

Partner Specification

Introduction to the Networked Data Lab

The Networked Data Lab is a Health Foundation initiative that will build a collaborative network of analytical teams across the UK. We will initially be selecting three partners with existing linked health and care datasets to join the Networked Data Lab. They will work with each other and the Health Foundation on shared problems facing the health and care system, and the health of the population. The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK. We have expertise in health analytics, and are working to improve analytical capability in the health and care system.

Partners will be provided with up to £400,000 over two years (funding secured until December 2022) to allow analytical teams to participate in the initiative and to enable technical support and data management. The team at the Health Foundation will include a senior analytical manager, who will design and deliver the analytical and data management programme, supported by a data scientist and a data manager. The Networked Data Lab will also be supported by programme management and communications professionals based at the Health Foundation.

The aim of the Networked Data Lab is to use linked data to improve health and care services, and to reduce health inequalities in the UK. It will achieve this aim by publishing the findings of its analysis, and providing decision makers with timely insights on shared problems facing the health and care system, and the health of the population. The Networked Data Lab will also develop models of open and collaborative analytics that can be scaled, spread and adapted to the changing health and social care landscape.

Working with partners

In order to successfully deliver our aims, we will initially be selecting three partners to work alongside the Health Foundation to deliver the Networked Data Lab. This document outlines the characteristics that we will be considering when we select partners.

What are we looking for in our partners?

The Networked Data Lab will need partners that are embedded in their local health and care systems and have established relationships with analysts, service providers, commissioners, patients and decision makers. We welcome partner teams drawn from multiple organisations where this will add value.

We recognise the valuable contribution that analytical teams outside the health and care sector can bring, including the academic sector. However, as this programme aims to provide analyses that can be used at both a local and national level, partners should have a clear link to decision makers in their local health and care systems and have established relationships with health and care planning and delivery teams. Academic or other teams

interested in applying are strongly encouraged to connect with partners in their local health areas and submit joint applications. Joint applications should provide evidence that their way of working will build sustainable analytical capability in the health and care service. Applicants invited to the second phase of the application process will be asked to provide letters of support from senior commissioning, clinical or other health system leadership (appropriate to the country and health system of the applicant).

What sort of data do we need?

One area of focus for the Networked Data Lab is to demonstrate the value of linked health, social care and wider datasets. Therefore, we are aiming to work with partners who have already made good progress on linking data between different care settings and who are looking to further progress their data linkages beyond health and social care to include the wider determinants of health.

Preference will be given to teams who have established linked primary care, secondary care and social care data which have been linked on an individual level. Additional datasets, linked at either a household or individual level, are desirable, but not essential. The linked dataset can cover any level of geography, from local partnerships to coverage across the full country. However, the dataset should be large enough to carry out meaningful statistical analyses, and the geography relevant for decision making in the health and care sector (for example linked to an integrated care system or sustainability and transformation partnership in England). If the data controller(s) are not the lead applicant, they should ideally be a partner (or partners) on the application.

To work with partners on analytical projects, the Health Foundation staff working on the Networked Data Lab will require access to de-identified anonymised data (as defined under the ICO anonymisation code of practice) for the purposes of carrying out analyses on critical areas of population health and health care research. Examples of potential analyses are included at the end of this document.

We recognise that the governance surrounding the use of linked datasets is complex. We will draw on our partners' knowledge to gain a clear understanding of the permitted use of their linked datasets, and a clear understanding of the identity, roles and responsibilities of data controllers and data processors of the datasets. In the expression of interest we need information on how the linked dataset could be used within current data permissions (or realistic amendments to these). This will help us decide on the suitability of partners and datasets for inclusion in the Networked Data Lab. We recognise that this process may require additional support from the Health Foundation and we are working with information governance specialists to ensure that we will be able to meet all the relevant requirements under GDPR and the DPA 2018.

Prior to analysis being conducted, there will be a period of data exploration and data standardisation, which will be supported by a data manager at the Health Foundation. In the expression of interest application, we ask you to share any progress that has been made on documenting metadata and any data standards that have been implemented that could support this process.

Geographic coverage

As this is a UK-wide initiative, we are aiming to work with a network of partners that provide a good geographic spread across the UK. For example, we will be aiming to select teams in different areas and, as far as possible, will avoid having two areas that are very similar in

terms of local geography and population. This will enable the Networked Data Lab team to carry out analyses to understand how different areas address similar challenges. Interested applicants, particularly in neighbouring areas, are encouraged to submit a joint application. Following the initial expression of interest stage, we might suggest that teams pair up to submit joint bids for the second stage of the application process where there may be value in doing so.

Analytical themes

We will devise a collaborative process for selecting topics for analysis, which will reflect the strategic priorities of our partners as well as existing and emerging national priorities, and public and patient voices. This process will be run at least once a year to identify a range of topics for that year. Teams interested in participating in the Networked Data Lab should value working on common problems, selected as part of a deliberative prioritisation process and be able to illustrate this in the application.

Analytical leadership and publication of findings

Findings from the Networked Data Lab will be published. The Health Foundation team will work closely with the partners to synthesise the findings from across all partners and publish and communicate the combined set of results.

Partners in the Networked Data Lab will be expected to take the lead in engaging with the clinical and system leadership in their area on the findings, so that these insights can be used to improve health and health care. Strong analytical leadership and existing relationships with key stakeholders will be needed to achieve this. We are asking partners to demonstrate this leadership through a track record of using the existing linked dataset to help address local priorities.

Collaboration

The Networked Data Lab is a collaborative programme and teams will be working together to develop analyses that can inform a joint understanding on a range of analytical topics. Partners wishing to apply to join the Networked Data Lab should be willing to work openly and collaboratively with one another: this includes working on common analytical topics, working on open source software such as R, publishing code, metadata and results. Preference will be given to teams who are able to demonstrate that they work in an open and collaborative way already. This might be evidenced based on the use of open statistical programmes used (for example R), a history of code sharing, and letters of support from senior leadership to work in an open and collaborative manner.

Public and patient involvement and engagement

Public and patient involvement and engagement (PPIE) is an important component of the Networked Data Lab and will be used to help inform the selection of analytical topics. In addition, it is expected that each local partner will engage patients locally to describe the types of analyses being carried out, gather views on the initial findings, and feedback results. Preference will be given to partners who can demonstrate processes and mechanisms for gathering input and feedback from patients and the public in their locality.

Potential analytical use cases for the Networked Data Lab

Below we give three examples of the types of analysis that might be conducted by the Networked Data Lab.

Health care use of adults accessing social care services

A descriptive analysis exploring the health care use of the population of adults who are in contact with adult social care services. The aim of this study would be to understand how health care services support individuals accessing adult social care services to identify how local health and care systems work together to provide care for this population. The study would include analysing the average number of primary care contacts, A&E attendances, outpatient appointments and inpatient admissions per patient. It would also investigate how this health care use varies with the level of social care contact, the length of time an individual has been accessing social care services, age, gender, number of chronic conditions and level of deprivation. To complete this study, we would need anonymised individually linked primary care, secondary care and adult social care data.

Analysing emergency admissions for children and young people with severe mental illness

A descriptive study of emergency admissions for children and young people with severe mental illness. The aim of this study would be to better understand the health and care needs of children and young people with severe mental illness. The study would involve an in-depth analysis of emergency admissions, including examining the characteristics of this population accessing emergency care, the reasons for admission, length of stays and risk of readmission. A second component of the study could be analysing the primary care contacts, contact with social care services and contact with mental health services for those who have had an emergency admission, in comparison to those who have not had an emergency admission. In order to carry out this study, we would need anonymised individually linked primary care, secondary care, child social care and mental health services data for children and young people.

Health and care needs of adults living with multiple long-term conditions

The aim of this study would be to better understand the health and care needs of individuals with multiple long-term conditions. This study would analyse the primary and secondary care use of individuals with multiple long-term conditions, as well as looking at contact with social care services, community care services and mental health care services. This would be stratified by age, gender, number of long-term conditions and level of deprivation. To carry out this study, we would need anonymised, individually linked primary care, secondary care, adult social care, community care and mental health care services data and to develop a standardised code list of conditions from the electronic health care record in primary care.