflect real diagnoses by comparing them to other verified sources (cohort data). This will allow us to improve our phenotypes to better capture mental health records in primary care. Once our phenotypes are completed, we will examine how primary care visits for mental health have evolved over time, comparing the period before, during, and after the pandemic. To strengthen our findings, we will use data from all available primary care records, not just a specific group of people (specific cohort data).
Keywords	Clinical phenotypes, COVID-19, and mental health
Date received	23 January 2025
Date approved	29 January 2025

Reference	DAC / 217
Project title	Choosing Well for Retirement: A Multi-Cohort Study of Education, Career, and Savings Decisions in the UK
Institution	University of St Andrews
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	The research project's aim is to understand the implications of education choices on late-career labour market outcomes and retirement planning. We seek to isolate the consequences of university field of study choice from related individual characteristics which directly affect work and savings decisions: early life achievements, family background, preferences, health shocks and family structure. The core of our methodology is a structural model of labour supply and savings decisions over the life cycle, which we estimate using data from the NCDS cohort study. The results of this project will be of particular use to government bodies and charities that support individuals into retirement. In addition to identifying determinants of retirement savings in a large-scale UK cohort, our work will deliver predictions about the evolution of older-age inequalities in the decades ahead and the costs associated with ensuring dignity and quality of life for all.
Keywords	Education, field of study, life cycle, retirement, and savings
Date received	15 October 2024
Date approved	9 January 2025

Reference	DAC / 215
Project title	The Association Between Early Parent-Child Interactions and Child Behavioural and Emotional Outcomes in Families of Children with Intellectual Disabilities
Institution	University of Birmingham
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Children with intellectual disabilities typically display fewer prosocial behaviours and increased rates of behaviour and emotional problems compared to typically developing children. However, little research has explored the development of children's prosocial behaviour, or child behaviour and emotional problems, during childhood in families of children with intellectual disabilities, starting from the point in which they first begin to emerge (i.e., by the age of three years). The quality of early parent-child interactions may be particularly important for the development of child prosocial behaviour over time in these families.

	This study aims to address the following research questions: i) How does child prosocial behaviour, child externalising behaviour problems, and child internalising behaviour problems, respectively, change over time during childhood? ii) What early parent-child factors are associated with the development of children's behavioural and emotional outcomes over time during childhood? We will analyse six Waves of data (Waves 2-7) from the Millennium Cohort Study. This study will offer insights into the development of children's behavioural and emotional outcomes during childhood in this group of children, and also the potential role of early parent-child interactions in shaping later child behavioural and emotional outcomes.
Keywords	Child behavioural and emotional outcomes, child prosocial behaviour, families, intellectual disability, parent-child interactions, and latent growth curve modelling
Date received	12 May 2026
Date approved	6 July 2026

Reference	**DAC / 214**
Project title	Early years education, schools and youth services all interplay with offending behaviour and hence demands on the justice system
Institution	University College London (UCL)
Application type	Data access
Data access method	ONS SRS
Cohort	Next Steps and MCS
Abstract	With this data they will examine how families, early years education, schools and youth services all interplay with offending behaviour and hence demands on the justice system. The public benefit of this work will be to inform the design and targeting of family-based policies that can ultimately help reduce demands on the justice system.
Keywords	Early years education, justice system, offending behaviour, and schools and youth services
Date received	22 November 2024
Date approved	22 November 2024

Reference	**DAC / 213**
Project title	Investigating the Bidirectional Relationship Between Internalising Problems and Physical Activity in Children and Adolescents Aged 7 and 14 Using a Random-Intercept Cross-Lagged Panel Model
Institution	Shenzhen University (China)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	The proposed research aims to investigate the bidirectional relationship between physical activity (PA) and internalising

	problems (e.g., anxiety, depression) in children and adolescents at ages 7 and 14. Utilizing a random-intercept cross-lagged panel model (RI-CLPM), the study will explore how PA and internalizing problems influence each other over time, accounting for stable between-person differences. The primary research questions are: (1) Does PA at age 7 predict changes in internalizing problems at age 14, and vice versa? (2) Are these associations consistent across different PA intensities (e.g., light, moderate-to-vigorous)? The study focuses on accelerometer-derived PA data from the Millennium Cohort Study (MCS) and validated measures of internalizing problems. By addressing these questions, this research aims to deepen understanding of the dynamic interplay between mental health and physical activity during critical developmental stages, providing insights to inform interventions and policies for youth well-being.
Keywords	Adolescence, bidirectional relationship, internalising problems, physical activity and random-intercept cross-lagged panel model (RI-CLPM)
Date received	20 November 2024
Date approved	9 January 2025

Reference	**DAC / 212**
Project title	Inequalities in Educational Attainment
Institution	University College London (UCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The aim of this project is to examine the SES attainment gap, and the mechanisms underlying it.
Keywords	Attainment gap, early environment, and mechanisms
Date received	5 November 2024
Date approved	19 November 2024

Reference	**DAC / 211**
Project title	Environmental exposures and epigenetic ageing in NCDS
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	Places where people live are key modifiable determinants of healthy ageing. One of the biological pathways how environment influences health is via DNA methylation. Epigenetic clocks, derived from DNA methylation levels, are biomarkers of aging and they predict a wide range of health conditions. Emerging findings suggest a link between epigenetic clocks and environmental exposures, such as air pollution or neighbourhood deprivation.

	However, it is often overlooked that environmental exposures are correlated. This project will link a range of environmental exposures, including physico-chemical (e.g. air pollution), built (e.g. green space), and social domains (e.g. deprivation), to residential postcodes the age 62 wave of the 1958 National Child Development Study. Epigenetic clocks derived from blood samples at the same wave will be used as outcomes. The project will estimate associations between environmental exposures, exposure mixtures and epigenetic clocks, to understand how the environment 'gets under the skin,' considering the complex interplay between social, environmental, and biological factors.
Keywords	Ageing, DNA methylation, environment, epigenetic clock, and exposome
Date received	8 October 2024
Date approved	22 October 2024

Reference	**DAC / 210**
Project title	External exposome and mental and physical health in MCS
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Physical and social features of places where children grow up are key modifiable determinants of health. However, it is often overlooked that environmental exposures are correlated, and that associations with physical and mental health might differ between social groups. This project builds on the exposome paradigm, considering the totality of environmental exposures across the life course, and utilises self-reported mental and physical health in the Millennium Cohort Study, a large cohort of 2000/2002 born children representative for the United Kingdom, with addresses available across the life course of participants. Property-based geocodes will be linked to a variety of high-resolution environmental exposures, considering physico-chemical, built, and social environment computed partly by the EXPANSE project. Research will (1) describe the level of environmental exposures from birth onwards, (2) investigate the associations with physical and mental health, and (3) explore environmental inequalities across social groups. Finally, after the project finishes, derived variables will be deposited for use of external researchers.
Keywords	Environment, external exposome, longitudinal analyses, mental health, and physical health
Date received	8 October 2024
Date approved	22 October 2024

Reference	DAC / 209
Project title	Comparing retrospective and prospective measures of adverse childhood experiences in the National Child Development Study
Institution	University College London (UCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	This project aims to compare two ways of measuring adverse childhood experiences (ACEs): retrospective (where individuals report past experiences from memory) and prospective (where experiences are recorded in real-time as they occur). By examining both methods, we seek to understand how each relates to health outcomes later in life, such as mental health issues, chronic disease, or other health indicators. Additionally, the project will investigate why these two measures sometimes differ and what factors might predict these differences. For example, are certain personality traits, life events, or social factors linked to discrepancies between retrospective and prospective reports? Understanding these variations is important because it can help improve how ACEs are measured and ensure that the links between childhood experiences and health are accurately captured. Ultimately, this research could lead to better ways to identify individuals at risk and inform prevention and intervention strategies.
Keywords	Adverse childhood experiences, childhood adversity, developmental outcomes, health outcomes, psychosocial factors, recall bias, reporting accuracy, and retrospective vs prospective measures
Date received	24 September 2024
Date approved	26 September 2024

Reference	DAC / 208
Project title	Parents and siblings
Institution	University of Cambridge
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	This project aims to explore the dynamic relationships among the mental health problems in families with multiple children. Data from sweep 2 and sweep 3 of the Millennium Cohort Study (MCS), including information on cohort members, their fathers, mothers, and older siblings, were used. We will establish cross-lagged network model to explore longitudinal relationships between intra-personal and inter-personal symptoms within the family. Furthermore, we will identify the central symptoms by estimating

	the centrality indices. Our project will provide new insights that contribute to theories and interventions related to family mental health.
Keywords	Family dynamic, mental health, Millennium Cohort Study network analysis, and siblings
Date received	12 September 2024
Date approved	18 September 2024

Reference	**DAC / 207**
Project title	Comparing retrospective and prospective measures of adverse childhood experiences in the National Child Development Study
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The Air Pollution, Housing Condition, and Child Respiratory Health Outcomes (AHCReHO) study will investigate how air pollution exposure and housing conditions in the early years influence the risk of acute and chronic respiratory tract conditions across the life course in the UK. Using the Millennium Cohort Study (MCS) national sample, we will investigate how early-life air pollution exposure and housing conditions influence the risk of admissions due to Bronchiolitis, Bronchiolitis-related illnesses, and Asthma.
Keywords	Air pollution, asthma, bronchiolitis, built environment, childhood respiratory health, environmental exposures, housing condition, neighbourhood health, and spatial life course epidemiology
Date received	12 August 2024
Date approved	8 October 2024

Reference	**DAC / 205**
Project title	llc_0033: Community mental health treatment and subsequent outcomes in children and young people: what works, for whom, and why?
Institution	University of Cambridge
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	MCS
Abstract	Population studies suggest that Children and young people's (CYP)'s mental health deteriorated since the start of the COVID-19 pandemic, with a 53% increase in contacts made to CYP's mental health services (MHS) in England compared to before the pandemic. The current project aims to understand the effectiveness of community MHS on CYP's mental health and functioning compared with those who do not access treatment, by looking at what works, for whom (moderation), and why (mediation). Findings will inform clinicians and policy makers of how

	to improve commissioning and delivery of MHS to better meet the needs of CYP.
Keywords	COVID-19, neurosciences and mental health, and psychology
Date received	2 August 2024
Date approved	8 August 2024

Reference	**DAC / 204**
Project title	llc_0032: Predictors of suicide ideation, suicide attempts, and self-harm among adolescents in the UK prior to and during/after COVID-19
Institution	Swansea University
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	Next Steps and MCS
Abstract	Suicide is currently a leading cause of death for adolescents and young adults. Yet, most research comes from cross-sectional studies and little is known about how the predictors of suicide and self-harm have changed before and after the COVID-19 pandemic. The aim of this paper is to examine the predictors of incident and repeated selfharm, before and after COVID-19, across three different UK birth cohorts, and identify the predictors of transition from suicidal ideation to self-harm and suicidal attempts.
Keywords	COVID-19, mental health, self-harm, and suicide
Date received	19 July 2024
Date approved	2 August 2024

Reference	**DAC / 203**
Project title	Using Machine Learning to Improve the Identification of Fabry Disease Using Routinely Collected Health and Social Data
Institution	Swansea University
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	This study will explore whether machine learning can identify people with a rare condition called Fabry disease (FD) using commonly collected health and social information. As a rare condition, long delays to diagnosis are the norm for FD. This study will combine data from the Millennium Cohort Study with other routinely collected health data available at the Secure Anonymised Information Linkage (SAIL) databank. We will identify a group of patients with FD and patients with conditions that FD is often mistaken for. This dataset will be used to train a machine learning model that can distinguish patients with FD from the other conditions. Analysing the factors that the model uses for identifying FD patients may help inform clinicians of factors in commonly collected care data that are indicative of FD.

	Furthermore, this could form the basis for an automated early-warning system for clinicians, potentially reducing the time-to-diagnosis for FD patients.
Keywords	Fabry disease, FD, and machine learning
Date received	30 May 2024
Date approved	20 June 2024

Reference	**DAC / 202**
Project title	Foundation Models for Activity Behaviours Using Thigh-Worn Accelerometer Data
Institution	University of Oxford
Application type	Data access
Data access method	Direct release to applicant
Cohort	BCS70
Abstract	Measuring human behaviour accurately is important for understanding how physical activity and sleep affect health and disease prevention. Current models for measuring activities from accelerometers are limited due to a lack of extensive labelled data. Our project aims to use recent advances in machine learning to develop foundation models for thigh-worn accelerometers. These models will enable researchers to create high-performance activity measurement tools applicable to various populations and devices, even in environments with limited resources.
Keywords	Accelerometer, foundation models, machine learning, physical activity, sleep, and wearables,
Date received	23 May 2024
Date approved	13 June 2024

Reference	**DAC / 201**
Project title	Data management guide for the time use survey (wave 6) and new deposit for the time use data (wave 6)
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	We are creating a user guide for MCS users who want to utilise the time use data collected in wave 6.
Keywords	Data cleaning, data harmonisation, data management, MCS, and time use
Date received	20 May 2024
Date approved	7 June 2024

Reference	**DAC / 200**
Project title	Ready Reckoner for Preventative Spending
Institution	His Majesty's Treasury (HM Treasury)
Application type	Data access

Data access method	UCL Data Safe Haven (DSH) / Direct release to applicant
Cohort	MCS
Abstract	We are aiming to develop a method to provide better evidence for assessing the long-term savings and benefits of new preventative policy proposals. To help build this method, we will look at how different individuals of the cohort progress under different circumstances.
Keywords	Economic outcomes, health outcomes, preventative spending, Ready Reckoner, social outcomes, and validation
Date received	8 April 2024
Date approved	23 April 2024

Reference	**DAC / 199**
Project title	NCDS Age 62 DWP Retirement & Initial Findings Project and BCS70 Age 51 Initial Findings Project
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH) / Direct release to applicant
Cohort	BCS70 and Next Steps
Abstract	As part of the CLS resource centre grant we are tasked to generate substantive initial findings from the latest sweeps (NCDS age 62; BCS70 age 51) across all aspects of data collected on policy relevant topics, including: mental health trajectories, retirement, economic inactivity, physical health and caring responsibilities. The work on NCDS will first be published in a report for the Department for Work and Pensions (DWP) and also in an initial findings report to accompany data deposit and also in CLS briefing and working papers (and latterly) in academic journal articles. The work on BCS70 will first be published in an initial findings report to accompany data deposit and also in CLS briefing and working papers (and latterly) in academic journal articles. Moreover, the planned work will have a strong methodological element, for example improving data quality by correcting any errors that we find in our data release, including the generation of weights, deriving variables and datasets, and allowing us to conduct missing data analysis and provide advice to users on how to handle these. By using the data ourselves for this substantive research will also improve our knowledge and understanding of it, which will help improve the user support we are able to provide through training and user guides.
Keywords	Caring responsibilities, economic inactivity, mental health trajectories, physical health, and retirement
Date received	11 April 2024
Date approved	12 April 2024

Reference	**DAC / 198**

Project title	Harmonising partnership and fertility measures across British cohorts
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH) / Direct release to applicant
Cohort	BCS70 and Next Steps
Abstract	The overall aim of this project is to harmonise data related to relationships and fertility across major British cohort studies: the 1946 National Survey of Health and Development (NSHD), the 1958 National Child Development Study (NCDS), the 1970 British Cohort Study (BCS70) and the 1989/90 Next Steps cohort. This will enable researchers to carry out cross-cohort research that answers important questions on partnership and family formation decisions have changed across four generations living in Britain since the end of the Second World War.
Keywords	Cross-cohort comparison, fertility, harmonisation, histories, and partnership
Date received	10 March 2024
Date approved	30 April 2024

Reference	**DAC / 196**
Project title	Investigating the association between Attention Deficit Hyperactivity Disorder (ADHD) symptoms and physical activity across developmental stages among girls and boys
Institution	Queen Mary, University of London
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	Attention-deficit/hyperactivity disorder (ADHD) is a common condition associated with age-inappropriate levels of hyperactivity, impulsivity, and attention. Adolescence is a period characterised by many changes and which can impact future health: e.g. patterns of health behaviours, including physical activity, developed during adolescence often persist into adulthood. Physical activity has shown promise in managing ADHD symptoms, including improvements in physical and mental health outcomes. This study aims to investigate the relationship between ADHD symptoms during childhood and adolescence. Our main research questions are: 1) Is there a difference in the relationship between ADHD symptoms and physical activity levels in children compared to adolescents? 2) Is this relationship different between girls and boys? 3) Does the relationship between ADHD symptoms and physical activity levels differ across pubertal stages in girls? Using the MCS datasets, including the Strength and Difficulties Questionnaire and the accelerometer data, we will seek to answer

	these research questions. This study may help determine the optimal timing for physical activity interventions.
Keywords	Accelerometery, ADHD, developmental stages, gender differences, physical activity, and puberty
Date received	28 February 2024
Date approved	26 March 2024

Reference	**DAC / 193**
Project title	'Making the Studies Easier to Use' (MSEU) User Panel Testing
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	MSEU team has created a core longitudinal data set for MCS and would like to share this with the internal and external users listed above (the User Panel) in order to obtain feedback and improve it before sharing it more widely via UKDS.
Keywords	MSEU, user testing, and quality control
Date received	29 January 2024
Date approved	30 January 2024

Reference	**DAC / 192**
Project title	24-hour movement behaviours and cardiovascular and cancer outcomes: ProPASS consortium
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	BCS70
Abstract	Accelerometery data from age 46 biomedical sweep of the BCS70 cohort will be used to examine the dose-response relationships between physical behaviours and incident cardiovascular disease (CVD), cancer, and mortality. Our unique software tool (ActiPASS, https://github.com/Ergo-Tools/ActiPASS/wiki/ActiPASS-References) for processing thigh accelerometery can extract 7,500 physical behaviour variables to comprehensively characterise physical activity, posture, and sleep related behaviours at very high granularity. We will use both established and novel statistical approaches to understand the independent, joint, and cumulative associations of physical behaviours with CVD risk. Our work will shape the next generation of evidence-based global and national guidelines to improve CVD prevention policy, health surveillance, and interventions.
Keywords	24-hour movement, epidemiology, cancer, cardiovascular, consortium, longitudinal, and physical activity
Date received	23 January 2024
Date approved	23 January 2024

Reference	DAC / 191
Project title	In utero exposure to pandemic influenza and accelerated ageing: an investigation of the long-term effects of exposure to the 1958 Asian flu epidemic
Institution	University College London (UCL) – CLS
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH) / Direct release to applicant
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	This project aims to link local authority data at birth to key population and demographic characteristics associated with where cohort members lived in NCDS, therefore contributing to CLS core geo-linkage programme of work. Information that will be linked include number pneumonia notifications to the Registrar General, number of live and still births, population density and number of men who are unemployed, in unskilled occupations, and left school at age 16, all measured at the local authority level. This new geo data linkage will be of value to the research community, by opening new avenues of research to better understand the effects of early life circumstances on health, education, and employment over the life course. The new linked data will be made available to other researchers through UKDS. A secondary aim to this project is to demonstrate use of this data through investigating the long-term effects of exposure to the 1958 Asian flu pandemic during pregnancy, and the consequences this has for the healthy ageing. Participants in the National Child Development Study (NCDS) have been exposed to the pandemic during their second trimester, a particularly sensitive period for development in pregnancy. We will measure healthy ageing in later life through a number of indicators, such as derived epigenetic clocks of ageing. We will measure exposure to influenza through the mother's report of flu during pregnancy, as well as regional variations in influenza severity, taken from official pneumonia notifications made to the Registrar Generals of England and Wales, and Scotland.
Keywords	Accelerated aging, epigenetic clocks, influenza, in-utero, and local authority data
Date received	8 January 2024
Date approved	11 March 2024

Reference	DAC / 190
Project title	CLS Survey Methods Programme
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS

Abstract	As part of the CLS Resource Centre grant we have committed to undertake an ambitious programme of research in the field of Survey Methods. Additionally, staff at CLS are involved in two work packages of the Survey Futures project and a number of outputs from this project will double up as outputs for the CLS Resource Centre. The research will be used to inform design decisions for our studies, in order to maximise the quality of the data we collect, and will make a leading contribution to best practice in survey methods both nationally and internationally.
Keywords	Data quality, measurement, mode of data collection, representativeness, response maximisation, and survey methods
Date received	10 April 2024
Date approved	10 April 2024

Reference	**DAC / 189**
Project title	Next Steps Age 32 Initial Findings Project
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	Next Steps
Abstract	As part of the CLS Resource Centre Grant we are tasked to generate substantive initial findings from age 32 sweep to include around four briefing papers on policy relevant topics, including: mental health trajectories, employment experiences, family formation, politics and attitudes, financial health and literacy, higher education returns, and intergenerational class mobility. This work will be underpinned by working papers. Moreover the planned work will have a strong methodological element, for example improving data quality by correcting any errors that we find in our data release, including the generation of weights, deriving variables and dataset, and allowing us to conduct missing data reports and provide advice to users on how to handle missing data. By using the data ourselves for this substantive research will also improve our knowledge and understanding of it, which will help improve the user support we are able to provide through training and user guides.
Keywords	Education, employment, family, finance, mental health, Next Steps, politics, and social mobility
Date received	18 December 2023
Date approved	18 December 2023

Reference	**DAC / 186**
Project title	Deriving positive indicators in childhood from the Bristol Social Adjustment Guide (BSAG)
Institution	University College London (UCL) – CLS
Application type	Data access

Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	During the NCDS sweeps at ages 7 (1965) and 11 (1969), cohort members' teachers were asked to fill out an inventory about the behaviour of the cohort members. This inventory, the Bristol Social Adjustment Guide (BSAG), contained a large number (around 250) of phrases about children's behaviour or attitudes, and teachers were asked to underline which phrases described the child. Although the use of the BSAG has been discontinued and includes phrases that can be considered inappropriate by today's standards, it remains a useful source of information on the NCDS cohort members' adjustment during childhood, particularly for positive indicators as there is a lack of research on these and their impact in adulthood outcomes. The aim of this study is, therefore, to assess the feasibility to generate usable summaries (e.g., phenotypes/typologies of behaviours and attitudes) of positive indicators in childhood that are supported by the internal structure of the data and explore their potential impact on adulthood outcomes.
Keywords	Data reduction, children attitudes, children behaviour, phenotypes, positive indicators, psychometrics, and typologies
Date received	21 November 2023
Date approved	6 December 2023

Reference	**DAC / 181**
Project title	Estimating the Technology of Skill Formation and Maternal Well-Being
Institution	University of Essex
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	This project examines the dynamics of cognitive and non-cognitive skills development in young children. It departs from the existing literature by considering whether parent-reported measures of child non-cognitive skills are influenced or contaminated by parental well-being. In order to address this potential issue, we make use of data from the Millennium Cohort Study, which collects longitudinal information on parental well-being as well as measures of child non-cognitive skills provided by different observers, such as interviewers and teachers. Our modelling strategy deals with the issue of measurement and at the same time shows how child and parental non-cognitive skills accumulate over time and influence each other. We use estimates obtained from the model to illustrate how contamination in parental measures of child non-cognitive skills could affects the evaluation

	of policies and interventions that also directly affect parental well-being.
Keywords	Children, dynamic factor analysis, human capital, measurement, and policy
Date received	23 August 2023
Date approved	5 October 2023

Reference	**DAC / 180**
Project title	Trade-offs in the Design of Maternity Policy: Evidence from the United Kingdom
Institution	Institute for Fiscal Studies (IFS)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This paper provides comprehensive evidence on trade-offs in the design of maternity benefit policies: (i) trade-offs between two policy tools – extensions of maternity pay and extensions in job protection – and (ii) trade-offs in their respective impacts on different socio-economic groups of recipients – children, with the National Pupil Database, and mothers, with the Quarterly Labour Force Survey. To that end, we consider a range of reforms to the maternity leave legislation that took effect in the United Kingdom in 1994, 2000, 2003, and 2007. Since the maternity leave period starts before childbirth, maternity leave reforms are often introduced as a function of an expected date of birth - and so are those considered in this research project. We show that the use of common evaluation techniques introduces bias into the results when analyses are conducted using the exact date of birth rather than the expected date of birth (the true determinant for entitlement to the reform's benefits). We show how the use of an auxiliary database that informs about the distribution of the measurement error (the typical difference between the actual and expected birth date), namely the MCS, can be used to retrieve correct estimates of the impact of the maternity leave reforms.
Keywords	Discontinuity designs, maternity benefits, maternity leave, measurement error, and regression
Date received	23 August 2023
Date approved	5 September 2023

Reference	**DAC / 177**
Project title	Examining the differential impacts of different dimensions of social capital on individual mental health during COVID-19: A longitudinal analysis
Institution	Tohoku University (Japan)
Application type	Data access

Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	This research aims to explore the effects of different dimensions of social capital on individual mental health during the pandemic. This longitudinal study will investigate how trust, social support, community involvement, and social networks influence mental health outcomes over time. The research questions focus on understanding the varying impacts of each dimension of social capital on mental health, examining potential mediators or moderators, and investigating if these relationships differ across different stages of the pandemic. By analysing longitudinal data, this research seeks to provide valuable insights into the role of ecological-level social capital in promoting mental well-being during crises such as COVID-19.
Keywords	Anxiety, community participation, key-workers, and social capital
Date received	9 June 2023
Date approved	7 November 2023

Reference	**DAC / 174**
Project title	Examining adverse and positive childhood experiences, and neighbourhood violent crime, as determinants of youth violence: Analyses of data from the Millennium Cohort Study
Institution	University College London (UCL) – CLS
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This research is part of a project commissioned by The Youth Endowment Fund to CLS researchers. The overall objective is to provide evidence to better understand the risk and protective factors associated with youth offending in England and Wales, using the MCS. We aim to investigate the relationship between negative and positive childhood experiences and their potential influence on youth violence. Additionally, the role of neighbourhood crime will also be examined.
Keywords	Police recorded crime data
Date received	28 April 2023
Date approved	17 May 2023

Reference	**DAC / 173**
Project title	Linked main survey data for the 36 participants of qualitative study 'SN 8470 Retirement Plans and Expectations: Qualitative interviews with a sub-sample of the 1958 National Child Development Study (NCDS)'
Institution	University of Birmingham
Application type	Data access

Data access method	Direct release to applicant
Cohort	NCDS
Abstract	The study aims to enhance understanding of how career histories are linked to retirement plans and expectations. Drawing on life course and resource-based perspectives, the study will explore the mechanisms underlying the relationship between career trajectories, resource accumulation and retirement expectations. We will use qualitative data from the Retirement Plans and Expectations interviews and NCDS survey data to construct employment histories for the 36 interviewees. The analyses of the quantitative and qualitative data will be integrated using sequence analysis to first group career trajectories and then explore within group shared patterns and between group differences in experiences and expectations and plans for retirement. The approach will enable consideration of the complex and varied nature of retirement plans and expectations and how different career histories and differential access to resources over life courses (e.g., financial, health and social resources) significantly affects retirement. The analysis will contribute to current debates around retirement and the boundaryless career.
Keywords	Aging, life course, resource, retirement, and work history
Date received	6 April 2023
Date approved	6 December 2023

Reference	**DAC / 172**
Project title	Coastal youth: exploring the impact of coastal towns on young people's life chances
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	Coastal towns in England and Wales have experienced stark economic decline in recent decades, with residents now likely to experience multiple levels of deprivation. Despite this, little research has examined the impacts of these challenges on young people and their future prospects. Our study, therefore, questions how growing up in coastal towns shapes young people's life chances, including their likelihood of having good educational, employment, housing, and health outcomes in adulthood. To explore these issues and develop meaningful policy interventions to improve coastal youth life chances, we will collect and analyse longitudinal and new qualitative data across six coastal towns. Additionally, we will undertake secondary analysis of NCDS data – specifically, from a sample of 11-year-old children's essays about their imagined lives at age 25 – to shed light on how youth

	opportunities, aspirations, and mobility plans have changed over time and across generations.
Keywords	Coastal deprivation, life course research, spatial inequalities, youth life chances, and youth mobilities
Date received	29 March 2023
Date approved	20 April 2023

Reference	**DAC / 171**
Project title	Dynamics of Preference and Social Geography
Institution	Institute for Fiscal Studies (IFS)
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	I estimate a dynamic general equilibrium model of neighbourhood choice and immigrants' cultural assimilation using a 17-year-long micro panel dataset that includes proxy variables for immigrants' cultural traits and neighbourhood choices. Social benefit from cultural assimilation depends on cultural similarities from their neighbours. Therefore, cultural assimilation effort is jointly determined with a neighbourhood choice. Using the model estimates, I discuss how to design a rent subsidy conditional on cultural dissimilarity from their neighbours that can effectively induce immigrants' cultural assimilation.
Keywords	Cultural assimilation, immigration, neighbourhood choice, social integration, and segregation
Date received	4 May 2023
Date approved	9 May 2023

Reference	**DAC / 170**
Project title	Assessment of retrospective bias and validation of life history data in the English Longitudinal Study of Aging (ELSA)
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Data Service SecureLab
Cohort	NCDS and BCS70
Abstract	The proposed research plans to study agreement between prospective and retrospective reports of early life and childhood circumstances in the National Child Development Study (NCDS). Comparing retrospective data with the data collected prospectively provides a unique opportunity to understand the accuracy with which early life and childhood experiences can be recalled. This information will be used to inform decisions for the inclusion of such measures in the new life history module of the English Longitudinal Study of Aging (ELSA), planned to be administered in 2023/24 (with participants who entered the study after 2006). In 2006/7, ELSA collected life history information using

	a Life History Questionnaire (LHQ), focusing on relationships and fertility, housing and mobility, jobs and earnings, and health. In addition to measures included in 2006/7, the new LHQ will include questions about earlier life experiences not asked previously due to limited knowledge about the accuracy with which older adults can recall information about childhood.
Keywords	Early life, life history, prospective, recall bias, retrospective, and validation
Date received	6 March 2023
Date approved	20 April 2023

Reference	**DAC / 168**
Project title	Harmonising diagnoses of health conditions across British birth cohorts
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	Britain's five national "birth cohorts" follow people from birth until now to learn more about their lives, including their health. It can be hard for researchers to combine data from these cohorts or to compare health across cohorts because they record information about the same health problems in different ways. Our goal is to use information from these birth cohorts and the healthcare system to identify people with health conditions that could make them more likely to have bad COVID-19 outcomes, and how long they have had these conditions for. In this project, we will look at cancer, heart, and blood vessel diseases, chronic breathing problems, and diabetes. We want to do this so that researchers can use these studies together and be sure these health conditions are measured and defined in the same way. We also want to understand how what people say about their health in surveys compares to their medical records. This is important information for researchers who only use survey data where health conditions are self-reported. Our work will make it easier for other researchers to investigate the effects of the pandemic on people.
Keywords	Physical health
Date received	15 February 2023
Date approved	22 February 2023

Reference	**DAC / 167**
Project title	The association between high street accessibility and social isolation and mental health in adolescence
Institution	University College London (UCL)
Application type	Data linkage – GEO

Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Loneliness and social isolation are associated with poor mental health. Young people are the age group most affect by loneliness and social isolation. The UK government's Tackling Loneliness Team have noted the lack of evidence specifying which features of young people's local areas influence their likelihood of suffering from loneliness and social isolation. This hampers wider efforts to understand the links between features of young people's local areas, social isolation, and loneliness (and consequently, their mental health). This project aims to link national spatial data describing young people's local surroundings, though linkage of built environment variables – with a focus on high street accessibility – to survey data from the Millennium Cohort Study. We will investigate the association between high street accessibility in childhood and social isolation in cohort members. We will also subsequently examine the relative contribution of high street and green space accessibility on young people's social isolation, while controlling for other relevant demographic and person related characteristics.
Keywords	High streets, social isolation, geo-linkage, millennium cohort study, and mental health
Date received	8 February 2023
Date approved	20 April 2023

Reference	**DAC / 165**
Project title	llc_0028: Identifying clusters of COVID-19 and long COVID symptoms
Institution	University of Bristol
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	We are a team of researchers at the University of Bristol and University of Cambridge who would like to understand if symptoms of COVID-19 and long COVID group together. We want to answer questions like "does having COVID-19 with a cough make it more likely that you will lose your sense of smell?" We will do this by combining data from 9 cohorts into one large dataset. The dataset will have information about when a person had COVID-19 and what symptoms they had. It will also include age and sex. We will group people according to their symptoms and to find out if age, sex, or time since COVID infection makes a person more likely to have a group of symptoms. Other researchers have done a similar study in each of the 9 cohorts separately. They found two groups of symptoms. If some symptom groups are less common, by combining data across the 9

	cohorts we are more likely to identify them. Knowing which symptoms group together may help doctors to diagnose long COVID and improve the quality of life of people that have it.
Keywords	COVID clusters
Date received	5 December 2022
Date approved	12 December 2022

Reference	**DAC / 164**
Project title	llc_0027: Mental health and COVID-19 vaccine outcomes
Institution	University of Nottingham
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	COVID-19 vaccines play a major role in preventing people from getting severely ill or dying from COVID-19. Two factors affect how the vaccines can keep protecting people. First, people need to be fully vaccinated. Second, the vaccines need to be effective. This research aims to understand how well COVID-19 vaccines work in people with mental health conditions (e.g., depression and anxiety). Specifically, we try to understand two questions. First, In the UK population, what proportion of people with mental health conditions are fully vaccinated against COVID-19? Second, whether this group of people are more likely to get infected, get ill, or die due to COVID-19 even after being vaccinated, compared with those without mental health conditions? We will use data from the UK LLC to estimate how many people have taken COVID-19 vaccines and how effective the vaccines are, in people with and without mental health conditions. This research will help inform healthcare providers on three aspects. First, how to engage and support people with mental health conditions to receive COVID-19 vaccines. Second, how to assist healthcare professionals to deliver vaccines to this group. Third, whether this group will need additional interventions to reduce health risks related to COVID-19.
Keywords	Vaccines
Date received	5 December 2022
Date approved	12 December 2022

Reference	**DAC / 163**
Project title	llc_0026: Capturing ethnicity in UK electronic health records and longitudinal studies
Institution	University of Bristol
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS

Abstract	You are often asked 'What is your ethnicity?'. This information can be found in your electronic health record. It was also recorded for your research study. However, this information may not always be the same. We are a team based at the University of Bristol. We will see how much information on ethnicity people have recorded. We will also see if people have the same ethnicity recorded in multiple places within their health records. We will compare this information to the information on ethnicity you provided to your study. Your ethnicity may mean you are more at risk of a medical condition. It may also affect the drug that you are given to treat a medical condition. We therefore need to know which information on ethnicity is correct. Our work will help others to use data on ethnicity for better research into medical conditions and treatments.
Keywords	Ethnicity
Date received	5 December 2022
Date approved	29 November 2024

Reference	**DAC / 162**
Project title	Associations between early-life mental health indicators and sleep in adulthood
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Research Data Storage Service (RDSS)
Cohort	BCS70
Abstract	It is well known that not getting enough sleep can be harmful for your mental health. And we also know that when your mental health suffers, your sleep can suffer too. Poor sleep has also been linked to many different physical health problems and can shorten life expectancy. But can your mental health as a child continue to affect your sleep as an adult? In this project, we aim to use data from BCS70 to find out whether mental health in early life is related to sleep in adulthood. In the age 46 sweep, BCS70 participants were asked to wear a device on their thigh that tracked how much they moved for one week. We plan to use these data to estimate how much sleep participants were getting and compare this with the state of their mental health when they were much younger.
Keywords	Mental health, childhood, sleep, accelerometery, and risk factors
Date received	1 December 2022
Date approved	2 December 2022

Reference	**DAC / 161**
Project title	Enhancing the Millennium Cohort Study by linking environmental variables
Institution	University College London (UCL) – CLS
Application type	Data linkage – GEO

Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This research project aims to study the environmental pollution exposure of Millennium Cohort Study (MCS) participants by linking annual pollution data to the residence and school location of MCS participants from 9 months until age 19 (waves 1 – 7). First, we will use the linked data to study inequalities of environmental exposure over the life course. Second, we will enhance the MCS data by creating research-ready linked data that other researchers could access.
Keywords	Air pollution, environmental inequality, life course, children, adolescents, and health
Date received	30 November 2022
Date approved	8 December 2022

Reference	**DAC / 160**
Project title	Air Pollution Impacts on Cognition for Children (APIC for Children) considering greenspace and noise impacts
Institution	London School of Hygiene & Tropical Medicine
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This research project will study how air pollution, greenspace, and noise around the school and home affect children's cognitive performance and development using the nationwide MCS and environmental data. MCS follows up over 19,000 lives born in 2000-01 across England, Scotland, Wales, and Northern Ireland. To date, cognitive performance was measured at age 3, 5, 7, 11, 14, and 17 years. Surrounding air pollution, greenspace, and noise will be measured from the pre-natal stage to the timing of each cognitive test. Despite increasing evidence, the impacts of such environment remains unclear. This study will provide further evidence from repeated measures of cognitive performance with wide range of air pollution, green space, and noise exposure over the nations for nearly two decades. This study could address a few novel research questions, including, `Which pollutant, greenspace, and noise matters in terms of children's cognitive development?', `When is critical to mitigate the impacts?', and `Are those impacts different in urban and rural areas?'.
Keywords	Children, cognition, educational attainment, child development, environment, air pollution, greenspace, and noise
Date received	14 November 2022
Date approved	8 December 2022

Reference	**DAC / 158**
Project title	Breastfeeding and child development

Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The aim of this project is to investigate the impact of breastfeeding on long term outcomes, including educational attainment, health, and others.
Keywords	Breastfeeding and child development
Date received	27 September 2022
Date approved	8 December 2022

Reference	**DAC / 157**
Project title	Association between self-reported mental health and property size
Institution	University College London (UCL) – CLS
Application type	Data linkage
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The aim of this project is to exploit the rich Energy Performance Certificate (EPC) data available, in the first instance, for England and Wales (similar data are available for Scotland but have not yet been linked). The December 2021 release of EPC data contains UPRN codes, which facilitates matching to the reference dataset (Ordnance Survey AddressBase Premium Epoch 87 data (September 2021)). We propose to link the EPC data (which contains upwards of 100 variables) to participants of wave 3 of the COVID-19 web survey, since full addresses were available for this wave. The main variables we are interested in at this stage are the accurate measure of property size (m2), number of habitable rooms, property type, building age band, and tenure. It will also be possible to calculate the size of each participant's garden, and whether this is fully private, semi-public (e.g., open space around a block of flats), or absent. Further work could make use of the detailed set of variables relating to energy costs and energy efficiency, since this is likely to be the single most important public policy issue in the UK.
Keywords	COVID-19, EPC, inequality, housing, and mental health
Date received	8 September 2022
Date approved	13 July 2023

Reference	**DAC / 156**
Project title	Effect of incentivisation on response and data quality in MCS
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	CLS shared drive

Cohort	MCS
Abstract	Retaining cohort members across time is a major aim of longitudinal studies, in order to reduce the possibility of non-response bias. The Millennium Cohort Study (MCS) is the largest on-going representative study of people born in the UK at the turn of this century. For the first time in MCS history, monetary incentives were introduced in the form of a randomised experiment in a web survey. Across the total issued sample (N = 13,533) – 75% were randomly allocated to the incentive group, and 25% were allocated to the control group. This study will assess the effect of the incentive on response rates and data quality (e.g., break off rates, item non-response, speeding, measures of satisficing, and completeness of responses).
Keywords	Attrition, data quality, incentives, non-response, and response rates
Date received	30 August 2022
Date approved	8 September 2022

Reference	**DAC / 155**
Project title	Linkage of National Longitudinal Cohort Studies and Administrative Data access / Genetics: A Mutually Beneficial Arrangement
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The overall aim of this project is to address several methodological issues at the interface between linked cohort data and administrative data that are mutually beneficial for both data sources: missing data, data quality, residual confounding. This will be undertaken using existing data linkages in health and education with UCL Centre for Longitudinal Studies (CLS) cohorts. We will address the following three methodological research questions, which will be directly reflected in the project work packages: 1. How can linked administrative data aid the handling of missing cohort data? 2. How can linked cohort data improve our understanding of the quality of administrative data? 3. How can linked cohort data help address residual confounding in analyses of administrative data?
Keywords	Administrative data, cohort data, data linkage, education, Millennium Cohort Study, MCS, National Pupil Data access / Geneticsbase, NPD, and residual confounding
Date received	29 July 2022
Date approved	8 September 2022

Reference	**DAC / 154**

Project title	Machine learning screening for long-COVID (SAIL IGRP 1427)
Institution	Glasgow Caledonian University
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	This main aim of this project is to investigate the traits which contribute to the development of long-covid. These include traits at the person and community level. Statistical analyses will be applied to the Millennium Cohort Study to find out whether some traits are more common among people that develop long-covid. The project will first try to find patterns in the data, and then see if these patterns can predict the people who develop long-covid. Since the MCS follows people over time we will also be able to tell if a person's past living conditions have an impact on their current state of health. Finally, this research will be crucial to doctors and other healthcare experts since it will allow them to better treat and prevent long-covid. Thus, reducing suffering and healthcare costs.
Keywords	Health, long COVID, and machine learning
Date received	22 July 2022
Date approved	15 December 2022

Reference	**DAC / 152**
Project title	Understanding and mitigating associations between childhood neighbourhood deprivation and adolescent mental health in two UK birth cohorts
Institution	King's College London (KCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Neighbourhood deprivation refers to a lack of access to opportunities (e.g., education, employment) and resources (e.g., food, accommodation, clothing) among residents. Growing up in a deprived neighbourhood has been linked with a greater risk of mental health difficulties including emotional and behavioural problems in childhood and adolescence. However, some individuals fair better than expected despite living in less-than-ideal economic circumstances and are therefore described as being 'resilient'. We aim to investigate (1) whether childhood neighbourhood deprivation is associated with adolescent mental health and (2) what factors in an individual's life (e.g., cognitive skills, parenting, social support, green space access) help protect their mental health from the negative effects of neighbourhood deprivation during childhood. This knowledge will help improve targets for intervention to better support young people who grow up in deprived areas.

Keywords	Deprivation and mental health
Date received	5 July 2022
Date approved	12 July 2022

Reference	**DAC / 151**
Project title	llc_0015: Socio-demographic determinants of COVID-19
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, and MCS
Abstract	Research has shown that some people are more at risk of COVID-19 than others because of personal factors, such as sex, ethnicity, or financial situation. In this study, we aim to understand whether differences in peoples' personal factors increase their risk of COVID-19. To do this, we will link data from 10 research studies with data on COVID-19 infection status from NHS health records. We will use statistical modelling to look at the relationship between personal factors and COVID-19. We will also look at whether certain combinations of personal factors increase someone's risk of COVID-19 further. For example, are Ethnic Minority women without a university degree more likely to report having had COVID-19 than others? Our findings will identify groups of individuals who had the highest risk of COVID-19 in the early waves of the pandemic. We will share the results with policy makers to help with decisions on how to support and protect these people.
Keywords	COVID-19 and personal factors
Date received	21 June 2022
Date approved	28 June 2022

Reference	**DAC / 150**
Project title	Socio-demographic determinants of COVID-19
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The study aims to understand whether differences in peoples' sociodemographic characteristics and circumstances increase their risk of catching COVID-19. These include ethnicity, gender, age, education, occupational social class, overcrowding, household size, subjective financial stability, housing tenure, urban/rural location, IMD, and whether respondents receive social benefits. This study is part of the Longitudinal Health and Wellbeing study of the National Core Studies programme, which brings together data from over 10 population surveys.
Keywords	COVID-19, inequalities, infection, ethnicity, gender, and IMD

Date received	12 May 2022
Date approved	12 May 2022

Reference	**DAC / 149**
Project title	llc_0010: Association of COVID19 and long COVID with disruption in employment and finances
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The COVID-19 pandemic has led to large-scale employment disruption, but little is known about the impact on employment for people who caught COVID-19. In this project, we will compare the differences in employment status, the number of hours worked, and financial circumstances for people who have had COVID-19 compared to those who have not had COVID-19. To do this we will use employment and financial data from research studies, in combination with NHS health records on COVID infection. Although we have information on COVID-infection from our research studies, NHS infection data will give us more reliable information about who was infected and when. NHS healthcare and hospital records will also tell us how severe peoples' infections have been, and how long they have lasted. We hope that this study will tell us how COVID19 infection might influence people's ability to carry on in work and cope financially. We will share the results of this project with policy makers to guide decisions on how to support people who have been infected by COVID19 to return to work and financially support their families. This will be particularly important given the large numbers of people who have long COVID.
Keywords	Long COVID, employment, and finance
Date received	14 April 2022
Date approved	13 May 2022

Reference	**DAC / 148**
Project title	Parental investments and child development
Institution	Institute for Fiscal Studies (IFS)
Application type	Data linkage
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The project aims to understand the role played by different types of parental investments in the formation of skills during primary school years. In particular, we consider how school quality, parental time spent with the child and private tutoring affect the development of cognitive and socio-emotional skills, as well as academic performance measured at ages 7 and 11 of cohort members in the Millennium Cohort Study.

Keywords	Education
Date received	5 April 2022
Date approved	19 April 2022

Reference	**DAC / 147**
Project title	MELD-B: Multidisciplinary ecosystem to study life course determinants and prevention of early-onset burdensome multimorbidity (SAIL IGRP 1377)
Institution	University of Southampton
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	Many people live with several long-term health conditions like diabetes, heart disease or dementia. Multimorbidity means having more than one health condition that may need medical management or behavioural adaptation. Throughout a person's life, many things influence their chance of multimorbidity, like biology (e.g., age), things that happen to them (e.g., infections), behaviours (e.g., smoking) and broader experiences (e.g., environment, education, work, income). Our aim is to use Artificial Intelligence (AI) methods to identify time points and risk factors across the life course that would help us prevent the development of early-onset, burdensome multiple long-term condition multimorbidity (MLTC-M). We will do this through multidisciplinary working and analysis of cohorts which provide data spanning many years in participants' lives. We will also use anonymised electronic health records to explore healthcare data. We will disseminate our findings to organisations and decision-makers to make this research impactful on a population level.
Keywords	Multimorbidity
Date received	4 April 2022
Date approved	17 May 2022

Reference	**DAC / 146**
Project title	Evaluating the student loans uptake and repayment among a cohort born in 1989
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	Next Steps
Abstract	The recent government response to the Augur Review has been released and proposes a £11,500 reduction in student loans in real terms with the aim to reduce the amount of debt students graduate with. They have also proposed a new £25,000 repayment threshold, meaning graduates will make at least a modest contribution to paying back their student loan once they start

	benefitting from it. With the Next Steps data, we have an opportunity to better understand the nature of student loans repayment, including the large number of graduates who are not expected to come close to repaying their loans in full – and indeed a not insubstantial number are expected to make no repayments at all – yet we know very little about who these individuals are or what jobs they are doing. If they were disproportionately employed in 'socially valuable' occupations (such as social care, for example), would that change how non-repayment of loans was viewed, for example? This kind of analysis would shed new light on important policy questions, including what level of taxpayer subsidy of the student loan system is 'acceptable', and what implications different changes to loan repayment terms may have on repayments and for which groups. We are interested in understanding how SLC loan values and repayments vary in the Next Steps cohort by subject studied, university attended and income/occupation at age 25 as well as key demographic characteristics (gender, ethnicity, parental education etc). Moreover, the planned work will have a strong methodological element, for example improving data quality by correcting any errors that we find in our data release, and allow us to conduct missing data reports and provide advice to users on how to handle missing data. By using the data ourselves for this research, this will also improve our knowledge and understanding of it, which will help improve the user support we are able to provide through training and user guides.
Keywords	Student loan uptake
Date received	9 March 2022
Date approved	10 March 2022

Reference	**DAC / 145**
Project title	CNC web survey Autumn 2021
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	This project aims to analyse the MCS autumn 2021 engagement web survey. It studies cohort members responses about awareness of and engagement with the CNC study by comparing answers for different demographic factors such as ethnicity, educational level, sex, among others.
Keywords	CNC and web survey
Date received	7 March 2022
Date approved	15 March 2022

Reference	**DAC / 144**
Project title	Is school absenteeism harmful to education and labour market outcomes? (SAIL IGRP 1351)

Institution	University of Strathclyde
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	Consequences for educational attainment and labour market outcomes are not fully understood. Frequently absent students miss out on classroom learning and developing key dispositions crucial for future success. This project examines whether school absenteeism is negatively associated with individuals' educational attainment and labour market outcomes. Additionally, it investigates whether psychosocial dispositions (e.g., self-esteem), behavioural dispositions (e.g., risky behaviour), and aspirations (e.g., educational) can explain the association between absenteeism and educational attainment. It will further consider the role of these dispositions and children's educational attainment in explaining the association between absenteeism and labour market outcomes. Finally, we will analyse whether the consequences of absenteeism for these outcomes differ across socio-demographic groups (gender, ethnicity, and socioeconomic background). Our study will provide much-needed evidence on the consequences of school absences for educational and labour market outcomes among different socio-demographic groups. This will give policymakers and practitioners the necessary information to place a greater emphasis on interventions to reduce absenteeism. The project will further clarify how absenteeism leads to disadvantages in these life course outcomes. By highlighting the relative importance of attending to learning loss and dispositions for educational and labour market success, it will become clear which interventions can mitigate the harmful effects of absenteeism. The study is timely within the current context of COVID-19 school closures - an enforced period of "absenteeism" for all children, with evidence of increasing absenteeism and socioeconomic disparities in absences after schools reopened.
Keywords	Education
Date received	3 March 2022
Date approved	17 May 2022

Reference	**DAC / 143**
Project title	The role of greenspace in child development
Institution	University College London (UCL)
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The main aim is to explore in depth the role of area greenspace in children's cognitive, behavioural, and socioemotional development. The project will link in well with my ongoing research on this using

	the existing greenspace data in MCS (sweeps 1 to 6). The existing MCS data (only available at ward level for the UK) are out of date for most of the sweeps (they are based on MEDIx, itself based on information in 2000). They are also indexing green cover only. This new project will provide more precise, granular, and up to date data for sweeps 1 to 7. Importantly it will include proximity to greenspace as well, which seems key for the child and adolescent population especially.
Keywords	Adolescents, built environment, children, cognitive functioning, emotional and behavioural development, greenspace, green space, and mental health
Date received	17 February 2022
Date approved	15 March 2022

Reference	**DAC / 142**
Project title	The impact of COVID-19 lockdowns on body weight of adolescents
Institution	University of Warwick
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH) / UK Data Service SecureLab
Cohort	MCS
Abstract	This project aims to estimate the causal effect of the accessibility to food outlets that supply high-calorie food, such as fast food, on the weight of adolescents using longitudinal data. We will use the independent variation in the accessibility to fast-food outlets in the individual's living environment caused by COVID-19 lockdown restrictions, to identify the causal effect of the access to fast-food outlets on weight status. Our sample will be drawn from the three waves of the new COVID-19 survey of the Millennium Cohort Study (MCS) participants, covering the period between May 2020 and March 2021. This will be linked to the data from the MCS main survey merged with other administrative data, and of locations of food premises. The use of the linked rich individual-level longitudinal data makes the study unique, enabling us to estimate the above causal effect to inform policy.
Keywords	COVID-19 and adolescent body weight
Date received	16 February 2022
Date approved	6 May 2022

Reference	**DAC / 140**
Project title	Childhood obesity, is fast food exposure a factor?
Institution	University of York
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	BCS70

Abstract	Access to fast food has often been blamed for the rise in obesity which in turn has motivated policies to curb the spread of fast food. However, robust evidence in this area is scarce, particularly using data outside of the US. We investigate whether the access to fast food increased BMI of adolescents at a time when fast food restaurants started to open in the UK. We combine data on the location and timing of the first openings of all fast-food outlets in the UK from 1968-1986, with data on objectively measured BMI from the 1970 British Cohort Study. The relationship between adolescent BMI and the distance from the respondents' homes and time since opening, is studied using regression analysis. We find that fast food exposure had no effect on BMI.
Keywords	Childhood obesity and fast-food
Date received	26 January 2022
Date approved	16 February 2022

Reference	**DAC / 139**
Project title	llc_0009: Understanding the impacts of healthcare disruption on health
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	This project will study the impacts of health care disruption in the UK. We will examine the experiences of those individuals affected by disruption, including whether it has impacted their health and if these impacts have had larger impacts on poorer people. We expect the project will be important for responding to the impacts of COVID-19 healthcare disruption and help benefit patients and service planners. We will share the findings with policy makers, NHS care managers, and politicians to help inform how the UK responds to COVID-19 healthcare disruption for years to come (e.g., which services to invest in or prioritise, which types of people need additional help) and also to improve NHS resilience for the future.
Keywords	Health
Date received	22 November 2021
Date approved	25 November 2021

Reference	**DAC / 138**
Project title	llc_0008: Risk factors and prediction models for long COVID: analysis of longitudinal cohort studies with linked NHS data
Institution	University of Plymouth
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS

Abstract	Patients with long COVID have symptoms over a long time. Some patients do not receive a diagnosis by their doctors, and do not receive support for recovery from long COVID. With the requested data, we will compare two sources of information on long COVID, reported by patients and by their doctors. We will identify who are more likely to miss a diagnosis by doctors. The data on patients are needed to find who are at higher risk of having long COVID. The benefit to patients includes the improved diagnosis of long COVID. More patients will receive a diagnosis by doctors. They will have better chance to have healthcare support for recovery.
Keywords	Health
Date received	22 November 2021
Date approved	25 November 2021

Reference	**DAC / 136**
Project title	Education and Society in Scotland
Institution	University of Edinburgh
Application type	Data linkage
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Secondary schools in Scotland attended by MCS cohort members at sweep 7 will be classified according to their history during several waves of educational reform in the twentieth century: the creation of the selective system (1920s–40s), the transition to comprehensive schooling (1970s), and the reforms to mid-secondary curriculum and assessment (late 1980s). The resulting data, along with sweep 7 of the MCS, would then be used to extend a time series obtained from the Scottish School Leavers Surveys (biennially 1976–2002), and the Scottish Mental Survey (aged 16 in 1952). Previous research on this series (Box 1.7) has shown that the origins of schools and their rate of transition to new structures in the 1970s and 1980s had a persisting influence on young people's experience, but that policy gradually shaped schools of diverse origins into a common system. Adding MCS data would assess whether that common experience has lasted.
Keywords	Education
Date received	15 October 2021
Date approved	16 December 2021

Reference	**DAC / 135**
Project title	The effect of early exposure to lead on children's development
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS

Abstract	The aim of this project is to investigate the impact of metals and toxins on children's development using a large and unique sample of milk teeth collected from nearly three thousand participants of the MCS.
Keywords	Child development
Date received	4 October 2021
Date approved	12 October 2021

Reference	**DAC / 134**
Project title	Physical activity and physical function in mid- to later-life
Institution	University of Exeter
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	BCS70
Abstract	By examining device-measured patterns of PA, and its association with PF in mid-life, there is the potential to identify windows-of-opportunity at this stage in the life course that could inform the future design and recommendation of interventions and guidelines. We intend to examine the raw accelerometer data in different ways than the derived outcomes provided in the main data set. We plan to derive new metrics from the raw data, focusing on how people accumulate their activity between- and within-days (activity pattern). The analysis will allow us to determine the different patterning of activity between high and low functioning adults in the BCS70. Results could then be used to develop more tailored public health messaging for promoting physical function in mid-life via physical activity. A limited number of derived variables from these data are available in the main survey data; however, access to the raw files allows for more further processing and analysis. For the purpose of this research project, the derived physical activity variables are required as 'exposures' in our association analysis, with physical function measures as the 'outcomes'.
Keywords	Accelerometery
Date received	28 September 2021
Date approved	12 October 2021

Reference	**DAC / 133**
Project title	Development of the British birth cohort studies as mixed methods resources for the study of mid- and later-life
Institution	University College London (UCL) – CLS
Application type	Data enhancement
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	This cross-cohort qualitative longitudinal seeks to advance understanding of cohort members' lived experience of long COVID.

	Via three waves of qualitative longitudinal interviews conducted with 40 individuals across five cohort studies – the four CLS studies plus the 1946 NSHD – we will investigate: long COVID sufferers' experiences of and perspectives on the condition; the impacts that long COVID has had on their lives and sense of self; and their perspectives on the treatment and support they have or have not received from the healthcare system.
Keywords	Health and long COVID
Date received	27 August 2021
Date approved	12 October 2021

Reference	**DAC / 132**
Project title	Fluoride exposure via drinking water and child development
Institution	UK Health Security Agency
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH) / UK Data Service SecureLab
Cohort	MCS
Abstract	Water fluoridation schemes in public water supplies are known to help reduce the risk of dental caries. However, an increasing number of international studies are reporting a potential adverse effect of fluoride exposure on child IQ. We aim to investigate this association in England using child development measures collected in the Millennium Cohort Study (MCS) from birth to 11 years of age, and fluoride concentration data from the Drinking Water inspectorate (DWI) which is available for the same period.
Keywords	Fluoride in water
Date received	7 September 2021
Date approved	14 September 2021

Reference	**DAC / 131**
Project title	llc_0006: Comparing the burden of long COVID in the community as measured by self-report and electronic health records: a study by the CONVALESCENCE consortium
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	There is considerable uncertainty about the extent to which individuals with a history of COVID-19 go on to develop long COVID. In particular, separate findings from surveys of individuals in the community self-reporting long COVID and studies of primary care records have suggested that the proportion of individuals with a history of COVID-19 receiving a diagnosis of long COVID from general practitioners may be of an order of magnitude lower than the proportions of individuals reporting persistent symptoms themselves. In this study, we will compare the self-reporting of long

	COVID by individuals with their primary care records of long COVID, to further evaluate the extent of long COVID in the community being recognised by primary care practitioners.
Keywords	Convalescence
Date received	6 September 2021
Date approved	14 September 2021

Reference	**DAC / 130**
Project title	llc_0004: Examining the serological response to SARS-CoV-2 infection and vaccination across the National Core Studies
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	Antibodies are biological molecules that control immunity to viral infections. When individuals catch a virus such as COVID-19 or receive a vaccination to protect against COVID-19, they produce antibodies that travel around the body to tackle (or prepare to tackle) the infection. However, everyone's antibody response is different; some people produce fewer antibodies, or their antibodies might diminish more quickly over time. Examining levels of antibodies over time after COVID-19 infection or vaccination will help to identify groups of people who have a poor or decreasing antibody response, who might benefit from a booster vaccine. Examining antibody levels over time will also help to estimate the best time (i.e., how long after the second vaccination) to give a COVID-19 booster vaccine, in order to maximise immunity.
Keywords	Serology
Date received	6 September 2021
Date approved	14 September 2021

Reference	**DAC / 129**
Project title	llc_0003: The social and mental wellbeing consequences of contracting COVID19
Institution	University of Glasgow
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	There are many mechanisms through which an individual's experience of COVID-19 may impact their ability to function healthily within society. COVID-19 symptoms may be associated with poorer mental wellbeing many months later, and more severe experiences of COVID-19 and the associated trauma could potentially have longer term consequences for mental wellbeing. Additionally, the experience of the disease itself and subsequent long-term symptoms may have a detrimental impact on

	employment and other social activities. Even experiencing asymptomatic COVID-19 potentially has problems: the requirement for those who test positive to socially isolate may disadvantage people in the labour market and have negative impacts on peoples' mental wellbeing. COVID-19 may also have longer term latent effects on people's wellbeing, even if people were initially asymptomatic. However, it is challenging to investigate these mechanisms using administrative or survey data alone. Self-reported measures of COVID-19 may not be accurate, while administrative health care data alone often does not contain subjective indicators of mental wellbeing or social indicators such as employment. Thus, in this project we aim to link survey data with health records provided by the UK LLC to address these topics.
Keywords	COVID-19 and wellbeing
Date received	6 September 2021
Date approved	14 September 2021

Reference	**DAC / 128**
Project title	llc_0002: Methodological enhancement and documentary analysis of the UK LLC
Institution	University of Bristol
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The UKRI funded Longitudinal Health and Wellbeing National Core Study aims to understand the health, social and economic impacts of the COVID-19 pandemic by uniting longitudinal population study data from established studies with participants national depersonalised electronic health records. It has built the UK Longitudinal Linkage Collaboration as a new infrastructure to host de-personalised data from many UK longitudinal studies and to link these to participants routine records. This will form a new national Trusted Research Environment for secure research using linked longitudinal data across studies. Approved researchers will use the UK LLC for COVID policy relevant research.
Keywords	Methodological project
Date received	29 July 2021
Date approved	14 September 2021

Reference	**DAC / 127**
Project title	Growing up in coastal towns
Institution	University College London (UCL)
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS

Abstract	Coastal towns have come to the fore in recent UK policy debates, as some of the most deprived neighbourhoods are now in coastal areas. These debates often raise concerns about the future of young people in these towns, largely because of the limited educational and employment opportunities. Despite this, there is almost no research on the impact of growing up in coastal towns. This led us to develop our research questions: 1. Are there place-based inequalities between coastal towns and the rest of the UK, and how do these inequalities impact on the young people who grow up in coastal towns? 2. How are youth aspirations shaped by their experiences of growing up in a coastal town? In light of these experiences, what are the solutions they would propose to improve their coastal communities? 3. What data can we use/generate to better understand these issues?
Keywords	Civic engagement, coastal towns, deprivation, educational achievement, health, labour market outcomes, and wellbeing
Date received	16 August 2021
Date approved	14 September 2021

Reference	**DAC / 126**
Project title	The effect of deindustrialisation on community participation and political involvement across multiple family generations
Institution	University of Milan (Italy)
Application type	Data access
Data access method	Direct release to applicant
Cohort	NCDS and BCS70
Abstract	The aim of this project is to reveal how a person's individual, family and local community experiences of manufacturing decline shape the way they participate in politics and their political attitudes over the course of their life.
Keywords	Deprivation
Date received	15 July 2021
Date approved	20 September 2021

Reference	**DAC / 125**
Project title	llc_0007: Multi-Longitudinal Cohort Study into occupational factors and COVID Risk as part of PROTECT National Core Study
Institution	University of Manchester
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	Infection and death rates linked to the SARS-COV-2 epidemic have been particularly high within the United Kingdom. One prominent source of increased risk throughout has been occupation, with several occupations identified as being high risk (e.g., health workers). Differences in occupation characteristics (e.g., ability to

	work from home, contact with the public, working outside) have been considered important in explaining increased risk of SARS-COV-2 infection and death. There is however still great uncertainty regarding the influence of occupation, and within occupational factors on infection, disease severity, and death.
Keywords	Health and occupation
Date received	18 August 2021
Date approved	14 September 2021

Reference	**DAC / 124**
Project title	llc_0005: Are immune-mediated diseases risk factors for long COVID?
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The predisposing factors responsible for individuals developing prolonged duration of COVID-19 symptoms over several months (long COVID) are unknown but exaggerated inflammatory and autoimmune responses have been proposed as key determinants. Individuals suffering from chronic inflammatory disorders, including atopic conditions and autoimmune diseases, have heightened risk of developing other inflammatory diseases, phenomena known as autoimmune and atopic diatheses. People with a history of atopic and/or autoimmune diseases might also have an increased liability for long COVID following SARS-CoV-2 infection if immune dysregulation is in part or wholly responsible for protracted symptomatology. However, associations between chronic inflammatory diseases and long COVID risk have not been studied rigorously in epidemiological settings to date.
Keywords	Health
Date received	18 August 2021
Date approved	14 September 2021

Reference	**DAC / 123**
Project title	Careers education in school and the link to post-16 outcomes
Institution	The Careers & Enterprise Company
Application type	Data linkage
Data access method	UCL Data Safe Haven (DSH) / UK Data Service SecureLab
Cohort	MCS
Abstract	The purpose of the research is to investigate the association between the quality of careers education provided in English secondary schools and post-16 attitudes and pathways. The Millennium Cohort Study provides a unique opportunity to bring the evidence up-to-date and to understand the role of careers education in shaping the pathways of young people, within the

	current policy context. Our intention is to use the additional detail from the National Pupil Database about attainment to identify the additionality of careers support and careers-related activity, including part-time work and community activities, as asked about within MCS. We also intend to explore the feasibility of linking the MCS to separate data on the quality of school career programmes from 2016-2018 (held by The Careers & Enterprise Company, funded by the Department for Education) to enrich the evidence on careers education. [This proposed linkage is the subject of this application form].
Keywords	Community activities and part-time work
Date received	6 July 2021
Date approved	16 December 2021

Reference	**DAC / 122**
Project title	llc_CONVALESCENCE: Characterisation, determinants, mechanisms, and consequences of the long-term effects of COVID-19 providing the evidence base for health care services (CONVALESENCE)
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The UK's chief scientific and medical advisors have commissioned a new programme of research into COVID-19. Part of this programme is designed to use the data from longitudinal studies to help answer certain research questions. This project is called the Longitudinal Health and Wellbeing National Core Study. As part of the researchers leading this programme have also secured specific funding to research a collection of symptoms and health and wellbeing outcomes that are known collectively as 'long COVID."
Keywords	Health
Date received	1 July 2021
Date approved	19 August 2021

Reference	**DAC / 121**
Project title	llc_LHW: Longitudinal Health & Wellbeing – National Core Study
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The UKRI funded Longitudinal Health and Wellbeing National Core Study aims to understand the health, social and economic impacts of the COVID-19 pandemic by uniting established population cohorts and national anonymised electronic health records to inform policy. … For [all] research themes we are employing

	longitudinal population-based cohorts, linked administrative data and electronic health records to produce novel and impactful insights to reduce the impact of the pandemic.
Keywords	Health
Date received	1 July 2021
Date approved	19 August 2021

Reference	**DAC / 120**
Project title	llc_0001: Harmonised Core Socio-demographic Measures Data access / Geneticsset
Institution	University College London (UCL)
Application type	Data access
Data access method	UK Longitudinal Linkage Collaboration (UK LLC)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	This project will generate a harmonised dataset of sociodemographic measures for inclusion as a research resource on the UK Longitudinal Linkage Collaboration platform. The project aims to facilitate COVID-19 research by identifying and, where possible, addressing differences in how participant characteristics are measured by the longitudinal population studies who are contributing data to the platform, and in so doing, help expedite researchers who want to use data from different studies to enhance the scope and possibly even precision of their work.
Keywords	Harmonisation
Date received	1 July 2021
Date approved	18 August 2021

Reference	**DAC / 118**
Project title	Mental Health and the Built Environment: How changing environments impact children's and young people's mental health and wellbeing trajectories
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The Mental Health and the Built Environment project will develop the methods to examine and analyse longitudinally in the largest and first study of its kind, the relationships between the built environment and mental health outcomes amongst children and young people in London, Manchester, and Birmingham. This will be accomplished using building-level data and Millennium Cohort Study data from 2008 to 2018. It will deliver timely and novel research, data resources for researchers and evidence to inform transport, urban planning, and housing policy about the links between the built environment and mental health outcomes in children and young people. Our primary research question is if and

	what characteristics of the built environment have an effect on mental health and wellbeing outcomes in children and adolescents?
Keywords	Environment and health
Date received	9 June 2021
Date approved	17 June 2021

Reference	**DAC / 117**
Project title	In their own words: Five generations of Britons describe their experiences of the Coronavirus pandemic. Findings from the COVID-19 survey in Five National Longitudinal Studies
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS and COVID-19
Abstract	The textual responses of the cohort members will be analysed in an effort to examine the experiences of this cohort during the COVID-19 pandemic. Exploring these experiences will provide a comprehensive picture of Britons' perceptions of how the COVID-19 pandemic has affected their lived realities. These responses will be very broad and cover a range of topics, and the research questions are, as of yet, not set in stone. Some potential areas that we may focus on are mental health, wellbeing, social life, higher education, etc.
Keywords	Health
Date received	12 May 2021
Date approved	12 May 2021

Reference	**DAC / 116**
Project title	Stay at home: Housing, home, and COVID-19 (unfunded book)
Institution	University of York
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	I am writing a short book called 'Stay at home: Housing, home and COVID-19'. It uses evidence from many different sources to explore 1) the role that housing and home played in lockdown experiences, 2) the effects the pandemic and lockdown had on people's housing conditions, and housing security, and 3 the role, if any, that housing circumstances played in risk of infection and disease. The open response questions in the CLS wave 1 Codi survey will be a vital source.
Keywords	COVID-19 and housing
Date received	18 March 2021
Date approved	25 March 2021

Reference	DAC / 115
Project title	The impact of social media use on mental health: Evidence from the MCS
Institution	University College London (UCL) – CLS
Application type	Data linkage – GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	We aim to evaluate the impact of social media use on mental health using the Millennium Cohort Study. We will exploit an Instrumental Variable research design that will use how changes in broadband and 3G/4G/Wi-Fi coverage over time and geographical areas affect adolescents' use of social media. We will use the created Instrumental Variables to study how social media use impact mental health during adolescence. We will use the data collected and analysed by The Office of Communications (Ofcom) from telecoms operators around the UK to generate the Instrumental Variables (coverage, access, and download speed (e.g., in Mbit/s)). We will link the Ofcom data to the MCS using postcode's centroids of the cohort members' residences.
Keywords	3G coverage, 4G, coverage, broadband, mental health, performance data, and Wi-Fi coverage
Date received	1 February 2021
Date approved	9 February 2021

Reference	DAC / 114
Project title	Ethnic Diversity, Inequality and Social Cohesion: The Longitudinal Effects of Changing Community Composition on Social Cohesion amongst Movers and Stayers
Institution	University of Manchester
Application type	Data linkage
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	The aim of this project is broadly to identify the drivers of intergroup relations in the UK. In particular, we aim to examine whether the ethnic composition of a young person's school has an impact on their intergroup attitudes in adulthood, and how any effect of school ethnic composition may moderate (or be moderated by) parental attitudes and neighbourhood ethnic composition.
Keywords	Education
Date received	26 January 2021
Date approved	9 February 2021

Reference	DAC / 112
Project title	The impact of criminal activity on childhood and adolescents' risky behaviours, well-being, and educational outcomes

Institution	University College London (UCL) – CLS
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	We aim to evaluate the impact of exposure to local criminal activity on childhood and adolescents' risky behaviours, well-being, and educational outcomes. We will construct local criminal activity variables around cohort members residences and schools over cohort members' life using the official police administrative data from https://data.police.uk/data/. We will first describe changes and trajectories in exposure to criminal activity over time and around cohort members' residences and schools. We will evaluate how criminal activity changes are associated with the cohort member's well-being, the prevalence of risky behaviours such as drug and alcohol consumption, antisocial behaviours, among other risky behaviours, and educational attainment and school absenteeism.
Keywords	Anti-social behaviour (ASB) incidents, https://data.police.uk/data/, and individual crime
Date received	1 February 2021
Date approved	9 February 2021

Reference	**DAC / 111**
Project title	Investigating environmental and individual characteristics interactions to understand inequalities in BMI and body composition
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	Overweight and obesity has been increasing globally since the 1980s, widely attributed to an increasingly obesogenic environment. There have also been increases in inequalities in obesity, with high income countries largely show inverse associations between socioeconomic position (SEP) and body mass index (BMI). Although the environment has been credited with driving secular increases in obesity, not all individuals exposed to an obesogenic environment are overweight or obese. Psychological factors have also been highlighted in the development of obesity, and these factors may interact with the environment. It is hypothesised that less advantaged individual SEP results in worse psychological symptoms and greater exposure to an obesogenic environment, and that the environment moderates the mediating effect of psychological characteristics. Those with worse mental health have reduced coping ability when faced with obesogenic cues, and obesogenic environments result in greater opportunity to

	regulate negative emotions in maladaptive ways. Using structural equation modelling, these pathway and interactions can be tested in the Millennium Cohort Study, to further understand how inequalities in obesity arise.
Keywords	Environment and health
Date received	9 December 2020
Date approved	17 December 2020

Reference	**DAC / 110**
Project title	InSPIRE: Innovating UK clean air policies to prevent cognitive disorders across the life course, particularly for vulnerable urban populations
Institution	University of Birmingham
Application type	Data linkage – GEO
Data access method	Project not pursued by applicant
Cohort	NCDS, BCS70, and MCS
Abstract	New emerging research shows that where people live determines the extent to which air pollution impacts cognitive health, particularly vulnerable populations living in major UK conurbations. Population density, transportation, and mortality rates from respiratory diseases are recognised to vary sharply according to environment and location. From a primary prevention standpoint, with particular reference to vulnerable populations in the UK's major conurbations, it is unclear which policies or strategies reduce the negative impact of social determinants and health inequalities on air quality and its effect on cognitive health. The InSPIRE consortium comprising 24 academics, 11 institutions, and +24 stakeholders seeks to co-develop pioneering primary prevention policies for improving air quality We will engage in a highly ambitious research programme using the latest developments in complex system science modelling.
Keywords	Air pollution and health
Date received	9 December 2020
Date approved	17 December 2020

Reference	**DAC / 109**
Project title	Examining relationships between the neighbourhood environment and health outcomes
Institution	University College London (UCL)
Application type	Data linkage - GEO
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	It is increasingly understood that one's environment impacts health and wellbeing and that individual behaviours are influenced by the context in which they occur. This project will aim to examine potential relationships between aspects of the neighbourhood

	environment, specifically green spaces and crime, and health outcomes including mental health and physical activity behaviours. The requested geographic identifiers will allow linkage between cohort member postcodes and: (1) distance to green spaces using Geographical Information Systems (GIS) in MCS ages 11, 14 and 17 and (2) crime data from Police.Data.UK in MCS ages 11, 14 and 17.
Keywords	Green spaces and health
Date received	8 December 2020
Date approved	9 February 2021

Reference	**DAC / 108**
Project title	Social differences in the experience of a pandemic
Institution	Goethe University (Germany)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The study aims to analyse how the answers to the open-ended question in the COVID-19 survey differ by social characteristics of the cohort members. Main questions regard differences by age, gender, educational level, and social class: • Are different topics addressed by social characteristics of the cohort members? • Who is more likely to report negative or positive experiences associated with the pandemic?
Keywords	Survey analysis
Date received	25 November 2020
Date approved	17 December 2020

Reference	**DAC / 107**
Project title	The collapse of mining communities in the UK: life-time education, health, and labour market outcomes
Institution	Royal Holloway, University of London
Application type	Data linkage – GEO
Data access method	Direct release to applicant
Cohort	BCS70
Abstract	The purpose of this project is to investigate the lifetime outcomes of individuals that, during their adolescence, were residing in areas that were affected by the 1980s collapse of the coal mining sector in the UK. Using BCS70 data linked with geo-located information of coal mines in England and Wales, this project proposes to look into the trajectory of affected individuals, before and after the closures of the mines, relative to comparable individuals. The project will look in their performance, behaviour, and choices over their lifetime, along many dimensions, e.g., educational attainment that can be linked to subsequent labour market outcomes.
Keywords	Mining

Date received	8 October 2020
Date approved	15 October 2020

Reference	**DAC / 106**
Project title	COVID-19: the role of neighbourhood deprivation in difficult times on individuals' wellbeing.
Institution	French Institute for Demographic Studies (INED) (France)
Application type	Data linkage – GEO
Data access method	Direct release to applicant
Cohort	NCDS, BCS70, Next Steps, and MCS
Abstract	The main objective of this work is to test whether different types of pre-COVID neighbourhood socio-economic deprivation (i.e., local income deprivation, local environmental deprivation, local housing-related deprivation, etc.) correlate with changes in behaviours (such as exercise, sleep, diet, and alcohol use) which are drivers for health conditions and overall health conditions throughout the pandemic.
Keywords	Deprivation
Date received	24 September 2020
Date approved	15 October 2020

Reference	**DAC / 105**
Project title	Poor and Skilled? Neighbourhood deprivation and non-cognitive skills development.
Institution	Sciences Po Paris (Institut d'Etudes Politiques de Paris) (France)
Application type	Data access
Data access method	Direct release to applicant
Cohort	NCDS
Abstract	The objective of this research is to add to the literature on neighbourhood effects by investigating whether growing up and living throughout life in a more or less deprived neighbourhood has an impact on individuals' non-cognitive skills development such as sociability, initiative, or self-confidence (Carneiro and Heckman, 2003).
Keywords	Deprivation
Date received	24 September 2020
Date approved	15 October 2020

Reference	**DAC / 104**
Project title	Risk factors for early or premature natural menopause: evidence from the 1970 British Cohort Study and the 1958 National Child Development Study
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	Direct release to applicant

Cohort	NCDS
Abstract	This paper uses data from the 1970 British Cohort Study and the National Child Development Study to shed further light on the factors throughout life affecting premature or early natural menopause – particularly early life, reproductive, lifestyle and socio-demographic influences. It employs pooled individual level analysis aimed at strengthening the evidence about common risk factors across women in the cohorts.
Keywords	Menopause
Date received	11 September 2020
Date approved	17 September 2020

Reference	**DAC / 103**
Project title	A multi-perspective analysis of university students' personal mental health and well-being capital and its effect on their life outcomes
Institution	University of Surrey
Application type	Data linkage
Data access method	UK Data Service SecureLab
Cohort	Next Steps
Abstract	The project will provide insight into how young people's life outcomes (educational, employment, mental health, and well-being) are dependent on their intersectionalities and how it is moderated by their university environment. By addressing how the characteristics of the university environment can improve the life outcomes for young people, universities can identify whether their environments may be detrimental to certain young persons and can work to put into place policies and practices that can reduce the disadvantages that may be faced by some groups of young persons.
Keywords	Higher education
Date received	28 August 2020
Date approved	17 September 2020

Reference	**DAC / 102**
Project title	Educational choices and social interactions. Reassessing Educational Strategies in a divided Society (ERESS)
Institution	University of Southampton
Application type	Data linkage
Data access method	ONS SRS
Cohort	Next Steps
Abstract	This project contributes to this literature by proposing an analysis of the decision processes accounting for those differentials. The analysis seeks to address the following questions using data from Next Steps. The educational choices of interest are 1) GCSE subject choice (2004) (EBacc-eligible, demanding, and applied subjects) in

	year 9, 2) A-levels as opposed to vocational qualifications or leaving education after year 11 (2006), 3) and university entry.
Keywords	Education
Date received	13 July 2020
Date approved	16 July 2020

Reference	**DAC / 101**
Project title	The development of novel physical behaviour metrics using free-living body-worn accelerometer data and their relationship with measures of clinical and health outcomes
Institution	University of Strathclyde
Application type	Data access
Data access method	Direct release to applicant
Cohort	BCS70
Abstract	This project will look at thigh-worn accelerometer data collected from a group of free-living subjects, the BCS70 cohort, to characterise potential novel physical behaviour (PB) metrics that describe real-world physical behaviours and capabilities in the general population which are masked by more generic analysis of daily accumulations of physical activity. We will also investigate and identify physical behaviour metrics that could act as digital biomarkers for specific diseases states, such as diabetes, by pairing the accelerometer data with lifestyle and health information captured within the main BCS70 survey.
Keywords	Accelerometery
Date received	13 July 2020
Date approved	16 July 2020

Reference	**DAC / 100**
Project title	Vision impairment and physical activity in childhood and adolescence
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	Our goal is to identify whether children and adolescents with impaired vision can achieve healthy levels of PA equivalent to those without impaired vision, the types of PA that enable this and thus the interventions that might be required to ensure all children and adolescents with impaired vision can access and benefit from PA.
Keywords	Vision and physical activity
Date received	7 July 2020
Date approved	16 July 2020

Reference	**DAC / 99**

Project title	Patterns of atopic eczema disease activity from birth through mid-adulthood
Institution	University of California (United States)
Application type	Data access
Data access method	Direct release to applicant
Cohort	NCDS
Abstract	The aim of this analysis is to identify subtypes of atopic dermatitis based on patterns of disease activity into mid-adulthood, examine whether early and mid-life characteristics are associated with atopic eczema subtype.
Keywords	Eczema
Date received	6 July 2020
Date approved	16 July 2020

Reference	**DAC / 98**
Project title	Impacts of COVID-19 on UK birth cohorts
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	NCDS, BCS70, Next Steps, MCS, and COVID-19
Abstract	The Centre for Longitudinal Studies (CLS) and the MRC Unit for Lifelong Health and Ageing (LHA) commissioned a special coronavirus (COVID-19) web survey to understand the health, social, and economic impacts of the COVID-19 outbreak. In combination with data from LHA, this research project aims to use the longitudinal data from the CLS birth cohorts to understand how people at different life stages are being affected, and how prior life experiences shape resilience or vulnerability to its effects.
Keywords	COVID-19
Date received	15 June 2020
Date approved	18 June 2020

Reference	**DAC / 97**
Project title	How active travel can improve our health and well-being: a study using linked administrative data (SAIL IGRP 1001)
Institution	Swansea University
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	This project will use information collected in i) the Active Adults Survey, which includes information on mode of travel to work and adult's sport participation, ii) the National Survey for Wales, which also includes information of active travel uptake and is currently being utilised by WG to monitor progress on active travel in Wales, and iii) the Millennium Cohort Study (MCS) in order to examine

	children's active travel patterns. To further enhance our knowledge on active travel in Wales, we will link the aforementioned surveys to health and education records to examine the health and well-being of those that actively travel and those who are not. Income and social circumstances will also be explored in terms of the influence on active travel uptake, should these datasets become available.
Keywords	Travel and wellbeing
Date received	8 June 2020
Date approved	5 February 2021

Reference	**DAC / 96**
Project title	Social mobility and educational attainment in the UK, and how it has changed over time
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	The aim of the research is to generate a better understanding of and to provide evidence regarding educational attainment gaps in the UK, and the extent of social mobility in education over time. We aim to answer the following research questions: 1. What are the educational attainment gaps in England, specifically in relation to one's background including parental education and socioeconomic circumstances, gender, ethnicity? 2. What are the mechanisms underlying these attainment gaps, and particularly what is the relationship between early life circumstances and parenting behaviours and educational attainment? 3. How do educational attainment gaps compare across generations, and across countries in the UK? 4. Does educational attainment relate to other aspects of life (e.g., mental health and wellbeing, labour market outcomes), and if so, to which ones? In providing updated estimates on the extent of social mobility in education for the UK – including the structural and behavioural mechanisms underlying it, how it has changed over time and how it varies across countries in the UK – this study will provide vital new evidence for policymakers to tackle problems that prevent poorer children from achieving their educational potential, and for reducing the attainment gap.
Keywords	Education and social mobility
Date received	13 May 2020
Date approved	21 May 2020

Reference	**DAC / 94**

Project title	Intergenerational Altruism and Transfers of Time and Money – A Lifecycle Perspective
Institution	University College London (UCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	Parental investments in children can take one of four broad forms: 1. Time investments during childhood and adolescence that aid child development. 2. School quality choice. 3. Expenditures for further education. 4. Cash transfers in the form of inter-vivos gifts and bequests. Using panel data that covers a cohort of individuals from birth to retirement, we estimate a dynastic model of household decision-making with intergenerational altruism that nests a multi-period child production function, incorporates all four of these types of investments, and allows us to quantify the relative importance of those investments in explaining intergenerational persistence in outcomes.
Keywords	Parental investment
Date received	6 April 2020
Date approved	23 April 2020

Reference	**DAC / 93**
Project title	Area-level variation in common mental disorders among lesbian, gay, bisexual and questioning compared to heterosexual young people: a feasibility study
Institution	University College London (UCL)
Application type	Data access
Data access method	UCL Data Safe Haven (DSH)
Cohort	Next Steps and MCS
Abstract	Lesbian, gay, bisexual, and questioning (LGBQ) young people are more likely than heterosexuals to have mental health problems and they are at higher risk of suicide. This is thought to be caused by stigma and discrimination. We think that stigma and discrimination towards sexual minorities might be worse in some areas of the UK than others. This could lead to geographical variation in mental health problems among LGBQ compared to heterosexual young people.
Keywords	Geography, LGBTQ+, and mental health
Date received	16 April 2020
Date approved	23 April 2020

Reference	**DAC / 92**

Project title	Impact of socioeconomic circumstances on risks and life-course consequences of preterm birth: studies into differential exposure and susceptibility (SAIL IGRP 0924)
Institution	University of Liverpool
Application type	Data access
Data access method	SAIL Databank
Cohort	MCS
Abstract	This project aims to investigate the pathways to inequalities in health and educational outcomes for children who are born preterm by applying novel causal mediation and Interaction analysis techniques to the linked data within SAIL. **Aim:** To better explain inequalities in preterm birth prevalence by understanding how the relationship between socioeconomic status (exposure) and preterm birth (outcome) is mediated by maternal risk factors and determine whether preterm birth and socioeconomic status interact to influence inequalities in later life. **Hypotheses:** Socioeconomic inequalities in the distribution of preterm birth are caused by differential exposure to risk factors for preterm birth, and that preterm birth has different impacts on later life outcomes dependent on childhood socioeconomic circumstances.
Keywords	Education and health
Date received	10 March 2020
Date approved	17 March 2020

Reference	**DAC / 91**
Project title	Modelling the intergenerational transmission of socioeconomic status between individuals over the life course contrasting occupational earnings with credit access
Institution	University of Nottingham
Application type	Data linkage – GEO
Data access method	In progress
Cohort	NCDS and BCS70
Abstract	This research project seeks to explore the extent to which two different measures of inequality/social stratification, namely occupational earnings, and credit risk scores, which are attained in adulthood (and represent socioeconomic position), differ across individuals depending on their socioeconomic background and generation.
Keywords	Economy
Date received	9 March 2020
Date approved	21 May 2020

Reference	**DAC / 90**
Project title	Investigating the pattern of physical activity accumulation in children with and without Asthma

Institution	Swansea University
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	It is well established that most children and adolescents aged between 5-18 years old in the UK fail to meet the current recommended guidelines of a minimum of 60 minutes per day of moderate-to-vigorous physical activity (MVPA; Chief Medical Officer, 2019). Current literature suggests that physical activity (PA) levels in children with Asthma are similar to those of their healthy counterparts (Jago et al. 2017), although those with poorer disease control, greater severity of disease or a recent hospital admission tend to be less active (Pike et al. 2017). Further interpretation is confounded by possible interactions with age, sex, and maturation status, among other things, which have not previously been accounted for. Jago et al. (2019) proposes a stronger association between time spent sedentary and Asthma, than Asthma and PA, with the associations increasing with age and being greater in girls. A fundamental characteristic of PA and sedentary time is its compositional nature within a constrained time period (i.e., 24 hours). However, much of the existing data fails to account for this and, consequently, little is known regarding the pattern of PA and sedentary time accrual in those with Asthma compared to their healthy counterparts. Indeed, it is hypothesised that whilst total PA may not differ, the manner in which this PA is accumulated may vary considerably according to disease status and severity.
Keywords	Physical activity
Date received	5 March 2020
Date approved	22 July 2020

Reference	**DAC / 89**
Project title	Physical activity, sedentary behaviour, and mental health
Institution	University College London (UCL)
Application type	Data access
Data access method	Project not pursued by applicant
Cohort	MCS
Abstract	Sedentary behaviour and physical activity could be modifiable risk factors for depression in young people. We aim to use accelerometer data from ages 7 and 14 to explore associations between sedentary behaviour, light activity, and moderate to vigorous activity with depressive symptoms at age 17. The results of our study will help to inform guidelines and interventions for improving the mental health of young people through the promotion of activity.
Keywords	Physical activity

Date received	3 March 2020
Date approved	17 March 2020

Reference	**DAC / 88**
Project title	Development of the British birth cohort studies as mixed methods resources for the study of mid- and later life
Institution	University College London (UCL) – CLS
Application type	Data enhancement
Data access method	Project not pursued by applicant
Cohort	NCDS and BCS70
Abstract	The UK's birth cohort studies are recognised internationally as a unique resource. Following representative samples of Britons throughout their lives, these studies collect valuable data on an extensive range of quantitative variables and have made a tremendous contribution to the understanding of a broad range of issues, including ageing. However, the cohort studies contain relatively little qualitative data, which means that they are not able to provide robust evidence on individuals' own experiences of and perspectives on ageing. Our aim is to remedy that deficit by adding new qualitative data collection to the three oldest studies: the 1946 National Survey of Health and Development (NSHD), the 1958 National Child Development Study (NCDS), and the 1970 British Cohort Study (BCS70). Our project has both resource development and empirical aims. We will add a qualitative, person-centred approach to the 1946, 1958, and 1970 birth cohort studies in order to: (a) conduct longitudinal mixed methods research into ageing and well-being, (b) facilitate cross-cohort comparisons of cohort members' perspectives and experiences, and (c) enrich the cohort studies for other qualitative and mixed methods researchers. Our empirical investigations will focus on the means through which individuals construct identity and maximise well-being over the life course and in their daily lives.
Keywords	Mixed methods and survey analysis
Date received	19 February 2020
Date approved	23 April 2020

Reference	**DAC / 87**
Project title	Actigraphic correlates of ADHD
Institution	King's College London (KCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	The proposed research project will use data from the six waves of the Millennium Cohort Study (MSC) data, to examine concurrent and historical actigraphic patterns in young people with and without ADHD. The study will investigate how the context of

	actigraphic measurement (i.e., when motor activity is monitored) influences the association between actigraphy and ADHD, after robust adjustment for potential bio-psycho-social confounders.
Keywords	Accelerometery and ADHD
Date received	4 February 2020
Date approved	20 February 2020

Reference	**DAC / 86**
Project title	Estimating the Returns to Early Childhood Development
Institution	University College London (UCL) – CLS
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	The team has come together to work on a project that will constitute a chapter of the IFS 'Deaton Review,' and a draft paper is due by summer 2020. The chapter is estimating the medium-term returns to early years investments. As part of this project, we are hoping to exploit synergies and to conduct analysis to contribute to the MCS7 Initial Findings, specifically on cognitive development and academic attainment, and to include genetic analysis as part of this (subject to META-DAC approval etc.). No outputs would be published until MCS7 data are available at the UKDS.
Keywords	Survey analysis
Date received	13 February 2020
Date approved	20 February 2020

Reference	**DAC / 85**
Project title	Academies' impact: Looking beyond exams
Institution	University College London (UCL) – CLS
Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	Increased school autonomy and competition is being introduced internationally as a way to raise educational standards through quasi-market incentives. Academies have more autonomy and flexible governance, being out of Local Authority (LA) control. Previous literature has focused on pupil performance at KS2 and KS4 to evaluate the impact of attending an academy on school outcomes. This is in line with performance tables that largely drive school competition and parental choice. If academies are maximizing their position in performance tables, they may be targeting students at the threshold with traditional teaching focused on exams preparation or directing students to different subject choices according to ability. Looking beyond exam performance, I would like to answer the following research questions: (1) Are pupils at academies (sponsored/converters)

	doing better at problem solving and social skills than their peers at LA maintained schools? (2) What influence do schools (academies) have on subject choice pattern? In both cases the treatment group is "pupils attending academies" and the control group “pupils attending LA maintained schools that later became academies.”
Keywords	Education and schools
Date received	7 February
Date approved	20 February 2020

Reference	**DAC / 84**
Project title	How does growth in earlier life modify the relationship between adult BMI and cardio-metabolic outcomes?
Institution	Loughborough University
Application type	Data access
Data release method	Direct release to applicant
Cohort	NCDS
Abstract	This project will provide novel insights into the contribution of body size trajectories to the resilience to adverse cardiometabolic outcomes observed in individuals of similar BMI. For example, this project will lead to a greater understanding of the specific age period(s) which confer cardiometabolic resilience and thus identification of groups of individuals (who share similar trajectories) in which this resilience manifests. This information is relevant to anyone conducting research on related topics, including life course epidemiologists, human population biologists and public health researchers. As BMI levels (and prevalence of overweight/obesity) are rising on a global scale, the beneficiaries of this grant extend beyond the UK alone. In addition to adding to the existing literature, the findings of the project will stimulate new research, for example, into the life course behaviours associated to cardio-metabolic resilience and any underlying body composition changes and hormonal/metabolic pathways.
Keywords	Health
Date received	24 January 2020
Date approved	20 February 2020

Reference	**DAC / 83**
Project title	Investigating the early life determinants of physical capability in midlife
UKDS project ref.	186390
Institution	Manchester Metropolitan University
Application type	Data access
Data release method	Direct release to applicant
Cohort	BCS70
Abstract	This project will aim to investigate whether a range of factors in early life that have previously been shown to be associated with

	objective measures of physical capability (including grip strength and standing balance performance) in later life, are associated with physical capability at age 46y in BCS70. Factors to be investigated include physical activity, anthropometrics, indicators of socioeconomic position, and markers of motor development. This will provide new insights on factors in early life that may be useful targets for intervention to promote the development and maintenance of peak physical capability.
Keywords	Physical capability
Date received	16 January 2020
Date approved	23 January 2020

Reference	**DAC / 82**
Project title	Understanding the determinants of educational achievement and the association with health and well-being in Wales: findings from the Millennium Cohort Study (SAIL IGRP 1015)
Institution	Cardiff University
Application type	Data access
Data release method	SAIL Databank
Cohort	MCS
Abstract	Understanding the factors that potentially influence children's educational achievement is important as this could contribute to the Welsh Government's recommendations and policies to tackle inequalities in educational achievement as well as raise educational standards. Health and education data will be linked to Millennium Cohort Study (MCS) data to provide a unique opportunity to explore issues, which have previously been not possible due to a lack of available linked information. This project aims to complete an analysis to study children's educational progress and the association with children's health, taking into consideration the potential impact of a child's home, school, and neighbourhood environments.
Keywords	Education
Date received	7 January 2020
Date approved	23 January 2020

Reference	**DAC / 81**
Project title	School choice and educational inequality: Economic analysis of parental preferences, constraints, and policies
Institution	University of Cambridge
Application type	Data linkage – GEO
Data release method	Project not pursued by applicant
Cohort	MCS
Abstract	School performance data show that pupils make markedly different levels of progress through secondary school and that the socio-economic gap in pupil achievement widens due to the

	different schools attended by different pupils. School assignment in England is determined by a system of school choice: since 1988, parents have had the right to nominate which schools they would like their child to attend. These nominations are combined with school admissions policies to determine the final allocation of pupils to schools. In this project we will study parents' preferences for school characteristics, and the implications of these and schools' admissions criteria for educational inequality.
Keywords	Education, pupil achievement, and SES
Date received	3 January 2020
Date approved	23 January 2020

Reference	**DAC / 80**
Project title	Adolescent obesity in terms of time use and wellbeing, using the MCS as the main data source. These paradata are used in my PhD thesis and related publications.
Institution	University of Warwick
Application type	Data access
Data release method	Direct release to applicant
Cohort	MCS
Abstract	I will be looking at mode differences across physical activity measurements as part of a study focusing on adolescent obesity. Those will involve comparisons between accelerometer and time diary data, as well as differences in mode within the time diary instrument, i.e., the paper, web, and app.
Keywords	Physical activity
Date received	19 December 2019
Date approved	23 January 2020

Reference	**DAC / 78**
Project title	Early life mental health, biomarkers in mid-life, and premature mortality: evidence from the 1958 British birth cohort
Institution	University College London (UCL) – CLS
Application type	Data access
Data release method	UCL Data Safe Haven (DSH)
Cohort	NCDS
Abstract	We capitalise on the availability of three assessments of mental health spanning childhood and adolescence in a population based prospective birth cohort to characterise trajectories of early life mental health and investigate their association with biomarkers in mid-life and all-cause mortality in early old age. We hypothesised that early life mental health is associated with biomarkers in mid-life and premature all - cause mortality. Considering that females live longer than males and that they are on average less healthy, we investigated modification of all hypothesised associations by sex. To further unpack the association between early life mental

	health and mortality, we grouped deaths in three broad categories, health related deaths, "deaths of despair (suicides, addiction related) and accidents.
Keywords	Mental health and mortality
Date received	5 November 2019
Date approved	5 November 2019

Reference	**DAC / 77**
Project title	Estimation of parent's preferences over secondary schools in England
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data release method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	I would like to use data from the MCS and the NPD to identify the factors that guide parents' choices of schools in England and Wales. I wish to explore two main questions: how parents trade-off different attributes of schools in their school applications (notably in terms of quality scoring, distance, and pupils mix); and the extent to which parents take account of the quality of schools in their choice of residential location. I would also consider how these preferences vary for different types of households.
Keywords	Education
Date received	20 October 2019
Date approved	22 January 2020

Reference	**DAC / 76**
Project title	'Primary' and 'secondary' effects of social origins on educational attainment: a new approach
Institution	Nuffield College
Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	Next Steps
Abstract	Despite decades of educational reform and expansion, social inequalities in educational attainment have been stubbornly persistent. Individuals from more advantaged backgrounds not only outperform those from less advantaged backgrounds in examinations (the 'primary effects' of social origins), but they also make more ambitious educational choices, even at comparable levels of prior performance (the 'secondary effects' of social origins). From a policy perspective, it is essential to understand the relative importance of primary and secondary effects in order to determine when and how to intervene to reduce them. This is an issue which both sociologists and economists have addressed, but existing findings are inconclusive. In addition, certain considerations have thus far been neglected. First, existing studies

	have focused almost exclusively on the influence of family economic resources, by and large ignoring other sources of (dis)advantage. This is likely to underestimate the size of both primary and secondary effects and can only tell a partial story about their sources and about over-time change. Second, little effort has been made to identify the mechanisms that generate these effects. We seek to address these neglected issues. Moreover, we will do so by examining the British case in comparative perspective. In this way we should be able to shed light on the possible influence of different educational institutions and policies.
Keywords	Education
Date received	12 October 2019
Date approved	19 November 2019

Reference	**DAC / 75**
Project title	How reliable are local neighbourhood measures of deprivation for measuring young people's socio-economic background?
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL Data Safe Haven (DSH)
Cohort	Next Steps and MCS
Abstract	The aim of this paper will be to concurrently investigate the properties of different socio-economic status measures that can be derived using administrative data, most of which encompass some form of local neighbourhood measures of deprivation.
Keywords	Deprivation
Date received	16 July 2019
Date approved	24 September 2019

Reference	**DAC / 73**
Project title	What Moderates the Scarring Effect of Youth Unemployment on Mental Wellbeing?
Institution	University College London (UCL)
Application type	Data access
Data release method	Direct release to applicant
Cohort	Next Steps
Abstract	There is an established link between youth unemployment and later life mental health, both in the UK and in other developed countries. Less if known, though, about whether this is true of all individuals, or whether the association is confined to particular groups. Using Next Steps, we will study whether months unemployed between ages 16-20 is associated with GHQ scores at age 25 and whether this association differs by: 1. Neighbourhood Index of Multiple Deprivation (age 14/15) 2. Family Socio-Economic Status (age 13/14)

	3. Internal Locus of Control (age 14/15) 4. Gender These questions will be investigated using OLS regression with interaction terms added between months unemployed and each of the factors listed in turn. To our knowledge Next Steps has not been used before to assess the impact of youth unemployment on later mental health. The requested data will be used to derive the months unemployment variable used in the regressions.
Keywords	Mental health and unemployment
Date received	21 August 2019
Date approved	24 September 2019

Reference	**DAC / 72**
Project title	Investigating the long-term outcomes of people who experience adversity in childhood, including time in care
Institution	University of Oxford
Application type	Data access
Data release method	Direct release to applicant
Cohort	NCDS and BCS70
Abstract	People who spend time in the care of children's services have poor health, education, and employment outcomes across the life course. These studies suggest that it is the experience of being in care which leads to poor outcomes. The present study proposes to use quasi-experimental methods to explore the contribution of the care experience to later life outcomes for participants in two birth cohorts (1958 and 1970). I work in collaboration with two historians at the University of Oxford who will conduct qualitative analyses (of other sources) to complement our interpretation of the findings. The study will contribute to a greater understanding of the ways in which welfare provision impacts on long-term outcomes of its recipients.
Keywords	Care experience
Date received	19 August 2019
Date approved	24 September 2019

Reference	**DAC / 71**
Project title	Moving for the Kids: Residential Choices, School Choices, and Ethnic and Socioeconomic Segregation
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	I am requesting the residential postcodes for all households in the first six sweeps of the Millennium Cohort Study (MCS). I will use these data for a research project funded through a British

	Academy Postdoctoral Fellowship. This research project will investigate the interplay between residential choices and school choices among young families, focusing on the UK. More specifically, I will study, through analysing households' moving behaviours, how parents' residential choices depend on the social composition of neighbourhoods but, importantly, also local school opportunities. My key research questions include: (1) How do the residential choices of young families depend on the social composition of neighbourhoods? (2) What is the additional influence of local school opportunities on residential choices? (3) To what extent do households from different ethnic groups or socioeconomic strata respond differently to various contextual characteristics in their residential choices? (4) How can any such group differences, as referred to in the previous research question, be explained? In short, I plan to use the full address data of the MCS for three purposes: 1. Measuring the distances over which households move; 2. Assessing the distances between households' homes and a range of school options; 3. Matching relevant area characteristics to households' residential locations. For each of these tasks, it is important that they are executed with a great level of spatial precision, making the residential postcodes of the MCS a critical factor to the success of my research project.
Keywords	Residential choices
Date received	2 August 2019
Date approved	19 November 2019

Reference	**DAC / 70**
Project title	Exploring the link between survey length and panel attrition
Institution	University of Salamanca (Spain)
Application type	Data access
Data release method	UCL IOE server
Cohort	MCS
Abstract	This research aims has two main goals. First, it aims to build a theoretical framework to disentangle the dimensions of survey length and propose a set of indicators. Second, it addresses the link between response and survey length in longitudinal studies using data from the MCS. These two main goals can be expanded in four operative objectives.
Keywords	Survey analysis
Date received	26 July 2019
Date approved	26 July 2019

Reference	**DAC / 69**
Project title	Faith Schooling, Faith and Economic and Educational Outcomes

Institution	Lancaster University
Application type	Data linkage – GEO
Data release method	UK Data Service SecureLab
Cohort	Next Steps
Abstract	The project seeks to examine the importance of faith, and of attending a faith school on educational and other economic outcomes (such as earnings at age 25, and measures of non-cognitive skills like risk aversion, also at age 25). There will also be inference on the importance of the ethos of a faith school by comparing, among those attending a faith school, those who are faithful (i.e., report a high level of how important their faith is in their everyday life) with those who are not faithful to see if the faithful perform better in faith schools. The requested geographical data provides the distances to the schools that could have been attended by the next steps cohort member. This is important as it provides some information on the other options available to the cohort member when they made their school choice.
Keywords	Education
Date received	8 July 2019
Date approved	15 July 2019

Reference	**DAC / 68**
Project title	Activity and Motion in 24 hours (AM24)
Institution	University College London (UCL)
Application type	Data access
Data release method	Direct release to applicant
Cohort	MCS
Abstract	Associating activity descriptions from Millennium Cohort Study diary data with simultaneously collected accelerometer records; investigating possibilities for making inferences from each type of record to the other.
Keywords	Accelerometery
Date received	9 May 2019
Date approved	11 July 2019

Reference	**DAC / 65**
Project title	School level influences on the early secondary phase
Institution	Manchester Metropolitan University
Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	The project will analyse how the experiences and outcomes of socio-economically disadvantaged pupils compared to their peers between the end of primary school and age 14 and identify how

	this varies with pupil, school, and place characteristics. A UKDS SecureLab application (128602) has been made to access the KS2 linked MCS data to test pupil and place effects; this request seeks to add to this usage through the analysis of the effect of school level variables. The main research question is: Are age 14 outcomes influenced by school characteristics? The school characteristics to be considered include peer characteristics, measures of school quality and the size of the school. The change in these characteristics from primary to secondary will also be tested.
Keywords	Education
Date received	25 April 2019
Date approved	7 May 2019

Reference	**DAC / 64**
Project title	The Development of Occupational Aspirations during Middle Childhood and Early Adolescence
Institution	University of Bristol
Application type	Data access
Data release method	Direct release to applicant
Cohort	MCS
Abstract	The proposed doctoral research aims to examine how gender, ethnicity and SES affect children's development of OAs via individual, family, school, and neighbourhood factors. Additionally, the proposed research aims to uncover the long-term relations between OAs and academic subject preferences, academic self-efficacy, and academic attainment among diverse groups of children based on gender, ethnicity, and SES. The proposed research will address the following research questions: 1. What is the role of ethnicity, gender, and SES in varying the development of occupational aspirations from age 7 to 14? 2. How are individual, family, school, neighbourhood factors associated with explaining group patterns in the development of occupational aspirations from age 7 to 14? 3. How are academic subject preferences, academic attainment and academic self-efficacy related to the development of occupational aspirations from age 7 to 14? 4. How do these relations vary across gender, ethnicity, and SES groups?
Keywords	Child development, education, and occupational aspiration
Date received	12 April 2019
Date approved	7 May 2019

Reference	**DAC / 62**
Project title	Intergenerational Altruism and Transfers of Time and Money: A Lifecycle Perspective
Institution	University College London (UCL)

Application type	Data access
Data release method	Direct release to applicant
Cohort	NCDS
Abstract	Parental investments in children can take one of three broad forms: 1. Time investments during childhood and adolescence that aid child development, and in particular cognitive ability. 2. Educational investments that improve school quality and hence educational outcomes. 3. Case investments in the form of inter vivos transfers and bequests. We develop a dynastic model of household decision making with intergenerational altruism that nests a child production function, incorporates all three of these types of investments, and allows us to quantify their relative importance and estimate the strength of intergenerational altruism. Using British cohort data that follows individuals from birth to retirement we find that around 40% of differences in average lifetime income by paternal education are explained by ability at age 7, around 40% by subsequent divergence in ability and different educational outcomes, and around 20% by inter vivos transfers and bequests received so far.
Keywords	Parental investment
Date received	18 March 2019
Date approved	19 March 2019

Reference	**DAC / 61**
Project title	Mental Health among adolescents; geographical determinants
Institution	University College London (UCL)
Application type	Data access
Data release method	Project not pursued by applicant
Cohort	MCS
Abstract	The main research question is looking into the impact of sleep on mental health of adolescents. As research has shown how formative those years are, one can easily understand the benefits from better understanding key causal relationships. Methodologically, the research aims at using exogenous variation in the sunset time as an instrument for sleep deficiencies.
Keywords	Mental health and sunset variation
Date received	11 March 2019
Date approved	19 March 2019

Reference	**DAC / 60**
Project title	The changing nature of residential mobility over childhood" – spin off from "Home moves in the early years"
Institution	University College London (UCL) – CLS
Application type	Data access

Data release method	Direct release to applicant
Cohort	MCS
Abstract	This research project examines household moves involving children in the UK during their first 14 years (over 2001-2016). We assess the prevalence and nature of moves in relation to children's age and previous moving history, asking three research questions. First, did the probability of moving vary with children's age? Second, did life events differentially affect the probability of moving as children grew older? Third, did the characteristics of moves change as children grew older? We use data from all 6 waves of the Millennium Cohort Study, including all families who participated in at least two waves (n=17,300). The main analysis uses multilevel event history analysis, which treats moves as recurrent events to allow repeat mobility throughout the study period. We consider as relevant life events partnership changes, changes in number of children in the household, and change in employment at household level. To characterise moves, we rely on information about house quality, housing tenure, and (if available) distance moved.
Keywords	Residential choices
Date received	11 March 2019
Date approved	19 March 2019

Reference	**DAC / 59**
Project title	'First in Family' graduates in England
UKDS project ref.	113943
Institution	University College London (UCL) – CLS
Application type	Data access
Data release method	UCL IOE server
Cohort	Next Steps
Abstract	The policy discussion about 'widening participation' (WP) in UK higher education (HE) has expanded beyond traditional socioeconomic gaps to identifying 'first in the family to attend university' students as a specific form of disadvantage. 'First in Family' (FiF) refers to students who attend university (and obtain a degree), but whose mother and father did not. Fifteen of the 24 Russell Group universities target these potential students in their WP campaigns, although little is known about their characteristics. This project will be the first large-scale research study on FiF in the UK and will inform national and university level WP policies. This research will shed light on FiF students and how well this proxies existing measures of disadvantage. We will compare FiF students to their peers who could have been FiF, but who do not go to HE, and those who are not FiF to attend university, to identify whether there are substantive differences in their non-cognitive traits such as aspirations, locus of control (perceived autonomy over their life) and academic self-concept to identify whether

	these explain their higher educational trajectories. We will then explore the decisions FiF students make in terms of the HE institution, subject choice and drop-out as compared to their non-FiF peers at university. Furthermore, we will investigate how being FiF affects labour market outcomes. We will examine a contemporaneous generation of young adults and compare them with two younger cohorts, using nationally representative data to determine how WP is affecting HE aspirations over time.
Keywords	Higher education
Date received	11 March 2019
Date approved	19 March 2019

Reference	**DAC / 58**
Project title	Undermatch in higher education: prevalence, drivers, and outcomes
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL IOE server
Cohort	Next Steps
Abstract	It is widely known that there are substantial socio-economic gaps in students' likelihood of attending higher education (HE). But students from disadvantaged backgrounds are also less likely to attend a high-status university than their richer counterparts, even when they have similar A-level grades (Chowdry et al, 2013). This has important implications for disadvantaged students' future earnings and employment prospects, and hence for equity and social mobility. This project would produce the first UK-based research on this so-called phenomenon of 'undermatch' – where a student's academic credentials would permit them to access a university that is more selective than the one they attend. While the evidence suggests that this is a significant issue in the US, with over 40% of students undermatching in their postsecondary choice (Smith et al 2013), we have little idea of the scale of the issue in the UK. In this project we will use linked the longitudinal study Next Steps to analyse the phenomenon of undermatch in the UK, and its implications for students' employment prospects. In particular, we will address the following research questions: 1. What is the extent of undermatch in the UK system? 2. What are the characteristics of undermatched students (such as gender, ethnicity, age, socio-economic status, prior attainment, predicted grades, subject choice at A-level, school type)? 3. Do students who undermatch have worse outcomes at university (drop out, and less likely to achieve a good degree)?

	4. Do undermatched students have worse early labour market outcomes (be unemployed, in lower status jobs or earn less after graduating)?
Keywords	Higher education
Date received	4 February 2019
Date approved	19 March 2019

Reference	**DAC / 56**
Project title	The effects of student loan debt on graduates' financial and life decisions in the UK
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL Data Safe Haven (DSH)
Cohort	Next Steps
Abstract	The increasing use of student loans to fund higher education is a global phenomenon and a factor fuelling its expansion and rising participation. In England, loans have facilitated the raising of tuition fees allowing increased access while limiting public expenditure. The vast majority of undergraduates depend on these loans to fund their studies and compared with previous decades, more students rely on them and borrow larger amounts to pay for their higher education. One of the consequences of funding access through such policies is increasing student loan debt. As levels of student loan debt have risen over time, so has the time it takes graduates to repay their loans. Current estimates suggest that the majority of graduates in England will be paying off their loans for most of their working lives and a sizable proportion will never pay off their loans in full. In other words, student loan debt is not a brief interlude, but a "new normal" that may shape graduates' post-university choices, behaviour, and life events well into the future. Yet, we know nothing about the longer-term consequences of growing student loan indebtedness on graduates' life choices in England. US research is available but might not be applicable to graduates in England because of differences in the student loans systems in the two countries.
Keywords	Higher education
Date received	1 February 2019
Date approved	19 March 2019

Reference	**DAC / 55**
Project title	The long-run effects of attending a preferred secondary school: Evidence from an English cohort
Institution	Lancaster University
Application type	Data access
Data release method	UK Data Service SecureLab
Cohort	Next Steps

Abstract	Schools vary in quality, and in England, high-performing schools tend to be over-subscribed: there are more applicants than places available. In this paper, we use nationally representative cohort data linked to administrative education records to study the long-term consequences of failing to gain admission to one's preferred secondary school in England. Our empirical strategy leverages features of the institutional setting and the literature on school choice to make a credible case for a selection-on-observed variable identifying assumption. Failing to gain a place at a preferred school had little impact on performance in high-stakes examinations, but increased drop-out rates from high-school and university and reduced mental health and income at age 25 years. A potential channel is increased early engagement in risky behaviours such as drug use and truancy. These effects are especially pronounced in areas which deployed a manipulable assignment mechanism for school places. Our results show that schools are important in shaping more than test scores, and the workings of the school admission system play a fundamental role in ensuring access to good schools.
Keywords	Education
Date received	23 January 2019
Date approved	12 February 2019

Reference	**DAC / 54**
Project title	The causal effect of air quality on child development and health: Evidence from Chile and the UK
Institution	University College London (UCL) – CLS
Application type	Data access
Data release method	UCL IOE server
Cohort	MCS
Abstract	I plan to linkage the Millennium Cohort with air pollution data from the Automatic Urban and Rural Network (AURN). The AURN is the UK's largest automatic monitoring network and is the main network used for compliance reporting against the Ambient Air Quality Directives. It includes automatic air quality monitoring stations measuring oxides of nitrogen (NO), sulphur dioxide (SO), ozone (O), carbon monoxide (CO) and particles (PM 10, PM 25). I request have access to geographical information at postcode level and the date of birth.
Keywords	Air pollution
Date received	21 January 2019
Date approved	12 February 2019

Reference	**DAC / 53**
Project title	CLS (S drive) and Ipsos Mori
Institution	University College London (UCL) – CLS
Application type	Data access

Data release method	Direct release to applicant
Cohort	MCS
Abstract	Interviewers on MCS are required to follow extensive and complex contact and tracking protocols to minimise non-contact and non-location and there is potential for mistakes or failure to follow protocols correctly. At wave 5 this information was recorded in the field using paper contact sheets which interviewers transcribed into an electronic system at home. At wave 6, interviewers were equipped with tablets, and the ECS system was developed for recording contact and tracking attempts. Extensive training was provided to interviewers on the new system. The objectives were to improve the quality and timeliness of paradata for fieldwork monitoring and mover tracing and to maximise interviewer compliance (and hence survey response) with the fieldwork protocols. This paper looks at the impact of the ECS on survey protocol compliance, non-contact and non-location rates, and survey cost.
Keywords	Survey analysis
Date received	3 January 2019
Date approved	15 January 2019

Reference	**DAC / 52**
Project title	Beyond careers: 'Other' reasons why cohort members enrolled on a degree by age 33 (1991)
Institution	University College London (UCL) – CLS
Application type	Data enhancement
Data release method	UCL IOE server
Cohort	NCDS
Abstract	This application for data enhancement is part of [the co-applicant's] PhD thesis. [Their] research questions are: 1. Is there a relationship between the age in which 1958 cohort members were awarded their degrees, their social class and gender? 2. How do cohort members who were mature students between 1982 and 2008 talk about their decisions to enter higher education as a mature student, in their life stories as told at age 50? 3. What new insights be gained by using quantitative and qualitative longitudinal secondary data guided by the life course approach in researching mature student decisions?
Keywords	Higher education
Date received	10 January 2019
Date approved	15 January 2019

Reference	**DAC / 51**

Project title	Predicting 1958 cohort members' future further education and careers: Their teachers' views in 1969
Institution	University College London (UCL) – CLS
Application type	Data enhancement
Data release method	UCL IOE server
Cohort	NCDS
Abstract	This application for data enhancement is part of [the co-applicant's] PhD thesis. Her key research questions are: 1) Is there a relationship between the age in which 1958 cohort members were awarded their degrees, their social class and gender? 2) How do cohort members who were mature students between 1982 and 2008 talk about their decisions to enter higher education as a mature student, in their life stories as told at age 50? 3) What new insights be gained by using quantitative and qualitative longitudinal secondary data guided by the life course approach in researching mature student decisions?
Keywords	Higher education
Date received	10 January 2019
Date approved	15 January 2019

Reference	**DAC / 50**
Project title	The effects of socio-economic circumstances on physical activity patterns among young people
Institution	Swansea University
Application type	Data access
Data release method	Direct release to applicant
Cohort	MCS
Abstract	UK public health guidelines state that children should undertake 60 minutes per day of moderate-to-vigorous intensity physical activity (MVPA) and that achieving this is associated with better health (Department of Health, 2011). However, our work in the Millennium Cohort Study (MCS) observed that MVPA levels are low – with only half of primary school-aged children partaking in enough activity (Griffiths et al 2013). Less is known about UK-wide activity levels of adolescents but use of accelerometers at the sixth survey of MCS allow activity levels and patterns in this sample to be determined. Our study seeks to examine these data and to explore if time spent being physically active and sedentary varies by socio-economic circumstance (SEC).
Keywords	Physical activity
Date received	8 January 2019
Date approved	15 January 2019

Reference	**DAC / 49**
Project title	Child abuse and Metabolic Syndrome: A Life-course Approach
Institution	University of Bedfordshire

Application type	Data access
Data release method	Direct release to applicant
Cohort	NCDS
Abstract	Metabolic syndrome (MetS) is an important public health issue. Metabolic syndrome which is clustering of metabolic abnormalities such as abdominal obesity, low HDL, and hypertriglyceridemia increases cardiovascular risk. Increasing evidence suggest adverse childhood experiences might accelerate metabolic syndrome in midlife and at older ages. Emerging evidence suggest that the association between child abuse and MetS may include indirect pathways. There is also evidence linking social support with metabolic syndrome and social support with child abuse. However, research on the role of social support in the lives of abused and neglected children and the extent to which this hypothesised lack of social support (as a mediator) lead to increased risk of MetS in midlife is unknown. This study expands on Delpierre et al.'s (2016) study by testing the association of physical, sexual, emotional/psychological abuse and neglect on risk of MetS, drawing upon the same 1958 British Birth cohort and the role of social support in influencing this association. Therefore, an existing on-going long-term survey of approximately 17,000 UK babies born during one week in 1958 will be used. The relative importance of pathways (social support) linking physical, sexual, emotional/psychological abuse and neglect with MetS can only be assessed if these pathways are modelled simultaneously. Path analysis which is a type of Structural equation modelling (statistical method) that will allow for such simultaneous modelling will be used. Thus, this research is of clinical importance, as it has implications for the identification of causal mechanisms in onset of MetS following child abuse. It is hoped that greater understanding of causal mechanisms may lead to the identification of high-risk groups, novel therapeutic targets to prevent onset of MetS and to inform guidelines for the effective management of children abused and neglected.
Keywords	Child abuse and metabolic syndrome
Date received	27 November 2018
Date approved	11 December 2018

Reference	**DAC / 48**
Project title	Health Production Functions in Childhood
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data release method	UCL IOE server
Cohort	MCS
Abstract	Exercise and diet quality in childhood are positively associated with health outcomes, both physical and mental. However, it's not

	clear whether this association reflects a causal relationship or is simply due to unobserved characteristics of children and/or their families. Furthermore, little research is available on potential complementarities between exercise and diet quality – i.e., whether one can substitute for the other, or whether they are both necessary for health and development. In this work, we plan to use the MCS wave 6 data to derive measures of diet quality and exercise, using weather data to instrument for these behaviours.
Keywords	Nutrition, physical activity, and weather
Date received	22 November 2018
Date approved	11 December 2018

Reference	**DAC / 47**
Project title	Early life mental health, biomedical risk factors in mid-life, and premature mortality: the 1958 British birth cohort
Institution	University College London (UCL) – CLS
Application type	Data access
Data release method	UCL IOE server
Cohort	NCDS
Abstract	Early life mental health is known to be associated with socio-economic outcomes and mental health in adulthood. We investigated the association between conduct problems and affective symptoms in childhood and adolescence with biomedical risk factors in mid-life and premature all-cause mortality. Methods: We used the 1958 British birth cohort which includes prospective data on early life mental health (age 7 to 16), a biomedical survey at age 44/45 (n = 9210) and information on all – cause mortality up to age 55 (n = 17657). Adjustment for potential-confounders-person and variable-centred approaches allowed us to test the accumulation of risk and sensitive period hypotheses, as well as investigate the differential predictive ability of conduct problems and affective symptoms. Results: In both person and variable centred approaches, early life mental health was associated with biomedical risk factors, where associations were more pronounced in women, as well as all-cause mortality. The accumulation of risk and sensitive period hypotheses were supported in associations with biomedical risk factors and all – cause mortality. Affective symptoms in adolescence and conduct problems in childhood were the stronger predictors of biomedical risk factors and mortality risk. Conclusion: Experiencing affective symptoms and conduct problems in early life is associated with less favourable levels of risk factors and mortality in mid-life. The transition from childhood to adolescence appeared to be a sensitive period in both genders, but the broader differences in the association with biomedical risk factors point to potentially gender specific mechanisms of action, as well as early life mental health being partly one of the drivers of the gender paradox in health and mortality.

Keywords	Biomedical risk factors, mental health, and mortality
Date received	12 November 2018
Date approved	13 November 2018

Reference	**DAC / 46**
Project title	Harmonised meta-analysis of the prospective associations between sedentary time, light-, moderate-to-vigorous- and vigorous physical activity with markers of adiposity in population-based samples of children and adolescents
Institution	Norwegian School of Sports Sciences (Norway)
Application type	Data access
Data release method	Direct release to applicant
Cohort	MCS
Abstract	We will determine the magnitude and shape of the prospective associations between physical activity intensities (light, moderate-to-vigorous, and vigorous) and sedentary time with body mass index (BMI) and waist circumference using objectively measured physical activity data from MCS wave 4 linked with adiposity data from MCS wave 6 (7 years follow-up). The main research questions are: 1. What is magnitude and shape of the prospective association between objectively measured sedentary time, light, moderate-to vigorous and very vigorous intensity physical activity with cardio-metabolic risk markers in children and adolescents? 2. Is the association with moderate-to-vigorous physical activity and vigorous physical activity independent of sedentary time? 3. Is the association with sedentary time independent of moderate-to-vigorous physical activity?
Keywords	Adiposity and physical activity
Date received	6 November 2018
Date approved	13 November 2018

Reference	**DAC / 45**
Project title	A novel 24-hour compositional data analysis approach to understand the influence of sleep, sedentary time, and physical activity on children's and adolescents' behavioural, psychological, and cognitive health
Institution	University of East Anglia
Application type	Data access
Data release method	Project not pursued by applicant
Cohort	MCS
Abstract	Children's healthy development and wellbeing are influenced by their movement behaviours (i.e., sleep, sedentary behaviour, physical activity). These behaviours have traditionally been studied

	in isolation, but the emerging field of time-use epidemiology has signalled a paradigm shift, where such behaviours are considered as inter-related and occurring in a mutually exclusive manner over a finite period of time, such as a 24-hour day. The proposed study will examine associations between 24-hour movement composition (assessed by wrist worn accelerometery) and markers of behavioural, developmental, psychological, and cognitive health.
Keywords	Child development and wellbeing
Date received	6 November 2018
Date approved	10 January 2019

Reference	**DAC / 44**
Project title	Exploratory analysis of the Policy and Events Headlines Bank
Institution	University College London (UCL) – CLS
Application type	Data access
Data release method	UCL Data Safe Haven (DSH)
Cohort	MCS
Abstract	Data collection in cohort studies is typically conducted over several months, and the circumstances across time and/or place vary during the fieldwork period. Such differences in the circumstances create quasi-experimental conditions, which allow for inference between these structural conditions at the given time and in the given place, and the individual cohort members' lives. These structural conditions may include policy interventions (e.g., changes to school funding, or health care reforms), local economic shocks (e.g., firm closures), and environmental incidents (e.g., localised flooding and extreme weather), which in turn may affect the cohort members' wellbeing, physical and mental health, attitudes, or economic decisions. Furthermore, where significant relationships are found, this understanding has a potential to unlock the value of the longitudinal observational data to make robustly causal claims. The research aims to answer the following questions: What are the relationships between the structural conditions during the MCS fieldwork and the cohort members' responses to questions? How do these relationships affect further outcomes across cohort members lives? The exact date of interview of the MCS1 will be used to identify whether the interview took place before or after the terrorist attacks which took place on the 11 September 2001, and the dates of the MCS6 will be linked to the Policy and Events Headlines Bank, which collected BBC news articles across the four UK nations during the period of the age 14 fieldwork. This linked dataset will be used for preliminary and exploratory analysis of the impact of these events on the cohort members' responses to various questions.
Keywords	Survey analysis
Date received	7 October 2018
Date approved	9 October 2018

Reference	DAC / 43
Project title	Early-life cognitive function, sex, socioeconomic status, and the development of obesity in the UK and USA
Institution	University of Edinburgh
Application type	Data access
Data release method	Direct release to applicant
Cohort	NCDS
Abstract	Pre-morbid cognitive functions are associated with many later life health outcomes, above and beyond what can be explained by socioeconomic variables from both early and later life. More recently, sex has been found to interact with pre-morbid cognitive function, such that women with higher cognitive function tend to be healthier than their male counterparts. This project aims to model weight gain and loss, as assessed by BMI, across three decades of life in two large, comparable samples, the National Child Development Study (NCDS) from the UK and the National Longitudinal Study of Youth (NLSY) from the US, both of which include a rich set of early life social and cognitive variables. While incorporating these early and later life socioeconomic variables, we wish to investigate the associations among cognitive function, sex, nationality, and BMI from early adulthood into midlife.
Keywords	Cognitive function, health, SES, and sex
Date received	5 October 2018
Date approved	9 October 2018

Reference	DAC / 42
Project title	Scoping existing dietary data available in CLOSER to support cross-cohort research questions
Institution	University College London (UCL)
Application type	Data access
Data release method	Direct release to applicant
Cohort	BCS70
Abstract	Briefly, this CLOSER-funded research project aims to document and describe all dietary data in CLOSER cohorts. The overall objective is to make the dietary data easier to use for future research and potential cross-cohort comparisons.
Keywords	Dietary data
Date received	3 October 2018
Date approved	9 October 2018

Reference	DAC / 41
Project title	The impact of a health information intervention on children's health, health related behaviour and academic performance in the UK
Institution	University of Essex
Application type	Data linkage

Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	In this project we investigate the impact of releasing information on children's weight status (e.g., normal weight, overweight) based on the National Child Measurement Programme on children's health, health-related behaviour (sedentary behaviour, physical activity, fruit intake, etc.), adverse effects (psychological outcomes) and academic performance.
Keywords	Health
Date received	3 October 2018
Date approved	9 October 2018

Reference	**DAC / 40**
Project title	The link between Key Stage 2 examinations, children's well-being, and mental health
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL IOE server
Cohort	MCS
Abstract	Using the MCS, I intend to investigate the link between the key stage 2 tests in England and children's well-being / mental health. My focus will be upon the fifth sweep, when children were in the final year of primary school. Within this wave of the MCS children were asked a number of questions about their well-being, mental health, and enjoyment of school. This includes questions, which will be the primary outcomes within our analysis.
Keywords	Education and wellbeing
Date received	3 October 2018
Date approved	9 October 2018

Reference	**DAC / 39**
Project title	Post-18 Education Review – Comparison of Outcomes in LSYPE 1 and LSYPE 2
Institution	University of Sheffield
Application type	Data access
Data release method	Direct release to applicant
Cohort	Next Steps
Abstract	The proposed work will contribute to the government's review of post-18 education provision and is being done at the request of the Review Commissioner, Professor Alison Wolf. The analysis will consider the factors associated with aspirations, progression, and outcomes in post-compulsory education for members of the LSYPE2 cohort, and compare those to LSYPE1 individuals, in order to identify changes over time.

	In particular, the following research questions will be considered (all focussing on changes between cohorts): 1. To what post-16 routes do young people aspire in Years 9, 10, and 11? 2. What transitions do young people make through post-16 education? 3. What types of vocational qualifications do young people take (e.g., BTEC versus NVQ)? 4. What are the characteristics of young people who engage with apprenticeships? 5. To what extent is there 'churn' between low level vocational qualifications, employment, and unemployment. 6. What are the subject areas of choice for young people going to university? 7. Do young people make an active choice to go to university or passively drift into it?
Keywords	Post-18 education
Date received	24 July 2018
Date approved	21 August 2018

Reference	**DAC / 38**
Project title	Evaluating the genotype calls in MBC
Institution	University of Bristol
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	This data will be used to test the genotype calling to make sure the results are sensible.
Keywords	Genotype calling
Date received	11 July 2018
Date approved	19 July 2018

Reference	**DAC / 37**
Project title	Caesarean sections and family outcomes
Institution	University College London (UCL)
Application type	Data access
Data release method	UCL IOE server
Cohort	MCS
Abstract	In this project we aim to examine empirically the causal nature of the relationship between mode of delivery and maternal mental wellbeing, mother-child attachment, and children's non-cognitive outcomes. The main research question is whether caesarean sections have a causal impact on maternal mental health, which could in turn affect the child's emotional development. In order to provide credible causal evidence about the effects of caesarean sections on these outcomes, we will exploit time variation in the

	unplanned c-section rate, which has been associated with physician leisure incentives. We plan to follow the methodology of Costa-Ramón, Rodríguez-González, Serra-Burriel, and Campillo-Artero (2018), where the time of birth is used as an instrumental variable for whether a c-section was performed. This will allow us to overcome potential omitted variable bias and to focus on caesarean sections that do not respond to a clear medical indication. In order to implement this strategy, we need to control for the weekday of admission to the hospital and the weekday of birth, given that these variables could affect the probability of caesarean sections themselves (c-sections are more common during workdays than during weekends – see e.g. Brown (1996)), as well as the quantity and quality of resources available at the hospital or maternity ward, which could have an independent impact on the mother's satisfaction with childbirth.
Keywords	Caesarean sections and maternal mental health
Date received	13 July 2018
Date approved	19 July 2018

Reference	**DAC / 36**
Project title	Secondary Education and Social Change in the UK since 1945
Institution	University of Cambridge
Application type	Data linkage
Data release method	UCL IOE server
Cohort	NCDS and BCS70
Abstract	SESC explores the history of education in Britain after 1945, with a focus on how this was experienced by parents and pupils. We are particularly interested in how educational experience informs identity at different points across the lifecycle (rather than just when at school) and how this varies between generations. Our core research question is: how does educational experience affect the whole life cycle of individuals, from their parents' schooling to their own schooling, through to decisions about their own children's schooling?
Keywords	Education
Date received	1 June 2018
Date approved	14 June 2018

Reference	**DAC / 35**
Project title	The relationship between child maltreatment and trajectories of antisocial behaviour across the life-course
Institution	University of Oxford
Application type	Data access
Data access method	Direct release to applicant
Cohort	NCDS

Abstract	**Aims:** The proposed research aims to investigate the relationship between child maltreatment and trajectories of antisocial behaviour (ASB) across the life-course. Our main research question will be: does child maltreatment increase the life-time risk of developing chronic ASB? **Background:** There is a well-documented relationship between child maltreatment and antisocial behaviour. However, it is less clear whether child maltreatment increases the life-time risk of chronic ASB or whether its negative effects are confined to specific developmental period(s) (e.g., adolescence). I have recently carried out a systematic review and meta-analysis of the longitudinal evidence examining the relationship between child maltreatment and antisocial behaviour across the life-course and found a paucity of evidence on life-course trajectories of ASB and their relationship with child maltreatment. In order to address this limitation, I will use novel latent growth curve analysis techniques for handling ordinal data to analyse rich longitudinal data available from the 1958 British birth cohort.
Keywords	Anti-social behaviour and child maltreatment
Date received	25 May 2018
Date approved	14 June 2018

Reference	**DAC / 34**
Project title	Outcomes of the economic restructuring between the 1960s and 1980s
Institution	University of Sheffield
Application type	Data linkage
Data access method	Direct release to applicant
Cohort	NCDS
Abstract	We are going to assess the extent to which economic restructuring between the 1960s and 1980s was associated with a range of outcomes of interest to criminologists, such as truancy from school.
Keywords	Criminality and economics
Date received	25 May 2018
Date approved	14 June 2018

Reference	**DAC / 33**
Project title	Collecting relationship data with smartphones in the MCS
Institution	University of Southampton
Application type	Data enhancement
Data access method	N/a
Cohort	MCS
Abstract	For this enhancement, MCS respondents would download a mobile phone or web app that regularly asks questions about their close and intimate relationships, dating and sexual behaviour, use of

	social media and on-line dating, and moods and emotions. The app would be user-friendly, designed to engage participants and optimize response and recall. The data would provide new insights into relationship dynamics and emotional well-being among young adults but would also provide important information for future research as the MCS cohort ages.
Keywords	Technology and wellbeing
Date received	15 May 2018
Date approved	14 June 2018

Reference	**DAC / 32**
Project title	The equity impact of Academies - pupil intake
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	Previous studies using administrative data found a significant short run increase in pupil intake quality for earlier academies and post-2010 sponsored academies. Additionally, there is evidence of increasing social stratification in secondary schools that became academies after 2010. The rich MCS data containing detailed information on family income and individual ability allow to assess in a more precise way secondary school composition and segregation of academies compared to only using free school meals and Key Stage 2 performance available on administrative data. The research issue is the composition of schools that become academies and whether this varies across different types of academies. I investigate if there is stratification with pupils from different backgrounds segregated in different school types. The outcome of interest is the distribution of pupils' characteristics across secondary schools.
Keywords	Education
Date received	11 May 2018
Date approved	17 May 2018

Reference	**DAC / 31**
Project title	The changing landscape: diverse friendships and the effects of contextual diversity on youth outcomes.
Institution	University of Bristol
Application type	Data linkage
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	We would like to link individual records of MCS cohort members to school-level (Tier 3) data from the National Pupil Database (NPD). The linking variable will be the combination of the MCS cohort member ID and the NPD school identifier, the URN. We understand

	that CLS already holds MCS cohort member identifiers matched to URN at Key Stage 1 and 2 (i.e., those used to create the KS1 and KS2 Linked Administrative Datasets currently available under Secure Access from the UK Data Service).
Keywords	Education
Date received	14 May 2018
Date approved	17 May 2018

Reference	**DAC / 30**
Project title	Deposit of look-up table for an index of social advantage/ disadvantage in the UK
Institution	University College London (UCL) – CLS
Application type	Data linkage – GEO
Data access method	UK Data Service
Cohort	N/a
Abstract	This is a multi- purpose multi-topic index of social conditions at the small area level, which may be used to estimate or control for 'neighbourhood effects' and inform the study of mobility. It was originally designed for use with the Millennium Cohort Study, but analysts may find it useful to link to other data sets. It was also designed to make comparisons with the USA and may have such an application in other research projects. This is a look-up table for an index of social advantage/ disadvantage on 41, 465 small areas across the whole of the UK in 2001: Lower Super Output Area in England and Wales, Data zone in Scotland and Ward in Northern Ireland.
Keywords	Deprivation
Date received	16 May 2018
Date approved	17 May 2018

Reference	**DAC / 29**
Project title	Irritability, reward processing and adolescent depressive and eating disorder symptoms
Institution	University College London (UCL)
Application type	Data access
Data access method	Direct release to applicant
Cohort	MCS
Abstract	Childhood irritability is associated with increased risk of depression and eating disorders in adolescence, but the mechanisms underlying this are not understood. Depression is associated with reduced reward-seeking behaviour, whilst irritability can be conceptualised as increased sensitivity to reward omission. This study tests the hypothesis that increased sensitivity to reward omission manifests as irritability in childhood and leads to the developments of reduced reward-seeking behaviour associated with depression and eating disorders.

Keywords	Behaviour, depression, and CANTAB
Date received	1 May 2018
Date approved	17 May 2018

Reference	**DAC / 28**
Project title	The impact of socio-economic background and secondary schooling on students' access to labour market: Evidence from England
UKDS project ref.	92560
Institution	Durham University
Application type	Data linkage
Data access method	UK Data Service SecureLab
Cohort	Next Steps
Abstract	One of the main aims for my PhD project is to find out whether there is a correlation between secondary school segregation and young people's labour market outcomes. My main research questions are: 1. To what extent are young people's 17/18 or 18/19 and/or education transitions influenced by school intake characteristics and segregation? 2. In terms of school segregation, to what extent is secondary schooling, including the type of secondary school attended, school characteristics, and peer effects, linked to the students' occupational statuses in their early adulthood? To what extent is the effect of advantage in access to labour market, especially the advantage in access to elite occupation, mediated by the differences in school characteristics? By linking national school segregation figures for secondary school, with Next Steps data, which contain the related information about young people's early occupational statuses and economic circumstances in early adulthood, I plan to use the regression model to probe into the extent to which school intake characteristics and segregation are related to students' occupational statuses in their early adulthood and the extent to which the effect of advantage in access to labour market, especially the advantage in access to elite occupations, is mediated by the differences in school characteristics.
Keywords	Education
Date received	25 April 2018
Date approved	17 May 2018

Reference	**DAC / 27**
Project title	What Happened to Thatcher's Children?
Institution	University of Sheffield
Application type	Data access

Data access method	Data not available
Cohort	NCDS and BCS70
Abstract	I would like to access the cause of deaths of NCDS and BCS70 cohort members. This is because I would like to explore the extent to which it is possible to chart the impact of the heroin epidemic in the UK in the 1980s and early 1990s and assessing the cause of death allows me to do this. I would also be able to explore the incidence of people taking their own lives too (which might be a further consequence of economic hardship and alienation).
Keywords	Mortality
Date received	29 March 2018
Date approved	17 May 2018

Reference	**DAC / 26**
Project title	What are the factors associated with travel to primary and secondary schools in the UK?
Institution	Cardiff University
Application type	Data linkage – GEO
Data access method	UK Data Service SecureLab
Cohort	MCS
Abstract	What are the factors associated with travel to primary and secondary schools in the UK? What is the sensitivity of 'distance to school' as children transition from primary to secondary school in the UK? What are the key country differences in the effect of factor associated with travel to school across England, Wales, Scotland, and Northern Ireland?
Keywords	Education
Date received	19 April 2018
Date approved	17 May 2018

Reference	**DAC / 25**
Project title	Calculating distances from NCDS/BCS70 cohort members to UK universities
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data access method	UCL IOE server
Cohort	NCDS and BCS70
Abstract	My project seeks to estimate the distribution of pecuniary returns to post-secondary schooling in UK, using a marginal treatment effect (MTE) approach. This approach aims to identify a differential in monetary returns, known as a treatment effect, for those individuals at the margin of selecting some level of education beyond secondary schooling. This MTE technique requires instrumental variables, for the estimator to be well identified. One example, extensively used in the literature, is distance to university

	during childhood. Children who live nearby universities may be more likely to go on to enter university, holding constant the expected pecuniary returns to university.
Keywords	Distance and higher education
Date received	5 March 2018
Date approved	20 March 2018

Reference	**DAC / 24**
Project title	Linking urban/rural, IMD and cycling data to MCS
Institution	London School of Health and Tropical Medicine
Application type	Data linkage – GEO
Data release method	Direct release to applicant
Cohort	MCS
Abstract	This work follows on from previous research on the impacts of the Bikeability cycle training scheme, see Goodman et al 2015 and Goodman et al 2016. We are now conducting follow up work on the potential impacts of Bikeability when cohort members are in wave 6. All three of the variables requested to be linked were included in these original papers, and so consistency in being able to use these for MCS6 would be beneficial.
Keywords	Cycling, IMD, and rural/urban
Date received	1 March 2018
Date approved	20 March 2018

Reference	**DAC / 23**
Project title	Calculating distances from MCS cohort members to high-performing state and selective schools
Institution	University College London (UCL)
Application type	Data linkage – GEO
Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	Private school choice continues to be significantly dependent on both price and "quality" of competition from local state schools (Blundell et al., 2010). There is little evidence as to the importance of grammar schools as competition, although it is widely assumed that, when available, these may substitute for private schooling for those who can pass the '11-plus' test. We seek to estimate the determinants of choosing private schooling, including the importance of geographical accessibility to both private schools and "high quality" state schools, including grammar schools. Our hypothesis is that the accessibility of private schools will be positively associated with demand for private schooling, while the accessibility of "high quality" state-funded alternatives will be negatively associated with demand for private schooling.
Keywords	Education
Date received	1 March 2018

Date approved	20 March 2018

Reference	**DAC / 20**
Project title	The effect of school composition on young people's educational attainment in England, in comparison to the family and neighbourhood
Institution	University of Edinburgh
Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	This PhD's main aim is to understand how the inequalities found between families and neighbourhoods effect young people's educational attainment. Inequalities have been conceptualised through young people's access to economic, social, and cultural capital at home and within the area. Both the analysis undertaken so far, and literature on neighbourhood effects highlights the link between schools and both place and attainment. Therefore, analysis containing both levels could elucidate the link between the neighbourhood you live and the composition of the school you attend.
Keywords	Education
Date received	23 January 2018
Date approved	25 January 2018

Reference	**DAC / 19**
Project title	Assessing the Relative Access to Grammar Schools for Students for Deprived Socio-Economic backgrounds
Institution	University of Nottingham
Application type	Data linkage
Data release method	Direct release to applicant
Cohort	MCS
Abstract	In my research study, I will seek to analyse the mechanism that results in fewer students from deprived socio-economic backgrounds attending grammar schools. In order to do this, I will run a regression on the likelihood of applying to grammar school, depending on a measure of socio-economic class, controlling for other individual and school level characteristics. I will then run a regression on the likelihood of a child attending a grammar school for different socio-economic backgrounds, conditional on applying. Thus, endeavouring to differentiate between the effects resulting in fewer children from deprived socio-economic backgrounds entering grammar school. To my knowledge previous research studies haven't differentiated between the effects resulting in fewer children from deprived socio-economic backgrounds entering grammar schools. However, my research study should give an insight into this relationship and distinguish whether it is a

	result of fewer children applying or whether they aren't getting in conditional on applying, (or a combination of these effects).
Keywords	Deprivation, education, and SES
Date received	23 January 2018
Date approved	25 January 2018

Reference	**DAC / 18**
Project title	Neurocognitive impact of air pollution exposures in childhood: Assessment of air pollution effects on the development of cognition and behaviour in children
Institution	ISGlobal - Barcelona Institute for Global Health (Spain)
Application type	Data linkage
Data release method	UCL IOE server
Cohort	MCS
Abstract	This project aims to explore the associations between environmental factors, such as air pollution, noise, greenness and night light pollution with cognition and behaviour development and the presence of autistic traits in children using the Millennium Cohort Study.
Keywords	Air pollution, autism, behaviour, cognition, green spaces, and health
Date received	23 January 2018
Date approved	25 January 2018

Reference	**DAC / 17**
Project title	Variation in the gender wage gap over the life course
Institution	University College London (UCL) – CLS
Application type	Data enhancement
Data release method	UCL Data Safe Haven (DSH)
Cohort	NCDS, BCS70, and Next Steps
Abstract	**Gender Wage Gap** 1. What does the gender wage gap look like over the life-course? Does it grow or narrow later in life? Does the gap look similar or different at points in the life cycle for those born more recently? 2. What role do early childhood attributes and experiences play in determining the subsequent wage gap between men and women and do childhood influences still matter having accounted for early adulthood experiences? 3. What role does childbearing and childrearing play in the emergence of the gender wage gap and how persistent is any penalty over the life-course? 4. How much of the gender wage gap is accounted for by differences in human capital accumulation over the life-course? How different does the wage gap look over the life-course for men and women with similar human capital attributes (qualifications and labour market experience)? Is

	the wage gap substantially different among the well-qualified and those working mainly in full-time employment? 5. How much of the gender wage gap is attributable to the sorts of jobs undertaken by men and women in terms of occupation, contract type and employer type (workplace size, industry)? Do women face greater barriers to wage growth than men associated with labour market segmentation/segregation and, if so, do these barriers change over the life-course and have they changed for younger cohorts? **Occupational Mobility** 1. What are the occupational mobility patterns of men and women over the life course? How does motherhood and fatherhood impact occupational mobility and has this changed across generations? 2. Are mother's making very different labour market decisions depending upon the size of their family? What are mother's patterns of occupational mobility over the life course of their children? Do mothers suffer more downward mobility if they adapt their careers around the needs of their family?
Keywords	Gender wage gap and occupation
Date received	31 July 2017
Date approved	14 November 2017

Reference	**DAC / 16**
Project title	Request to link grammar school variable to MCS6 data
Institution	University College London (UCL)
Application type	Data linkage
Data release method	Direct release to applicant
Cohort	MCS
Abstract	Research into the impact of attending grammar schools upon the pupil's cognitive, non-cognitive, socio-emotional, and behavioural outcomes.
Keywords	Education
Date received	9 June 2017
Date approved	13 June 2017

Reference	**DAC / 15.3**
Project title	Alcohol Misuse: Electronic Longitudinal Alcohol Study in Communities (ELAStiC) (SAIL IGRP 0336)
Institution	Cardiff University
Application type	Data access
Data release method	SAIL Databank
Cohort	MCS
Abstract	Do family structure, household composition, youngsters' previous ill-health and educational attainment predict their use of alcohol?

	What is the effect of a mother's alcohol use during pregnancy on a child's educational attainment by age 14 years? What is the association between early childhood alcohol consumption and hospital admission and mental health (up to age 11)?
Keywords	Alcohol misuse
Date received	20 March 2018
Date approved	2018

Reference	**DAC / 15.1**
Project title	Using health record linkage in the UK Millennium Cohort Study to investigate childhood obesity, asthma, infections, and injury (SAIL IGRP 0410)
Institution	Swansea University
Application type	Data linkage
Data release method	SAIL Databank
Cohort	MCS
Abstract	The aim of this project is [...] to address important issues relevant to children's health. This will be done by enhancing information collected in the longitudinal, UK-wide Millennium Cohort Study (MCS) by linking participating children to their routine health records. These issues include: health service implications of early life onset of obesity and overweight; timeliness of immunisations; association of infections with asthma and allergic disorders in childhood; and burden of disease due to childhood injuries.
Keywords	Child health
Date received	20 March 2018
Date approved	2018

Reference	**DAC / 14**
Project title	Investigating the effect of air pollution on cognitive outcomes in MCS
Institution	London School of Health and Tropical Medicine
Application type	Data linkage – GEO
Data release method	
Cohort	MCS
Abstract	This project examines the impact of 6 pollutants (CO, NO2, NOX, PM10, PM25, SO2) on cognitive outcomes of MCS cohort members. Data at postcode level has been linked to the nearest DEFRA 1km grid point for these pollutants, spanning the period 1999 - 2015. Both 'time-sliced' (i.e., a single measure of each pollutant based on year of interview) and 'accumulated' (i.e., total exposure based on length of time lived at each reported address) have been calculated.
Keywords	Air pollution and cognition
Date received	May 2017
Date approved	May 2017

Reference	DAC / 13
Project title	MCS and Ofsted data
Institution	University College London (UCL)
Application type	Data linkage
Data release method	
Cohort	MCS
Abstract	Which school factors are cross-sectionally associated with children's socio-emotional and language development at ages 5, 7 and 11 years? Does school context moderate the effect of family context on child outcomes at ages 5, 7 and 11 years? How much variance in socio-emotional and language outcomes at ages 7 and 11 years is attributed to family, school, and neighbourhood contexts?
Keywords	Child development and education
Date received	22 March 2017
Date approved	2017

Reference	DAC / 12
Project title	Request for MCS4 teacher survey linkage with Ofsted
Institution	University of Essex
Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	MCS
Abstract	The applicant has Ofsted data about school performance that needs to be linked to the MCS4 Teacher survey. This Ofsted data has been linked with the MCS data that [the applicant] requested. This new linked data set was sent to the UKDS in July 2017.
Keywords	Education
Date received	21 April 2017
Date approved	2017

Reference	DAC / 11
Project title	Request to do DNA extraction and genotyping BCS70: genetic risk map for physical activity
Institution	University College London (UCL)
Application type	Sample request / DNA
Data release method	Sample release
Cohort	BCS70
Abstract	
Keywords	Genetics
Date received	22 March 2017
Date approved	2017

Reference	DAC / 10

Project title	BCS70 request to enact additional assays
Institution	University College London (UCL) – CLS
Application type	Sample request / DNA
Data release method	Sample release
Cohort	BCS70
Abstract	
Keywords	Genetics
Date received	31 March 2017
Date approved	2017

Reference	**DAC / 9**
Project title	The long-term consequences of infant domestic adoption (Nuffield Foundation)
Institution	King's College London (KCL)
Application type	Data access
Data release method	
Cohort	BCS70
Abstract	The life-long nature of adoption is enshrined in UK law, but systematic evidence on outcomes of infant adoption beyond the early adult years is severely limited. This study is designed to fill that gap by exploring the long-term consequences of UK infant domestic adoption using data from the 1958 and 1970 British birth cohorts. We will compare adopted people with their age-peers on indicators of mid-life socio-economic circumstances; intimate relationships and social support; health-related behaviours, physical health, and cognition; mental health and well-being, and alcohol problems and crime.
Keywords	Adoption
Date received	6 September 2016
Date approved	2016

Reference	**DAC / 8**
Project title	The early life social and psychosocial origins of adult cancers
Institution	French National Institute for Health and Medical Research (INSERM) (France)
Application type	Data linkage
Data release method	
Cohort	NCDS
Abstract	The research question I would like to answer would focus the "exposure" stage for cancer incidence in the first 16 years of life. Here, the longitudinal design from birth is key, since prospective and therefore unbiased data are available on the childhood context, including detailed social and psychosocial factors. The age of the cohort members is also key – they are now entering a life stage where cancer incidence will increase exponentially – and

	especially among men. Given the improvements in the UK regarding cardiovascular disease and mortality, the big public health issue for this generation will be morbidity and mortality from cancers and neurodegenerative diseases. This data linkage will provide important data to explore these big public health questions.
Keywords	Cancer
Date received	20 July 2016
Date approved	2016

Reference	**DAC / 6**
Project title	Data linkage of the 1958 National Child Development Study dataset with the UK AAA screening programmes
Institution	University of Leicester
Application type	Data linkage
Data release method	
Cohort	NCDS
Abstract	Infra-renal aortic diameter is an independent risk factor for cardiovascular morbidity and mortality. The health services across the UK have introduced ultrasound screening for abdominal aortic aneurysm for men in the year of their 65th birthday and around 400,000 men are invited for screening every year. Currently AAA screening programmes are solely focussed on the diagnosis and treatment of AAA (approximately 1.5% prevalence in those screened). Men without AAA have their aortic diameter recorded but nothing is done with this information. Research is ongoing to determine the prognostic significance and potential clinical use of infra-renal aortic diameter at age 65. Little is known about the causes of abnormal aortic diameter other than traditional cardiovascular risk factors, however. The effects of in-utero development, environmental and socio-economic factors prior to the age of 65 are unknown. There is some evidence that nutrition in utero may influence cardiovascular disease and aortic development but direct associations with aortic diameter in later life have not been described. In 2023 the men in the 1958 National Child Development Study will be invited for AAA screening. Women are currently not screened for AAA, but it is feasible by 2023 that targeted screening of high-risk women for AAA may be introduced. In this enhancement we are proposing to link data from the 1958 National Child Development Study with the UK AAA Screening Programmes.
Keywords	Abdominal aortic aneurysm and AAA
Date received	2016
Date approved	2016

Reference	**DAC / 4**

Project title	Early access to a subset of transcribed age 11 NCDS essays, to be combined with NCDS survey variables
Institution	London School of Economics and Political Science (LSE), University of London
Application type	Data access
Data release method	
Cohort	NCDS
Abstract	The principal research question of this project is: does attending a private school influence subjective expectations about the future? To address this question our analysis has three stages. First, we will use a matching procedure to identify a set of respondents who have the same socio-economic background but who differ in terms of the type of school they attended. Then we will use this matched sample to conduct some simple bivariate regression analyses to observe whether there are differences in the types of occupations these students expect they will be employed within when they are 25. Finally, we hope to qualitatively analyses the essays of the students. This is the main part of the project, and the matching is primarily being used as a method of case selection to identify respondents whose essays may best help us address our research question.
Keywords	Life course
Date received	1 June 2016
Date approved	2016

Reference	**DAC / 2**
Project title	Allow DNA extraction in BCS70 for the dress rehearsal sample, and DNA methylation from this DNA
Institution	King's College London (KCL)
Application type	Samples request / DNA
Data release method	Sample release
Cohort	BCS70
Abstract	There is no META-DAC governance of the BCS70 samples until CLS make the formal decision to hand them over. Background information is provided in the application for depletable blood DNA from NCDS (reviewed by META-DAC 01 December 2015). Description of issues and how this was dealt with: to be added by Gabriella Conti on her return (w/c 23-Jan TBC)
Keywords	Genetics
Date received	2016
Date approved	20 March 2018

Reference	**DAC / 1**
Project title	Data linkage NCDS-BCS for neighbourhood effects research, health, and well-being
Institution	University College London (UCL)

Application type	Data linkage
Data release method	UK Data Service SecureLab
Cohort	NCDS and BCS70
Abstract	To link data to the National Child Development Study (NCDS) and British Cohort Study (BCS) to conduct research for a Leverhulme Project Grant due to start in June 2016 and last for two years. The project will contribute to neighbourhood effects research through a novel life course perspective. It will determine whether living in a deprived neighbourhood in early life matters more for later life health and wellbeing than other life stages. The data from the two British birth cohort studies will provide a unique perspective of individuals currently in mid to later life who have been interviewed throughout the latter 20th Century and early 21st Century during which time small area data from the census can be linked. Our data are a set of 2011 Census Lower Super Output Area and Data Zone polygons that can be matched to the postcode centroid of each individual in the cohort studies at each sweep from age 16 (i.e., 1974 in NCDS and 1986 in BCS). The data include Townsend deprivation scores and other census measures to two decimal places for each decennial census 1971 to 2011 at the 2011 Census boundaries. Our plan is to start the linkage as soon as possible and have it completed by August 2016. We plan to start analysis in September 2016 and to write up our research findings from January 2017. We anticipate that the linkage will be completed at the Centre for Longitudinal Studies. We would like the option to be present during the work to ensure we understand how the data are linked and any cause of incorrect matches. Our project team is Dr Paul Norman, University of Leeds, Dr Emily Murray, UCL, a research associate based at UCL yet to be appointed.
Keywords	Deprivation
Date received	10 February 2016
Date approved	2016