

Information sharing for social inclusion in England: A review of activities, barriers and future directions

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A number of central government policy initiatives in the UK are encouraging the sharing of information between government and other partners. A relatively large amount of information is available to enhance social inclusion but this data does not always have the detail (granularity) required to investigate small areas. As a result information sharing of locally generated information is increasing in the UK¹, particularly for issues such as health and crime where information is not readily available for Local Authorities. Legal and ethical issues associated with sharing locally generated information are frequently perceived as problematical. Examples of methods and protocols to overcome these problems are reviewed. It is possible that the activities of the Cabinet Office Committee on data sharing (MISC31) will act as an incentive for data sharing. However, an equally important catalyst will be commitment and support across UK central government and at the local level by Chief Executives and members to the principles and benefits of information sharing for better informed policymaking.

Keywords : Data sharing, social inclusion, local information systems, protocols, evidence based policymaking

1. INTRODUCTION

For many years commentators and policymakers in the UK (Campbell, 1990; Employment Department Group, 1988; Foley, 1990; Hasluck 1990; Social Exclusion Unit, 2001; Miliband, 2006) have highlighted the need for accurate up-to-date information to inform social inclusion policies.

The Local Government White Paper (2006) establishes, for England², the growing importance of information in the UK government's strategy to enhance social inclusion, asserting that "effective cross-agency working to deliver Local Area Agreement (social inclusion) targets needs to be supported by effective data-sharing between local partners" (para 5.30).

Information can be used to better identify, quantify and map social exclusion problems, analysis can help to enhance inclusion strategies and improve the joining-up and targeting of services and solutions to individuals, groups and areas. Importantly, continuous data monitoring can identify social exclusion trends and establish the impact of social inclusion strategies and initiatives (University of the West of England, 2004).

This paper examines the information sources that are available in the UK to enhance social inclusion. It highlights deficiencies in current information availability and uses short case studies to demonstrate the advantages and methods adopted between organisations to share information. The paper is divided into three sections. The next section

provides an overview of efficiency improvements and benefits provided by the enhanced use of information. Section three provides examples of key data sources that offer information on social exclusion issues at different scales of analysis ranging from local authority administrative districts (there are 388 in England) to output areas (a new geography for the collection and publication of small area statistics introduced in 2004 to overcome problems caused by the inconsistent and unstable electoral ward geography, there are 165,665 output areas in England with a mean population of 1,500). Appendix one provides an overview of key online data sources.

The final section briefly considers some of the key barriers to sharing information and the methods and protocols that have been adopted to overcome these difficulties and successfully share information.

2. CONTEXT AND BENEFITS

During recent years technology has provided English local authorities and other organisations with new opportunities to access online datasets from organisations such as the Office for National Statistics (ONS), the Neighbourhood Renewal Unit and the Audit Commission. Communication and sharing of data and information between organisations has improved and become more rapid. Technology, such as Geographical Information Systems; increasingly used for crime mapping, offers new opportunities to analyse data. Technology can also be used to ensure that information sharing protocols agreed between organisations are made to work (Neighbourhood Renewal Unit, 2005).

Importantly, continuous data monitoring identifies social exclusion trends and moves data analysis beyond a simple, time specific, 'snap shot' of exclusion problems. Regular data analysis can also be used to monitor change and assess and evaluate progress over time. This was particularly important for the Local Area Agreement pilots (DCLG, 2005) that needed to establish a sound local evidence base to analyse cross-partner performance.

The creation of local policy goals and performance management is likely to become a more important issue in the future. The Local Government White Paper (2006) advocates a reduction in targets set by central government and greater flexibility for local authorities to establish their own local goals. Finding suitable indicators to define appropriately a goal or vision is problem-

atical. Difficulties concern the selection of variables that are relevant to the delivery of performance improvement, are easy to understand, are cost-effective to collect, are unambiguous and reflect changes in performance.

Some have argued that performance monitoring is of limited value as there is not a free market choice that the citizen can really make. This view is correct, but several strands of the Local Government White Paper (2006) strengthen bottom up accountability. This is an attempt to achieve a new central-local relationship which enables people to hold local service providers to account. But this will only be possible if communities and citizens have information about the performance of services delivered or the achievement of local regeneration targets. Information, and more importantly ease of access to local information, at relevant local neighbourhood geographies will be vital.

The concept of evidence-based policy making has increased in popularity (Comptroller and Auditor General, 2003; National Audit Office, 2001). *Evidence based policy* has been defined by Davies (1999) as 'the integration of experience, judgement and expertise with the best available evidence from systematic research'. *Evidence-informed* or even *evidence-aware* policy is probably a better description of the aspirations for the role of data sharing in the policy making process. However, a number of studies have shown that the public sector may not currently be making full use of evidence to inform policy-making and practice decisions (Office for Public Management, 2005). Where research and statistics are used, they sometimes have only a limited impact (Percy-Smith et al. 2000; Percy-Smith et al. 2002; Weiss, 1980; World Health Organisation, 2004).

This caveat about the limited use and impact of research and statistics highlights another concern that can arise at some data sharing projects. It is almost certainly a fallacy that 'more data is better'. More data is only beneficial if it is pertinent and analysed competently. Several data sharing managers interviewed during a recent study (Foley et al, 2007) noted that achieving the right balance between information comprehensiveness and information "overload" in a simple usable system is difficult.

The FAME (Framework for information sharing in a multi-agency environment; www.fame-uk.org) National Project³ is developing a product for multi-agency information sharing. The project is comprised of nine work (or information) strands. It does not have a social inclusion focus but several work strands concern inclusion issues.

Independent consultants estimate that each authority using the FAME product in a single partnership should accrue net financial benefits of £125,000 per annum from reductions in staff time and through preventative action enabled by FAME (Fame, 2005). This net financial benefit increases to over £400,000 where authorities have four partnerships using the FAME product.

2.1 Benefits

Benefits of information collection and sharing systems extend beyond the simple financial benefits identified for FAME. Benefits are usually divided into two groups (Neighbourhood Renewal Unit, 2005): *Direct benefits* and *indirect benefits* or outcomes arising from better use or access to data or information. The key benefits claimed by the Neighbourhood Renewal Unit (2005) include:

Direct benefits include issues associated with efficiency and improved understanding or knowledge.

Efficiency benefits include:

- Reduced staff time (or automation) for data and information collection and analysis.
- Removal of duplication of effort in collecting and analysing data.
- Easier and more efficient information sharing.
- Improvements in the timeliness of information received and shared.
- Data accuracy is improved (by data cleansing).
- Audit trails and service histories are more readily available.
- Security and authentication is guaranteed.
- Improved ability to comply with Freedom of Information access requests.
- Electronic (or web enabled) real time information sharing can require less paperwork; less travel and access to more accurate up-to-date information.

Knowledge benefits include:

- Improved ability to create a more accurate and clearer picture of what is going on in an area.
- Enhanced ability to 'mix and match' different data sets and join or overlay information from a range of organisations.
- Better knowledge of individual or community needs.
- Better capability to compare performance between different areas.
- Improved evidence base to review, justify and

set local objectives and strategies.

- Enhanced partnership working, shared ownership and joint action.
- Stimulating debate and raising public awareness, particularly when developing community strategies.
- Better support for local authorities undergoing Comprehensive Performance Assessment (CPA) by providing valuable context data.

Indirect benefits primarily concern the way processes or services can be optimised through having better access to more accurate information. These benefits include:

- Increased speed or reliability of service delivery.
- Better quality of services provided.
- Citizen access to services not previously available or a wider range of services.
- Increased choice or service access (channel or time availability) for users.
- Personalisation, proactive identification and targeting of services delivered.
- Improved perception of the council and local government, i.e. greater trust, better community relations.

This list provides an overview of benefits. The magnitude and ease of achieving these benefits will be variable. For example data cleansing may be problematical, security may be difficult to maintain and the ease of access to data under the Freedom of Information Act is questionable.

3. DATA SOURCES AND INFORMATION

3.1 Introduction

Data sources and information useful for enhancing social inclusion fall into two domains, each type has particular benefits and problems. The two types of data or information are:

- *Information in the public domain.* Datasets from the ONS and others are becoming more widely available. They can usually be accessed at no cost and shared with others. This data does not always have the detail (granularity) required to investigate small areas.
- *Locally generated information.* The amount of information about individuals or households collected and/or analysed by local organisations (local authorities, police, health, voluntary and private sectors) is increasing. Legal

issues and the need for protocols are frequently perceived to be constraints on sharing this type of information.

3.2 Information in the public domain

The starting point for the collection or aggregation of information in previous studies has frequently been the need to obtain data relating to National Public Service Agreement Targets (UWE, 2004) or Comprehensive Performance Assessments (Audit Commission, 2005).

This study uses this previous research and other reports to provide a brief introduction to data that is able to address the Social Exclusion Unit’s key inclusion themes (Social Exclusion Unit, 2004). The availability of information related to the Social Exclusion Unit’s key themes is shown in Table 1. In addition to the key themes all sources also provide data on the local environment. This is important in fulfilling the Department for Communities and Local Government Neighbourhood Renewal Unit’s broader renewal remit.

The key sources of information and data are briefly described below. Further details of 45 key statistics from the above data sets aggregated by theme and providing details of the geographical granularity of data are provided in Appendix 1.

Neighbourhood Statistics Service (www.neighbourhood.statistics.gov.uk) The Neighbourhood Statistics Service is the primary source of social inclusion data in the UK. Table 1 shows that it has data on a wide range of topics and it is fairly user friendly. The website enables data to be downloaded by theme. An alternative access method is to insert postcodes or place names, this provides a bespoke overview containing data on many of the

Table 1 The Social Exclusion Unit’s key themes and information on these topics provided from leading data sources

Social Exclusion Unit Key Themes	Neighbourhood Statistics Service	Indices of Deprivation	Audit Commission	UWE Overview of data Sources
Crime	★	★	★	★
Education and skills	★	★	★	★
Employment	★	★	★	★
Health	★	★	★	★
Housing and homelessness	★	★	★	★
Social Capital	★		★	
Access to services	★	★		

themes in Table 1.

The website provides access to data from the Census of Population 2001 and the Indices of Deprivations (see below). Some of the data is provided at ward level, more detail (granularity) is provided for a few measures by providing data at one of three categories (layers) of ‘Super Output Areas’ (SOAs). The most detail is provided by the ‘lower’ layer of Super Output Areas; these provide data on areas with a mean population size of 1,500.

The Indices of Deprivation (www.neighbourhood.gov.uk) This index measures deprivation at a fine geographical level of detail (the lower layer of Super Output Areas) across the whole of England. The overall Index of Multiple Deprivation is made up of seven (weighted) components (see Table 1 for components plus ‘living environment’). Data on each component is provided as an index value (constructed by combining the indicators for that component) and a rank of the index value in comparison with 32,482 (Super Output) areas (where a rank of 1 is the most deprived). Further details and data can be downloaded from the Neighbourhood Renewal Unit website.

Census of Population 2001 (www.statistics.gov.uk/census2001) The Census of Population is the key statistical sources for small area data in the UK. However, its key drawback is that it is conducted on a ten-year cycle and 2001 information is becoming dated. It is a vital resource for population and household estimates as well as for a range of characteristics that can be used to investigate neighbourhoods at a fine geographical level of detail (the lower layer of Super Output Areas).

The Audit Commission (www.areaprofiles.audit-commission.gov.uk) The Audit Commission (2005) is developing a new set of indicators to help local authorities and other organisations paint a local picture of the quality of life and public services. The Audit Commission’s 45 key measures or variables have been aggregated into ten themes (see Table 1 for components, plus environment; people and place, transport and access; and culture). The data is expected to be available at local authority level in April 2006. The Audit Commission hope to provide data at a finer (unstated) level of detail in the future.

The UWE overview (www.neighbourhood.gov.uk/document.asp?id=128) This report for the Neighbourhood Renewal Unit on ‘Data Provision for Neighbourhood Renewal’ provides an overview of key data and information sources investigated by University of the West of England researchers in June 2004. This paper provides a succinct overview and update of many of the key issues and data sets

highlighted in the University of the West of England report.

One final useful source of information is *Nomis* (www.nomisweb.co.uk). The website provides an extensive range of detailed and up-to-date labour market statistics. Datasets include information on employment, unemployment, vacancies, businesses, earnings and other topics. The website enables information from datasets to be downloaded by topic. An alternative access method is to insert postcodes or place names. This complements the summary statistics report provided by the Neighbourhood Statistics Service (see above) by providing labour market measures not available in that report and by giving figures for the working age population (rather than all people aged 16-74).

Appendix 1 provides an overview of 45 key datasets available from the above sources that provide an insight into the Social Exclusion Unit's key themes. The appendix provides a URL for each dataset and details of the geographic level of detail at which data is provided.

Although a caveat was provided earlier about the dangers of information overload arising from too much data it is also important not to restrict or dictate the amount of data that is available. Many local authorities and regeneration partnerships have different objectives and the new Local Government White Paper (2006) advocates greater flexibility in determining these objectives. Some areas place greater emphasis on employment, others on crime, in some areas neither of these may be a concern and care of the elderly may be a more important local priority. More data can create overload, but it does provide a larger source to enable local organisations to select the data useful for their local circumstances and goals. The ability to access data with a fine degree of granularity (such as standard output areas) is also important in enabling local policy-makers and citizens to map data according to their own (more intuitive) geographies and not those imposed by administrative boundaries.

3.3 Locally generated Information

Previous reports and Appendix 1 highlight that comprehensive information is not available on all the Social Exclusion Unit's key themes. Only 12 of 31 Neighbourhood Statistics Service datasets have information at ward level (or Super Output Areas) and four of these datasets were collected as part of the 2001 Census. In some areas where information is not available, or where information at a sufficiently fine level of geographical detail is not

available, local authorities and other organisations have developed partnerships to share or collect information. Camden provides a good example of an authority that has supplemented information from national sources with local data collection and surveys to develop their social inclusion strategy.

Camden's social inclusion strategy (2003) draws heavily on national and local datasets to provide an evidence base for action. Data analysis of the difference between the highest and the lowest ward scores on the Index of Multiple Deprivation identified Camden as the most polarised borough in London. Data from national sources and locally collected information was used throughout the inclusion strategy to discover areas where more work is required and to identify geographical areas for a concentrated focus over the medium term. The strategy highlighted a paucity of information about lesbian, gay, bisexual and transgender people in the Borough. Additional research and data collection was an action area identified by the strategy. Data sharing to overcome a paucity of nationally available information or to better utilise local collected data has primarily developed in the areas of health and crime information. Interestingly, these are the two areas where geographically detailed information from national sources (see Appendix 1) is very poor or information is dated. Only two of nine measures for health information provide up-to-date data at ward level. None of the crime measures is provided at ward level.

Detailed information in these two areas is primarily collected by Health Care Trusts and Police Forces, but this information is not readily available to local authorities. These organisations generally lead on the development and implementation of social inclusion policies in their respective areas of expertise. The more holistic manner in which social inclusion strategies and implementation is now undertaken has led to the creation of partnerships to utilise relevant information to enhance strategy development, operational activities and improve service delivery.

In Leeds local organisations have created a partnership to better utilise health information to increase efficiency and enhance social inclusion, details are provided in the next section. In Middlesbrough the Active Intelligence Mapping initiative (AIM) has brought together several partners to share the analysis of crime information. The initiative:

- Maps crime by geographical area and type of crime
- Profiles the characteristics of crime areas

- Identifies the perpetrators of crimes and their patterns
- Targets responses and deploys patrols
- Monitors and evaluates targeted actions.

The AIM group holds weekly meetings with the heads of all participating public services including the police, local authority and fire brigade, to discuss the week's developments and necessary actions. All strategic and tactical decisions are considered in the light of the intelligence gathered through AIM. Crime hotspots can then be targeted for increased surveillance or higher profile activities. Part of the reason for the project's success has been the high level support it has received; AIM was established to support the Mayors' manifesto which focuses strongly on crime reduction.

A good example of the wider benefits of local information sharing is provided by the use of ambulance incident data. This data can be a useful source of road traffic accidents for local authority highways departments to plan for road traffic improvements. Incident data can also be a useful source of information about assaults. This can be used by the police and crime prevention partnerships to identify violent incident hotspots (both by geography and time) and as a source of information that might indicate domestic violence. Resources can then be better targeted at overcoming these problems.

3.4 Further incentives for information sharing

Additional incentives for information collection and sharing in some areas have been the need to share information as a result of Acts of Parliament. The Middlesbrough AIM initiative was partially guided by the Home Office's Crime and Disorder Reduction Partnerships established by the 1998 Crime and Disorder Act.

A more direct impact of an Act of Parliament is illustrated by the Children Act 2004. This requires all local authorities to create a register of children at risk.

In St Helens the Act was a stimulus to develop a pilot project to create a register. The St Helens Children's Partnership knew that one outcome of the Children Act 2004 would be the requirement to develop a register of children at risk. The partnership decided to act early and key partners (the council, Health Trust and NSPCC) contributed about £200,000 to develop a pilot project.

The project found it very difficult to clarify the legal basis for sharing information about children between public agencies. Letters were sent to children's parents and guardians seeking permission to share information about their child. Six per cent withdrew their consent. The register contains details for 2,285 children aged between 0 and 18.

Information that might indicate a change in a child's well-being is input by local schools; Primary Care Trusts; Merseyside Police; the council's social services, education and leisure services departments; and other partners. Partners can only access the data they input. However, each week a small multi-agency team of senior childcare professionals meets to look at the complete database and examine all changes that might indicate a child is moving towards 'at risk' status. A five point scale of child need has been created (culminating in the requirement for child protection) and any child moving up a category is identified.

The St Helens initiative and similar projects elsewhere in the UK has the ability to highlight the significance of a number of seemingly inconsequential factors. For example a child who might have reported to hospital with a broken arm, could also have started to become absent from school and the police might have been called to the child's house by reports from neighbours of shouting and screaming. Individually each of these incidents might have gone unnoticed, but collectively they could indicate child abuse. In St Helen's if this occurred one of the partner agencies would then be designated to contact the child and parents or guardians to ensure appropriate support is provided (if required) to guarantee the child's wellbeing.

4. INFORMATION SHARING PROTOCOLS

4.1 Introduction

As local and central government modernises, the way information is used is changing. Traditionally, local authorities have not used information in a joined up manner. However, during recent years information sharing activities (within and between public organisations) to support the provision of more effective and efficient public services or to enhance social inclusion has increased. Considerable benefits arise from analysing and sharing data. However, overcoming the legal and ethical issues associated with sharing locally generated information is frequently perceived to be highly problematic (Neighbourhood Renewal Unit, 2005).

Sharing information and the analysis of information in the public domain between public sector organisations has increased. But it is probably the sharing of locally generated information that has had the largest impact and encountered the greatest problems. Sharing information about service users between public organisations has become vital to the provision of more co-ordinated and seamless public services (DCLG, 2006). However, there are a number of barriers to information sharing.

Confusion often arises from different interpretations (between organisations) of the Data Protection Act and other information privacy concerns in some areas. These concerns have been overcome at some data sharing groups by aggregating data or using anonymising software to remove data of personal information. This activity is undertaken by Brighton CityStats (www.citystats.org) to obtain data from health service providers.

Barriers are usually linked to legal requirements or concerns over responsibility and accountability for the sharing of information. To overcome these barriers many public sector organisations and information sharing partnerships have developed information sharing protocols. Protocols clarify the purposes for sharing information, the processes that will be used and the types of information that will be exchanged within or between organisations. Information sharing protocols ameliorate the potential uncertainties about what information can be legally shared, by whom and in what instances. They protect individuals' or service users' confidentiality.

The final part of this paper provides examples of the different types of information sharing protocols, it presents an overview of the legal considerations protocols address and concludes with details of how protocols have been developed and successfully implemented.

4.2 Types of information sharing protocols

The needs and goals of the organisation, or a consortium of organisations, which need to share information will determine the structure and style of a protocol. Many of the constituent elements of protocols are similar, but they all differ in order to meet local requirements.

Protocols usually focus on the sharing of locally generated information about individuals or households, but some also establish principles to share or analyse information accessed from the public domain.

Three tiers or levels of protocols can be identified (Neighbourhood Renewal Unit, 2005). These range from the strategic to the operational. Upper tier or strategic protocols can include issues related to sharing information from the public domain. The lower two tiers concentrate primarily on locally generated information. Some overlap in the issues addressed by the three tiers exists, but this typology provides a clear overview of the main types of protocol.

- *Strategic protocols.* These are strategic or overarching protocols developed where the organisation or partners perceives a need to agree a common set of general principles under which they share information (between different departments or between organisations). Good examples of strategic protocols have been developed by Durham, Leeds, Solihull, Worcestershire and the Improvement and Development Agency.

[www.durham.gov.uk/durhamcc/usp.nsf/Lookup/Protocol%20for%20Information%20Exchange%20-%20Sept%202004/\\$file/Protocol+for+Information+Exchange+-+Sept+2004.pdf](http://www.durham.gov.uk/durhamcc/usp.nsf/Lookup/Protocol%20for%20Information%20Exchange%20-%20Sept%202004/$file/Protocol+for+Information+Exchange+-+Sept+2004.pdf)

<http://www.leeds.nhs.uk/infoshare>

www.solihull.gov.uk/wwwss/ISPSolihullv1.pdf

www.worcestershire.gov.uk/home/text/cs-social-docs-progsa-infosharingprotocol.pdf

www.idea.gov.uk/transformation/downloads/protocol.pdf

- *Middle tier protocols.* These focus on specific purposes for data sharing, such as crime prevention; child protection; health and social care. The content of these protocols are defined by the type of information to be shared and the purposes for which it can be shared, they usually cover specific locally generated information. They can include personal or user information, but they do not prescribe the comprehensive level of practical or technical detail provided by lower tier service level protocols. Good examples have been developed in Gedling, Leeds and Warwickshire.

http://www.leeds.nhs.uk/attachment/00000000aef19d22636b62a8a8a96c10/0000000051fc9f243bb25de939ae8a46/isp_oct_2002_appendix_3.pdf

www.gedling.gov.uk/gedling_data_share_protocol.pdf

[www.warwickshire.gov.uk/Web/corporate/pages.nsf/Links/06730D5205DA28D980256D1900491DDA/\\$file/PROTOCOL3+\(2\).pdf](http://www.warwickshire.gov.uk/Web/corporate/pages.nsf/Links/06730D5205DA28D980256D1900491DDA/$file/PROTOCOL3+(2).pdf)

- *Service level protocols.* These establish detailed technical agreements and methods for sharing

information about individuals or households. They set out clear requirements for managing the data sharing process; clarify arrangements for gaining the consent of individuals to hold and share data; and create methods to keep information secure and maintain confidentiality. A good example was created for the RYOGENS (Reducing Youth Offending Generic National Solution) National Project. This project uses a secure web based system for professionals to record and share concerns about individual children and young people in a safe and secure manner.

www.localgovnp.org/webfiles/National%20Projects/Ryogens/Toolkit/Deliverables/EXAMPLE%20Lewisham%20ISP%20Tier%203%20v001_160304.doc

The Leeds Information Sharing Initiative provides a good example of the timespan and considerations required to establish protocols and the supporting infrastructure for an information sharing initiative. In 2001 health and social care organisations in Leeds recognised the need to create a clear framework to facilitate information sharing.

Eighteen organisations (including Hospital Trusts, Primary Care Trusts, Leeds City Council, West Yorkshire Police and the Service Users and Carers Alliance) joined together to establish an inter-agency steering group to develop an information sharing protocol. The protocol was agreed in October 2002 after 18 months of consultation and research. The strategic protocol is now being used by health, social care and voluntary organisations throughout Leeds.

The protocol provides an overall framework for sharing information. Middle tier, more practical, protocols have also been established for particular types of projects, such as mental health. These provide guidance on "who can share what and how". A web site (www.leeds.nhs.uk/infoshare) and a small support group have been established for the information sharing initiative. The website provides access to protocol documents. The support group (and website) also provides assistance and materials for training on information sharing issues.

The key benefits of the project have been better consistency in sharing data between organisations and increased confidence to share data (rather than being overawed by the Data Protection Act). One key to the success of this project has been the emphasis on a very practical approach, focusing on meeting the needs (and obtaining data) from the service provider (doctor, nurses and care workers) on the ground and making data and information as usable as possible for them and their service users.

4.3 Legal barriers to information sharing

The most commonly perceived barriers to information sharing are legal problems; these primarily concern the responsibility and accountability of those sharing personal information. Each individual is personally liable under the Data Protection Act 1998 for the protection of personal information. Should the matter become litigated, the case if heard in the Magistrates Court could have a maximum financial penalty of £5,000.

An interesting conundrum exists. Central and local government are keen to develop joined up services, eGovernment and encourage information sharing. However, they also have a legal responsibility to ensure the security and confidentiality of personal information. Indeed, in recent years central government has strengthened legislation and guidance in this area (e.g. Data Protection Act 1998 and Caldicott guidance [health service principles on the protection of personally identifiable information]). Information sharing legislation is however often confusing. An Improvement and Development Agency (2005a) briefing document (Local government data sharing) identified three areas where legislation is unclear.

Firstly, local authorities operate with regulations covered by different central government bodies such as the Office of the Deputy Prime Minister; the Department for Education and Skills; the Department of Health; the Department of Trade and Industry; the Department for Environment Food and Rural Affairs.

Secondly, local authorities need to have statutory authority, or vires, for every information activity they undertake, at every level, on every instance and for each organisation it is sharing information with.

Thirdly, current legislation does not cover the new opportunities for information sharing that are enabled by advances in technology. For example the use of customer relationship management (CRM) systems that utilise council tax information as a basis for sharing information has been questioned in some local authorities because legislation might prevent use of council tax information for other functions.

Unclear and conflicting legislation has created uncertainties about the circumstances under which information may be legally shared. Concerns over responsibility and accountability for information sharing that may leave individuals or the organisations they work for open to possible legal action is perceived as a major obstacle. It is not uncommon

for staff to be reluctant to share any personal information about service users if they are uncertain about legislation and guidance. Conversely, staff that are unaware of changes in legislation may continue to share information on the basis of informal arrangements that do not meet legal requirements.

Interestingly, the requirements of the Data Protection Act 1998 were a catalyst in one area to develop a data integration project that also has data mining capabilities. One requirement of the Data Protection Act is for organisations not hold more data than necessary about citizens.

The Hammersmith and Fulham Borough Council realised they had a common set of customers, several systems collecting data about them and opportunities for rationalisation and enhancement. They also saw an opportunity to enable citizens to report a change of address once; the information could then be shared within the council and with other relevant public sector organisations. The cleansing process was very complex and problematic. But significant operational and strategic advantages have arisen.

A good example of the strategic use of this data has been a decision not to adopt a one-stop-shop approach to making services available in local neighbourhoods. Hammersmith and Fulham is an heterogeneous borough with considerable divergence in the relative of wealth of different areas. Instead of a universal one-stop-shop approach analysis of service use and users has enabled different services to be better located in a range of localities that best meet local users' needs. Using local transport data, service outlets have been distributed to ensure that the majority of users are no more than 30 minutes from a relevant office.

4.4 Developing and implementing information sharing protocols

Information sharing makes it possible for organisations to generate more comprehensive and accurate information by combining different data resources and different types of data. This requires the development of systems for capturing the required information; transferring the information to other public organisations and holding shared information. Effective information sharing also requires the different parties to agree what information should be exchanged, how and by whom.

As well as addressing legal issues information sharing protocols are also designed to provide a clear framework to facilitate and govern the sharing

of information between organisations. Information sharing protocols ensure legal, consistent and robust information sharing procedures by providing a reference framework for common issues of good practice.

The most commonly covered topics in information sharing protocols include:

- The purpose of the protocol
- The objectives for information sharing
- Scope of the information sharing
- Principles and relevant legislative powers
- Partners undertakings
- Risk management
- Data Protection Act compliance.

Information sharing protocols are a tool to facilitate legal and efficient sharing of information. They do not have to be a bureaucratic hurdle. The best protocols are clear and comprehensive, many of the examples in section 4.2 meet this requirement. They are easy to follow and include realistic goals. Information sharing protocols usually start by explaining the reasons for sharing information. All parties entering the agreement need to approve, understand and formally agree the purpose of the data sharing arrangement. Hence, information sharing protocols must clearly explain what data is being shared and outline the principles and commitments organisations will adopt when personal (or other) information is gathered, stored and disclosed. Protocols also need to establish when information can be shared and to assign responsibilities and roles to members within and between organisations. This includes formally establishing who will gather, store and disclose personal information.

Protocols are usually developed by an information steering group. The steering group is responsible for supporting, monitoring and reviewing the implementation of the protocol. Other duties might involve contacting lawyers, data protection officers, Caldicott Guardians and IT specialists. The best information sharing protocols (and projects) have been developed after consulting service users or beneficiaries, interest groups and relevant associations to obtain a better understanding of the needs of users and to better determine the focus of the project.

The most successful information sharing partnerships have been developed by introducing pilot protocols or projects. Pilots are useful to ensure that the operational standards and procedures agreed to ensure the accuracy of information and efficient record management. Effective

implementation depends on the clear allocation of roles and responsibilities of staff and the development of supporting training programmes.

5. CONCLUSION

A great deal of information is available in England to enhance social inclusion and policymakers are placing increasing emphasis on the needs for evidence based policymaking and the achievement of targets.

The Local Government White Paper (2006) advocates a reduction in targets set by central government and greater flexibility for local authorities to establish their own local goals. Finding suitable indicators to define appropriately a goal or vision is problematical. Access to suitable central government data and information from local organisations and surveys will be vital in informing the debate about appropriate local goals and methods to monitor performance.

Information in the public domain (from the Office for National Statistics and others) can be accessed at no cost and shared easily with others. However, this data does not always have the detail (granularity) required to investigate small areas, particularly when trying to identify health and crime problems. For example only 17 of the 45 measures reviewed in Appendix 1 provide detail at ward or Super Output Areas level. As a result information sharing of locally generated information is increasing.

Legal and ethical issues associated with sharing locally generated information are frequently perceived as highly problematical. However, the final section of this paper provides examples of methods and protocols that have been developed to overcome these problems.

As the examples in this paper demonstrate where effective information sharing systems can be established they can be vital in generating better informed local social inclusion strategies and in providing joined-up solutions in many neighbourhoods.

NOTES

1. The author is interested to know of any examples from other countries, which have proven elusive in literature searches.
2. Local Government is a responsibility devolved to the Scottish and Welsh administrations.
3. <http://www.localgovnp.org>

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Appendix 1 Key social inclusion information data sources in England

Indicator/Measure	Smallest geographic unit of coverage	Source of data
Crime		
Notable offences recorded by the police - 5 categories (burglary, robbery, theft of or from a vehicle, violence against the person)	Local authority area	www.neighbourhood.statistics.gov.uk From the Home Office recorded crime series
Crime statistics - 9 categories (Burglary, criminal damage, drug offences, fraud and forgery, robbery, sexual offences, vehicle and other theft, violence against the person, other offences)	Local authority area	www.crimestatistics.org.uk Combines the police recorded crime figures with the British Crime Survey
Additional Crime statistics (for Police Force Areas) can be found at www.homeoffice.gov.uk/rds/index.htm and www.lcjb.cjsonline.gov.uk/ncjb/29.html		
Education and Skills		
GCSE/GNVQ achievements of 15 year old pupils in maintained schools	Local authority area	www.neighbourhood.statistics.gov.uk
Highest qualifications by age, sex and ethnicity	Local authority area	www.neighbourhood.statistics.gov.uk
Home student enrolments on Higher Education courses at publicly funded Higher Education institutions	Local authority area	www.neighbourhood.statistics.gov.uk
Key Stage 3 achievements of 14 year old pupils in maintained schools	Local authority area	www.neighbourhood.statistics.gov.uk
Number of schools in which fewer than 65% of pupils achieve level 4 or above in English or Maths	Local Education Authority average and individual schools	www.dfes.gov.uk/performancetables
Education and Skills contd.		
Number of schools where fewer than 60% of 14 year olds achieve level 5 or above in English, Maths, ICT and Science	Local Education Authority average and individual schools	www.dfes.gov.uk/performancetables
Percentage of 11 year olds achieving level 4 or above in English or Maths	Local Education Authority average and individual schools	www.dfes.gov.uk/performancetables
Percentage of 14 year olds achieving level 5 or above in English, Maths, ICT and Science	Local Education Authority average and individual schools	www.dfes.gov.uk/performancetables
Percentage of half-days missed through unauthorised absence from secondary and primary schools	Local Education Authority average and individual schools	www.dfes.gov.uk/performancetables
Percentage of Pupils Achieving 5 or More GCSE Grade A*-C (or Equivalent)	Local authority area	www.neighbourhood.statistics.gov.uk
Percentage of Pupils Achieving Key Stage 2 Maths and English Level 4	Local authority area	www.neighbourhood.statistics.gov.uk
Primary School Pupils at Key Stage 2	Local authority area	www.neighbourhood.statistics.gov.uk
Employment		
Claimant count	Local authority area	www.neighbourhood.statistics.gov.uk
Count of enterprises	Wards	www.neighbourhood.statistics.gov.uk
Employment rate	Local authority area	www.neighbourhood.statistics.gov.uk
Employment status by ethnicity and qualifications	Local authority area	www.neighbourhood.statistics.gov.uk
Job seekers allowance claimants	Wards	www.neighbourhood.statistics.gov.uk
Starts to New Deal for Young People, New Deal 25plus and New Deal for Lone Parents	Middle layer Super Output Area	www.neighbourhood.statistics.gov.uk
Additional employment statistics (for local authority areas) can be found at www.nomisweb.co.uk		
Health		
Incapacity and severe disablement allowance claimants	Wards	www.neighbourhood.statistics.gov.uk
General health 2001	Lower layer Super Output Area	www.neighbourhood.statistics.gov.uk from the 2001 Census
Hospital episode statistics	Local authority area	www.neighbourhood.statistics.gov.uk
Life expectancy at birth	Local authority area	www.neighbourhood.statistics.gov.uk
Limiting long term illness 2001	Lower layer Super Output Area	www.neighbourhood.statistics.gov.uk from the 2001 Census
Synthetic estimates of healthy lifestyle behaviours	Wards	www.neighbourhood.statistics.gov.uk
Drug misusers presenting for treatment	Health authority areas	www.neighbourhood.statistics.gov.uk
Health and provision of unpaid care 2001	Super Output Area	www.neighbourhood.statistics.gov.uk from the 2001 Census
Under 18 conceptions	sub-region	http://www.statistics.gov.uk/StatBase/Expodata/Spreadsheets/D6624.xls

Housing and Homeless		
Dwelling stock by tenure and condition	Local authority area	www.neighbourhood.statistics.gov.uk
General demand indicators	Local authority area	www.neighbourhood.statistics.gov.uk
Homelessness	Local authority area	www.neighbourhood.statistics.gov.uk from ODPM statutory homeless release statistics
Local authority dwelling stock	Local authority area	www.neighbourhood.statistics.gov.uk
Social housing rents	Local authority area	www.neighbourhood.statistics.gov.uk

Social Capital		
General satisfaction with local authority and street cleanliness	Local authority area	www.neighbourhood.statistics.gov.uk from Best Value Indicators 2000/1
Migration	Super Output Area	www.neighbourhood.statistics.gov.uk
Population change 1982-2002	Local authority area	www.neighbourhood.statistics.gov.uk
Population turnover rates	Wards	www.neighbourhood.statistics.gov.uk

Access to Services		
Distance travelled to work	Super Output Area	www.neighbourhood.statistics.gov.uk from the 2001 Census
Cars and vans	Super Output Area	www.neighbourhood.statistics.gov.uk
Educational establishments	Local authority area or postcode	http://www.edubase.gov.uk
General practices/surgeries	Postcode	http://www.nhs.uk/England/Doctors/Default.aspx
Dentists	Postcode	http://www.nhs.uk/England/Dentists/Default.aspx
Opticians	Postcode	http://www.nhs.uk/England/Opticians/Default.aspx
Hospitals	Postcode	http://www.nhs.uk/England/Hospitals/Default.cmsx