

## Example A

### Kent integrated dataset (KID)

Kent County Council and Kent's 7 CCGs created the Kent Integrated Dataset (KID) covering the health and care records of 1.5 million people. KID links data from council adult social care, GP practices, mental health services, public health and community health at an individual, but de-personalised level.

This dataset has enabled the public health team to conduct analyses to:

- test 'what works' in the county, for example, evaluating the impact of home safety visits carried out by Kent Fire and Rescue Service on A&E attendances;
- assess the impact of services by comparing outcomes of service recipients with statistically similar people who don't receive the service e.g. falls prevention services;
- calculate average per capita costs for all points of care delivery (adult social care, community care, A&E attendances, non-elective admissions and Out of Hours care) by GP practice area;
- identify gaps in provision for particular client groups, such as a needs assessment for the population of clients with autism spectrum disorders to inform the provision of new services.

#### Kent Integrated Dataset (KID)

**WHO:** Kent County Council (KCC) and Kent's seven Clinical Commissioning Groups (CCGs)

**WHY:** In order to transform public services, KCC needed data analysis that crossed organisational silos. Integrating health and care data created cradle-to-grave health and care records, enabling whole service user journeys to be analysed. Integrated data could inform decisions about which services to provide and how to organise them.

**WHAT:** The Kent Integrated Dataset (KID). It is one of the largest integrated health and care databases in the UK, covering the health records of 1.5 million people. Data is brought together from council adult social care, GP practices, mental health services, public health and community health. It includes data on activity, cost, service/treatment received, staffing, commissioning and providing organisation, patient diagnosis, demographics and location. Datasets are linked on a common patient identifier (NHS number) and de-personalised.

**HOW:** The KID was built from existing systems, using a SQL-server data warehouse (The Kent and Medway Health Informatics Services) and a purchased business intelligence tool. KMHIS developed a 'black box algorithm' for data as it enters the KID. This runs an algorithm to check that the information on either side matches up, without the system operators needing to see identifiable data. The programme then creates a de-personalised NHS number - a 64 bit sequence - which is given to each piece of personal data and is applied to all files that come in relating to the same person. The project was assigned an IG expert who advised on the requirements of KID and informed the data sharing agreement for each agency, including the 240 GP surgeries in Kent.

**IMPACTS:** KCC uses the dataset to inform care, health and public health strategies and decisions. They can test what works and forecast future service pressures and outcomes. It is also being used to help analyse and forecast the impact of change suggested by the Kent Sustainability and Transformation Plan so decision-makers are better informed. It is also possible to run further analysis to test which types of people a programme is most useful for, and for whom it has limited impact, helping prioritise which groups should receive certain interventions or services.

**SOURCE:** Nesta and LGA (2016) Wise council: insights from the cutting edge of data-driven local government  
[http://www.nesta.org.uk/sites/default/files/wise\\_council.pdf](http://www.nesta.org.uk/sites/default/files/wise_council.pdf)

## Example B

### Predicting the prevalence of loneliness

Age UK used aggregate statistical data from two different sources (the 2011 Census and the English Longitudinal Study of Aging) to identify areas across England that were likely to be 'hot spots' for loneliness among people aged 65 and over.

They wanted to know what makes older people at risk of being lonely and which neighbourhoods had the highest risk, in order to help them plan their interventions. To achieve this they commissioned a study to isolate the particular characteristics that increase the prevalence of loneliness among older people.

The resulting 'loneliness heat maps', together with local knowledge and an understanding of local neighbourhoods, helped them to plan how they would allocate their resources to tackle this problem: enabling both the development of tailor-made interventions to address loneliness in prioritised areas and an assessment of whether existing services were reaching areas of need.

#### Predicting the prevalence of loneliness

**WHO:** Age UK

**WHY:** Age UK wanted to predict the risk of loneliness among older people across small geographical units in England. The charity wanted to know which neighbourhoods have the highest risk so to better allocate resources to tackle the issue. Better data would also help determine whether existing services are reaching areas of need.

**WHAT:** The English Longitudinal Study of Ageing (ELSA), is a representative longitudinal survey of people aged 50 or over. It has been used to identify factors associated with an older person being lonely and Age UK developed a model to predict the risk of loneliness based on these factors. However, the sample size of ELSA is too small (6,773) to infer any geographical patterns. Similar factors were also measured in the 2011 Census. The Office of National Statistics National (ONS) Wellbeing Team applied the model, using only those factors for which Census 2011 data exists, on the individual records held in the 2011 Census Microdata files. This produced the relative likelihood of loneliness amongst those aged 65 and over at different geographical locations.

**HOW:** Census data is held by ONS and the ELSA survey is held by its partners IFS, UCL, Manchester Uni and NatCen Social Research. The ONS National Wellbeing Team applied the model. Both data sets are openly available for research and de-personalised.

**IMPACTS:** Alongside local knowledge, the loneliness heat map has helped to direct the allocation of resources to reduce loneliness. For example, the heat map predicted Wirral and Rotherham were at high risk of loneliness. As a result, Age UK Wirral identified a gap in provision of social activities in Bromborough and introduced its Friends in Action scheme in the local area. Age UK Rotherham used the map to re-engage local partners with the loneliness issue. Ensuring loneliness was addressed through existing work such as Rotherham Together Partnership, Safer Rotherham Partnership and the Rotherham Health and Well-Being Board.

**SOURCE:** Age UK (2015) Age UK loneliness maps <http://www.ageuk.org.uk/professional-resources-home/research/loneliness/loneliness-maps/>

## Example C

### Tackling Fuel Poverty

The Digital Economy Act 2017 introduced new powers for government to share identifiable information about customers with licensed energy suppliers for the purposes of assisting people living in fuel poverty by—

- a) reducing their energy costs,
- b) improving efficiency in their use of energy, or
- c) improving their health or financial well-being.

The government will link tax credit data held by HMRC with data it holds on property characteristics to identify persons entitled to energy bill discounts and/or help to improve the energy efficiency of their home.

Companies will then receive a yes/no notification for each of their customers so that they can automatically apply a 'Warm Home' rebate or offer support under Energy Company Obligation schemes.

Companies will not be able to use any of the data they receive for any purpose other than those that are outlined in legislation without incurring strict penalties.

#### Tackling Fuel Poverty

**WHO:** Government (using information from HMRC and the Valuation Office) sharing with licensed gas or electricity suppliers.

**WHY:** It is maintained that the best way to guarantee that the government schemes designed to provide energy bill rebates for those in fuel poverty reach those who most need is to provide it automatically. Automatic rebates however can only happen if the state can inform energy companies which of their customers is eligible to receive it.

**WHAT:** Under new provisions in the Digital Economy Act tax credit (benefits) data held by HMRC will be linked with basic property characteristics data held by the valuation office agency and the Department of Business, Energy and Industrial Strategy (BEIS) notify citizens living in fuel poverty. Having identified those who would benefit from targeted assistance the government will inform licensed energy providers which of their customers should automatically receive assistance. The only information that energy companies will receive will be a yes/no per customer.

**HOW:** Clause 30 of the Digital Economy act allow the state to disclose personally identifiable information to licensed gas or electricity suppliers for the purpose of reducing the energy costs, or improving energy efficiency or the health or financial well-being of people living in fuel poverty in connection with an energy supplier obligation scheme. These schemes are the Warm Home Discount (Part 2 of the Energy Act 2010) and the Energy Company Obligation (under the Gas Act 1986 and the Electricity Act 1989). Section 142 of the Pensions Act 2008 already enables the disclosure of social security information about persons in receipt of state pension credit to enable electricity suppliers to automatically provide rebates to customers under the Warm Home Discount scheme. This new clause will enable other datasets to be used for this purpose.

Clause 31 of the act also allows energy companies to share information with those acting on behalf of public authorities to identify customers who are entitled to offers of help to improve the energy efficiency of their home.

**IMPACT:** While still to be applied the new powers mean that eligible customers will automatically receive a rebate without the need to provide personal information to the energy company to apply for support.

**SOURCE:** [www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/545213/DigitalGovernment-](http://www.gov.uk/government/uploads/system/uploads/attachment_data/file/545213/DigitalGovernment-)

## Example D

### Funding GP Practices in Socially Deprived Areas

GPs working in Tower Hamlets and at Queen Mary, University of London (QMUL) used aggregate statistic information from the Index of Multiple Deprivation and consultation rates from GP practices to demonstrate the additional demand per head of population placed on GP surgeries in deprived areas.

This has enabled them to make a case that, in the interests of equality of service provision, levels of social deprivation need to be taken into account when allocating funding to GP practices.

#### Funding GP Practices in Socially Deprived Areas

**WHO:** The research was conducted by three GPs working in Tower Hamlets and at Queen Mary, University of London (QMUL).

**WHY:** GPs in deprived areas argue that funding for GP practices based on the size of the population served actually increase health inequalities by not taking into account the fact that different practice population needs have major implications for practice workload.

**WHAT:** The researchers examined the 2013 annual GP consultation rates, by age and sex, for the one million GP registered population in east London, and broke this down by the national quintile of Index of Multiple Deprivation (IMD), linking data at their smallest geographical output area. Their analysis showed an excess number of consultations in more socially deprived areas, and illustrated that an individual aged 50 years in the most deprived quintile consults at the same rate as someone aged 70 years in the least deprived quintile.

They were also able to show, by an analysis of consultations which include one or more of a cluster of common investigative blood tests, that these additional consultations were not simply brief encounters for minor illness. Instead the complexity of these consultations showed a similar concentration by deprivation.

**HOW:** The researchers used publically available, aggregate statistical information about geographic deprivation alongside consultation rates from a nationally representative samples of GP practices.

**IMPACTS:** The researchers were able to demonstrate that when social deprivation is taken into consideration, some local areas need significantly more GP resources than the current funding formula provides. They developed a new formula to calculate this and found that applying their new formula to Tower Hamlets, one of the most deprived boroughs in England, would indicate 33% more funding was needed to provide a comparable service to other areas.

**SOURCES:** <http://www.bmj.com/content/349/bmj.g6814/rr/808723>

# Example E

## Justice Data Lab

The Justice Data Lab was set up by the Ministry of Justice (MoJ) to give organisations working with offenders, particularly Voluntary, Community and Social Enterprise organisations, access to central re-offending data.

To use it, an organisation needs to provide the MoJ with details of a group of offenders they have worked with, and information about the nature of the intervention. In return the organisation receives a report of the re-offending rate for that group compared to a matched control group of offenders with similar characteristics.

The service provides this information to help organisations to assess the impact of their work on reducing re-offending. It also helps develop a collaborative understanding of effective rehabilitation.

### Justice Data Lab

**WHO:** Ministry of Justice (MoJ) with Voluntary, Community and Social Enterprise organisations working with offenders.

**WHY:** The Justice Data Lab has been set up by the MoJ to help organisations working with offenders access re-offending data. It is intended for Voluntary, Community and Social Enterprise organisations working with offenders who want to get a better understanding of their impact.

**WHAT:** To use the Justice Data Lab an organisation needs to provide details of a group of offenders they have worked with including, their name, date of birth, gender and - if possible - Police National Computer Identifier (PNCID) and/or Prison Number, as well as the start and end date for their intervention and whether the work was carried out in the community or custody.

The MoJ then uses this information identify the offenders and track any cases of re-offending. From this they will produce a report for the organisation which shows the re-offending rate for that group compared to a matched control group of offenders with similar characteristics. The difference between the two rates represent the impact of the intervention on the group's re-offending rate. These reports are also published on the MoJ website.

**HOW:** This dataset used by MoJ is an extract of the Police National Computer, linked to other sources. It contains a wide range of variables relating to criminal history and previous offences, as well as the re-offending outcome. In establishing the Data Lab the MoJ considered confidentiality and data protection and are satisfied that it meets the necessary standards. In particular, they feel that because the purpose of Justice Data Lab is to test the effectiveness of interventions, the consent of individuals is not needed before their data is sent. Further all personally identifiable information about offenders must be sent to the MoJ using a Criminal Justice Secure e-mail address and the MoJ will ensure all individual data sent by organisations is permanently deleted after use.

**IMPACTS:** The service helps organisations, particularly small voluntary sector organisations, assess and demonstrate the impact of their work. It also helps develop a collaborative understanding of effective rehabilitation.

**SOURCE:** <http://www.clinks.org/sites/default/files/MoJ%20Data%20Lab%20briefing.pdf> and <https://www.gov.uk/government/collections/justice-data-lab-pilot-statistics>

## Example F

### Homeless Support in Bristol

BrisDoc's Homeless Health Service is working in partnership with homelessness support services, and other agencies who interact with the city's homeless population, to develop a shared data sharing platform that will give a complete picture of the service interactions of clients: pooling information from medical, psychiatric, social agencies, criminal justice and housing services.

This data platform will enable any of the services a homeless client comes in contact with to access their records and ensure a co-ordinated approach to care and support.

In time, analysis of these linked records, will also allow assessments to be made regarding the effectiveness of different approaches to managing and supporting homelessness in the city, informing future service planning and strategic interventions.

#### Homeless Support in Bristol

**WHO:** BrisDoc Homeless Health Service and homelessness support services throughout Bristol

**WHY:** For people experiencing homelessness or prolonged periods of rough sleeping, the rate at which health problems occur increases rapidly: 73% report a physical health problem, and for 41% this is a long term problem; 45% have been diagnosed with a mental health issue. Factors which contribute to unhealthy lifestyles such as smoking, and drug and alcohol use, are also more prevalent than in the general population. However accessing sustained and consistent treatment can be difficult.

**WHAT:** BrisDoc are developing an electronic data sharing scheme designed to support agencies to deal more effectively with homeless clients. The aim is to pool all available information from medical, psychiatric, social agencies, prisons and housing services into a single electronic platform accessible to a wide range of actors interacting with the city's homeless population. This would mean that, for example, in the case of police or paramedics being called to a street dweller wandering drunk through traffic they would be able to use the data platform to establish whether the person was known to mental health teams, which would lead to a referral there and avoid unnecessary sectioning or a night in police cells.

**HOW:** Building the data platform has involved combining information from two main systems – the Emis data-sharing platform used by 106 GP practices in Bristol and Connecting Care, a local electronic patient record allowing health and social care professionals in Bristol to access outline NHS patient information. Adult protection information, criminal justice and housing history as well as end of life care plans are now being integrated into the system.

**IMPACTS:** The system is still under construction however Homeless Services in the city are already seeing the impacts: "Before the introduction of the electronic platform, I have seen support workers spend a day trying to trace a client, only to find out that they are in hospital... Now that link can be made in five minutes."

**SOURCE:** <https://www.theguardian.com/healthcare-network/2017/feb/22/gp-practice-sharing-data-transform-care-homeless-people>

# Example 1

## Routes from Diagnosis

This research, led by charity Macmillan Cancer support, linked routinely collected Hospital Episode Statistics (HES) data with cancer waiting times data, data from cancer screening programmes and cancer registry data to map the cancer journey from diagnosis to survival or death.

The information gained from this research has led to a better understanding of cancer patient's clinical journeys and is being used to:

- Enhance clinicians' knowledge of the issues faced by cancer survivors;
- Better understand the patterns of side effects from treatment and which patients are more likely to suffer from them and need support;
- Inform the planning, development and implementation of care pathways for cancer patients.

### Routes from diagnosis

**WHO:** MacMillan Cancer Support in partnership with the National Cancer Intelligence Network and Monitor Deloitte

**WHY:** More evidence is needed to understand what happens to cancer patients after diagnosis and of the issues cancer survivors face after treatment. Improvements to cancer care are limited because we don't know how many patients are dealing with significant consequences of cancer and its treatments and in particular which patients are affected. More evidence is needed to understand variations in survival outcomes, morbidity and cost between patient groups.

**WHAT:** Route from Diagnosis is a programme of research performing retrospective analysis of almost 85,000 cancer patients' interactions with the NHS in England over seven years. It linked routinely collected administrative Hospital Episode Statistics (HES) data with cancer waiting times data, data from cancer screening programmes and cancer registry data to map the cancer journey from diagnosis to survival or death.

**HOW:** The programme used anonymised cancer registry and HES data linked at a patient and episode level. Datasets were linked by an anonymised patient ID.

**IMPACTS:** The evidence generated can be applied to cancer care commissioning, service and system design, policy formulation, and to inform the direction of academic research. For example, South Yorkshire, Bassetlaw and North Derbyshire Clinical Commissioning Groups have the highest levels of cancer incidence and mortality in England. They used the programme methodology to identify a number of outcome pathways for those diagnosed with colorectal cancer. By matching patient needs to the correct level of support, the CCGs are now designing, testing and evaluating stratified care pathways which provide more individualised care for each outcome group.

**SOURCE:** Routes from diagnosis, Macmillan <http://www.macmillan.org.uk/about-us/what-we-do/evidence/cancer-intelligence/routes-from-diagnosis.html>

## Example 2

### Reducing unnecessary 999 calls

In order to reduce the number of unnecessary calls made to blue light services in Braunstone emergency service providers, the local authority and health services are developing an agreement to share information about repeat callers.

The rationale is that those who repeatedly use emergency services are likely to be facing similar underlying difficulties which may be better served with a social care package or mental health support, freeing up the blue light services to respond to emergency calls instead.

By sharing information about repeat callers between partners the hope is that those identified individuals can be approached and offered alternative support at the earliest opportunity to improve their wellbeing.

#### **Braunstone Blues partnership information sharing agreement – reducing unnecessary 999 calls**

**WHO:** Braunstone Blues is a multi-agency project consisting of Leicester Fire & Rescue, Leicester Police and East Midlands Ambulance Service. It also strategic input from Leicester City Council, Leicester City Clinical Commissioning Group, Leicestershire NHS Partnership Trust, and University Hospitals of Leicester NHS Trust.

**WHY:** The project partners want to identify underlying causes for increasing calls to the blue light services in Braunstone. Those that repeatedly use emergency services, irrespective of which service it is, may be facing similar difficulties which cannot be dealt satisfactorily by one organisation alone. Many vulnerable households calling the blue light services may be better served with a social care package or mental health support. In order to support an early intervention project and provide the most suitable service, the underlying causes for calling the blue light services needs to be identified and understood.

**WHAT:** A multi-agency information sharing agreement is being set up to share identifiable data between health and non-health partners for the purposes of early intervention and improving outcomes for vulnerable people.

**HOW:** There are particular difficulties in sharing health data (particularly around confidentiality and whether data can be shared without consent for interventionist work, or for secondary use purposes if not for individual care). This project would examine solutions in more detail to ensure the resulting agreement is compliant with data protection and human rights laws, as well as the common law duty of confidence.

**IMPACTS:** By better understanding which households repeatedly call 999, and why, more effective early interventions can be designed across the many agencies. Better data could also show where these vulnerable households would be better served by other specialist services. Ultimately, this would lead to freeing up blue light services to respond to emergency calls.

**SOURCE:** LGA data experts grants support better use of local data mini projects <http://about.esd.org.uk/news/lga-data-experts-grants-support-better-use-local-data-mini-projects>

## Example 3

# Linking data to improve health and social care outcomes

De-personalised patient data from health and social care services in East and North Hertfordshire (including hospitals and GPs) was linked to:

- better understand the needs of their local population;
- facilitate data-enabled decisions;
- improve the process of identifying individuals at risk or in need of a specific intervention.

The data is used in an anonymised form to inform service planning and evaluate interventions, however the system is also designed to enable patients to be re-identified and offered services or support.

This is because, in this case, identifiers such as name, NHS number, and full postcode were coded, rather than removed from the dataset altogether. Therefore if an individual is identified as being at risk or in need of a specific intervention, the relevant health and care professional involved in the care of the patient can use the system to re-identify them.

### Linking data to improve health and social care outcomes

**WHO:** Health and social care services in East and North Hertfordshire (including hospitals and GPs)

**WHY:** The use of linked data was designed to enable health and social care services to:

- better understand the needs of their local population;
- facilitate data-enabled decisions;
- improve the process of identifying individuals at risk or in need of a specific intervention.

**WHAT:** De-identified patient data from health and social care services was linked. Identifiers such as name, NHS number, and full postcode were however coded, rather than removed altogether. This meant that where an individual is identified as being at risk or in need of a specific intervention, the relevant health and care professional involved in the care of the patient could use the system to re-identify the individual or individuals and make the necessary intervention.

**HOW:** The data was linked using the MedeAnalytics' software package (<http://medeanalytics.co.uk>). The sharing was made lawful by legislation which places a legal duty on health and adult social care organisations to share information when it will facilitate care for an individual. (The Health and Social Care (Safety and Quality) Act 2015, which inserted sections 251A, B and C into the Health and Social Care Act 2012: (<http://www.legislation.gov.uk/ukpga/2015/28/contents/enacted>))

**IMPACTS:** Having access to timely, linked data about local patients and service users has enabled East and North Hertfordshire to better understand their patients needs. Specifically it has been used to:

- undertake powerful impact analysis of their re-ablement service (helping people regain their independence);
- set up automated information alerts – for example, advising a GP if one of their patients is making frequent visits to A&E.

**SOURCE:** National Data Guardian for Health and Care (2016) Review of Data Security, Consent and Opt-Outs  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/535024/data-security-review.PDF](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/535024/data-security-review.PDF)

## Example 4

### Empty Homes Initiative

Empty properties traditionally pay reduced or zero council tax. Sharing council tax information (including property address) between local authority Revenue Services and Empty Homes Teams can be used to help identify empty homes and help prioritise resources to get homes back into use.

Preston and Lancaster shared service have also found that sharing this data not only supports the work of the Empty Homes Team, but has also reduced instances of error and fraud where council tax was not being paid on occupied homes that were incorrectly listed as empty. This generated over £330,000 in additional council tax revenue in the first year.

#### Empty Homes Initiative

**WHO :** Preston and Lancaster Shared Service (PALSS - established to enable Preston City Council and Lancaster City Council to deliver Revenues and Benefits services in the most effective, efficient way) and the councils' Empty Homes teams.

**WHY:** In 2016 there were over 200,000 properties in England that have been empty for six months or longer and getting them back into use is a priority for authorities to address local housing needs, tackle homelessness and regenerate local areas. As empty homes can be exempt from Council tax (or subject to a reduced rate) sharing Council Tax information with Empty Homes Officers enables these officers to have an accurate picture of how many empty properties they have in the area and how long they have been empty.

**WHAT:** PALSS commissioned a web-based Property Inspection Module to be designed and built for them by performance management company Destin Solutions which proactively tracks all properties in their area.

They also used this information to undertake an Empty Property Review by providing a list of their current empty properties to a private company Equifax, to carry out checks to help identify the likelihood of that property was actually in use. Typical checks looked at whether there was any credit card activity associated with an address or whether any bank accounts had recently been opened listing that address. This information was then shared with revenue and Empty homes teams to decide whether a visit was required to confirm whether the property was still in fact empty

**HOW:** The Local Government Act 2003 s85 inserted a new section (18A) into Schedule 2 of the LGFA 1992 specifically allowing Local Authorities to disclose personal Council Tax data in the pursuance of empty property work.

**IMPACT:** By sharing data through the Property Inspection Module the Councils' found that many residents had "forgotten" to inform the authority that they had occupied an empty property, generating over £330,000 in additional council tax revenue in the first year. It also allowed the Empty Homes teams to focus their efforts on bringing genuinely 'empty' and effectively abandoned properties back into use.

**SOURCE:** <http://www.destin.co.uk/casestudy/preston-and-lancaster-shared-service/>

## Example 5

### Housing regeneration and health

This study was designed to examine whether physical improvements in the quality of social care housing had a significant impact on residents' physical and mental health.

Researchers from Swansea University undertook a matched cohort study, using anonymised, routinely collected data from health and social care services in Wales, to compare the health outcomes of those living in regenerated housing with those living in older properties.

The study found that those living in regenerated houses had lower rates of emergency hospital admissions.

The evidence generated by this research is now being used to demonstrate to local Council's that investment in housing improvements not only has a positive impact on residents' health and well-being in the short term, but can deliver long term savings to health and social care budgets.

#### Housing regeneration and health

**WHO:** Academic researchers at Swansea University

**WHY:** Better evidence was needed to determine that improving social care housing does benefit the physical and mental health of residents. Previous studies have been criticised for ignoring the multifactorial nature of causality relating to housing, deprivation and health. Smaller, self-reporting studies also cause stress for participants.

**WHAT:** A social care housing regeneration programme was being carried out in Carmarthenshire County Council. A cohort study was created by linking routinely collected data in health and social care data sets in Wales. Both housing and health data sets were anonymised (removing names and addresses) and given a unique identifier and anonymous linking fields. They were linked within a trusted third party (NHS Wales Informatics Service).

**HOW:** Data from the Welsh Demographic Service was used to create the cohort and linked to several datasets held within the SAIL (Secure Anonymised Information Linkage) databank which holds anonymised data about the population of Wales. For example: Patient Episode Dataset for Wales, which includes demographic and clinical data on all inpatient and day case admissions, including emergency admissions; General Practitioner data set, including prescriptions and symptoms; Public Health Mortality records from the Office for National Statistics (ONS). The SAIL databank has very high data security standards. Individuals are assigned a unique linking field termed an Anonymised Linking Field (ALF), which is operated by the NHS Wales Informatics Service. The ALFs in each data set enables record linkage across data sets at the individual level while retaining anonymity. This cohort study received approval from an independent Information Governance Review Panel. Analyses are carried out within the SAIL Gateway at Swansea University, which is a secure remote access service to the SAIL databank.

**IMPACTS:** The study found that for those living in regenerated houses there is a reduction in the proportion of residents who have emergency admission to hospital for cardiovascular conditions, respiratory conditions and injuries. The local council is now using this information to consider integrating budgets to focus more funding on interventions in housing in order to deliver long term cost saving effects in health and social care.

**SOURCE:** Housing regeneration and health study (2012)

<https://academic.oup.com/ije/article/43/1/52/730313/Cohort-Profile-The-Housing-Regeneration-and-Health>

## Example 6

### Information Sharing to Tackle Violence (ISTV)

Studies have shown that only 25% to 30% of assaults that lead to medical treatment are reported to the police.

In Hackney, the ISTV programme has seen the A&E department share non-identifiable patient information related to violent crime injuries with the Community Safety Partnerships (CSPs): time and date of the incident; time and date of arrival in A&E; specific location of the incident; primary means of assault (i.e. weapon or body part used).

This has allowed local police to target hot-spots with preventative initiatives designed to reduce knife, gun and other violent forms of crime, for example:

- increasing patrols at key times and locations;
- the creation of dispersal zones;
- providing evidence to licensing reviews.

#### Information Sharing to Tackle Violence (ISTV)

**WHO:** Homerton University Hospital A&E, Hackney police licensing, and Hackney Community Safety Partnership (CSP) as part of the ISTV programme.

**WHY:** In Hackney, there is a multi-agency approach to violence prevention involving the CSP, police and public health. Although levels of violence have decreased in Hackney in recent years, rates of violent crime, A&E presentations and hospital admissions for assault remain above national averages.

**WHAT:** All A&Es collect a core dataset on assault patients, such as patient demographics and the time of presentation. As part of the ISTV programme additional data was collected relating to the time and date of incident, time and date of arrival to A&E, specific location of incident and primary means of assault (weapon or body part).

Non-identifiable patient information from A&E admissions was then shared with the CSP in a de-personalised format (however it is acknowledged that there is a risk that individuals could be re-identified when this information is combined with that held by CSP members). CSP analysed the data and subsequently shared it with Hackney police, public health, the Drug and Alcohol Action Team (DAAT), Young Hackney and the Islington Council CCG (Clinical Commissioning Group) so that cross-borough issues could be identified.

**HOW:** In September 2014 the Health and Social Care Information Centre published an Information Standards Notice for ISTV. This formal standard of information sharing was sponsored by the Department of Health and designed to ensure that the information sharing was fully compliant with the Data Protection Act.

**IMPACTS:** Examples of how this information has been used include:

- the development of action plans for addressing anti-social behaviour and violence hotspots;
- provide evidence for the creation of dispersal zones (areas where police have the power to disperse groups where the groups' behaviour has [or is likely to] result in harassment, intimidation, or distress to others);
- contributing towards a licensing review after a number of assaults were identified as taking place at a specific venue.

SOURCE: <http://www.cph.org.uk/wp-content/uploads/2014/12/Hackney-case-study-health-data-sharing-to-support-violence-prevention.pdf>; <http://informationsharing.org.uk/reports/egyvresources/>