What is the Honest Broker Service (HBS)?

HBS provides anonymised, aggregated and, in some cases pseudonymised, health and social care data from the Regional Data Warehouse (BSO) to the DHSSPS and HSC organisations.
What is the Honest Broker Service (HBS)?

- HBS also provides a service to researchers carrying out ethically approved health and social care related research.

- Safe and secure provision of access to anonymised data.
Data from different HSC Trusts and BSO is deposited in the Data Warehouse and may be joined together to gain a fuller understanding of the health of the population.
Regional Data Warehouse

Royal Victoria Hospital Radiology Information System (RVH RIS)…
Social Services Client Administration and Retrieval Environment (SOSCARE)…
Outpatients Waiting List…Local Community Information Development (LCID)…
Outpatients Waiting Daily…Human Resources (HR)/Payroll…Ward Attenders…Procurement…
Admissions & Discharges (A&D)… Inpatients…Dental Payment System – PatList…
Inpatients Waiting Daily…Dental Payment System – History…Inpatients Waiting Weekly…
Dental Payment System – Treatment…Inpatients Waiting Monthly…
Dental Payment System – GDC Surgery Lookup…Dental Payment System – Dentist…
A&D Ward…Dental Payment System – Surgery…A&D Speciality…
Dental Payment System - Monarch Payment Detail…
Inpatients Mental Health and Learning Disability (MHLD)…
Dental Payment System - Monarch Summary…Northern Ireland Maternity Service (NIMATS)…
Ophthalmic System - Ophthalmic Activity…Laboratory Systems (LABS)…
Ophthalmic System - OPH_Master Archive…Bowel Cancer Screening…
Ophthalmic System - Personal Codes Master File…Cancer Patient Pathway System (CaPPS)…
Central Postcode Directory…Northern Ireland Regional Accident and Emergency System (NIRAES)…
Enhanced Prescribing Database (EPD) - TBL_PRESCRIPTION…
Symphony AE (Accident & Emergency)…Enhanced Prescribing Database (EPD) - TBL_DRUG_ITEM
Theatre Management System (TMS)…Dictionary of Medications and Devices (DMAD) system
BSO_Medicinal Products
Patient Registration (NHAIS) system – OTOL…Northern Ireland Picture Archiving and
Communications System (NIPACS)…
Patient Registration (NHAIS) system - DEDUCTED_PERSON…
Belfast City Hospital Radiology Information System (BCH RIS)…
Patient Registration (NHAIS) system - CARE_HOME_INDICATOR
To ensure good Information Governance and provide data in line with Data Protection, Confidentiality Requirements and the Information Commissioners Office Codes of Practice. This will be managed by the Honest Broker Governance Board.

To enable non patient identifiable data to be shared within HSC to maximise the uses and health service benefits which can be gained from it including planning, commissioning of services and public health monitoring.
To deliver high-quality, cutting-edge research potential by enabling the linking of electronic HSC datasets in order to build capacity in health informatics research.

To provide the physical and electronic infrastructure to facilitate and support the safe use of non-identifiable patient data for medical research through the provision of a research ‘safe haven’.
Benefits of the HBS

The Honest Broker Service enables;

- data from different HSC Trusts to be joined together to gain a fuller understanding of the health of the population they serve.
- Secondary care data to be linked to some centrally held primary care data or other appropriate sources.
- HSC to carry out Service Evaluation and Clinical Audit of services.
Streamlined service will create efficiencies and ensure full benefits of data sharing for the benefit of public health and well being.

Anonymisation will provide greater protection of service user information whilst enabling appropriate use of the data for research purposes.

HRA Proportionate Ethical Review: Where the research does not require access to any patient identifiable data during any of the stages of research – 14 Days.
Benefits of the HBS
(Why not just publish the datasets?)

Data Linkage
Benefits of the HBS
(Why not just release the datasets?)

- Secure environment
Benefits of the HBS
(Why not just release the datasets?)

- Honest Broker Advice Service will assist with projects, offering advice and support.
Metadata

Click on the links below to download the metadata for each of the datasets available. Please note that there are multiple tabs to explore within each Excel document.

Patient Administration System Dataset Metadata

- Admissions and Discharges

Family Practitioner Services

- Dental Payment System
- Enhanced Prescribing Database (EPD)
Research Application

http://www.hscbusiness.hscni.net/services/2454.htm

Honest Broker Research Application Form

Through the Honest Broker Service, researchers may access anonymised data within the Regional Data Warehouse (held within Business Services Organisation BSO) in order to facilitate scientifically sound and ethically robust health and social care related research.

Please ensure that you have consulted with the Honest Broker Advice Service (HBAS) and have read the Research Application Guidance before completing this application form.

SECTION A: APPLICATION DETAILS & AUTHORISATION

A1. Project/Research Title

A2. Correspondence address of the Chief Investigator (CI)

Title:
Name:
Position:
Organisation:
Telephone:
Email:

A3. Details of who commissioned the research

Title:
Name:
Position:
Organisation:
Address:

Telephone:
Email:

NHS Research Ethics Committee (REC) – Proportionate Review Service

- No Material Ethical Issues Tool: For your application to be suitable for proportionate review, it should meet one of the study types listed in the No Material Ethical Issues Tool (NMEIT).
- Proportionate Review Service FAQ: This leaflet answers frequently asked questions about the Proportionate Review Service. The Proportionate Review Service is designed to ensure an appropriate level of ethical review for low-risk research studies.
- Submitting your application: Flowcharts and tools to help you assess your research, how to book, and where to submit your application.
Current Projects

- Early Life Factors and Mental Health in adulthood - QUB
- The impact of antibiotic prescription in surrounding community on the incidence rates of nosocomial extended-spectrum β-lactamase (ESBL)-producing strains in hospitalised patients - QUB
- A pilot study to assess the influence of early life events on future risk of development of inflammatory bowel disease – SHSCT + QUB
- Evaluation of past and present implementation of Telemonitoring NI - QUB
- A study to explore care provision to older people with mental health needs who access pre-hospital and in-hospital emergency care service (EMS) - UU Magee
- To determine the profile of women in Northern Ireland from 2014-2015 who have accessed maternity services and who have complex healthcare needs and/or disabilities – UUJ
- Investigating maternal and foetal outcomes for women with Gestational Diabetes Mellitus (GDM) - UUJ
Current Projects

- The relationship between people with borderline personality disorder and general practitioners: Analysis of Northern Ireland patient Health and Social Care data - UU Magee

- Exploring the problem of pain in the Cerebral Palsy population: Piloting a big data approach - QUB

- Identifying and understanding inequalities in child welfare intervention rates: comparative studies in four UK countries – QUB

- Commonly prescribed drugs and association with cancer progression - QUB

- Antibiotic prescribing in older people and trends on movement into institutional care: a record linkage study QUB

- Analysis of antidepressant prescribing patterns in Northern Ireland UU Magee

- Evaluating the implementation of Minimum Unit Pricing of Alcohol – Harmonising alcohol related outcomes data across the UK & Ireland - QUB
CANCER SURVIVAL
IN NORTHERN IRELAND
DATA FROM THE N.IRELAND CANCER REGISTRY

TESTICULAR
FIVE-YEAR SURVIVAL
99.8%
7% INCREASE OVER 10 YEARS

MELANOMA
FIVE-YEAR SURVIVAL
90.8%
5% INCREASE OVER 10 YEARS

BREAST
FIVE-YEAR SURVIVAL
81.2%
7% INCREASE OVER 10 YEARS

WOMB
FIVE-YEAR SURVIVAL
75.1%
11% INCREASE OVER 10 YEARS

CERVIX
FIVE-YEAR SURVIVAL
66.4%
10% INCREASE OVER 10 YEARS

FIVE-YEAR SURVIVAL FOR ALL CANCERS IS INCREASING
FOR MEN AND WOMEN RESIDING IN NORTHERN IRELAND
BUT THERE IS STILL ROOM FOR IMPROVEMENT

STOMACH CANCER FIVE-YEAR SURVIVAL STILL ONLY 18.0%

PANCREATIC CANCER FIVE-YEAR SURVIVAL STILL ONLY 5.0%

OESOPHAGEAL CANCER FIVE-YEAR SURVIVAL STILL ONLY 16.7%
Management of co-morbidity is a real challenge for HSC going forward: data from different HSC Trusts, different systems and data from Primary Care prescribing could be joined together to analyse service users with co-morbidities and gain a fuller understanding of the health services they are accessing.

Assessment of frail elderly and the services they are accessing and where they live – planning on how to deliver services to these people differently to prevent them moving into nursing homes or hospital.
Potential Uses of HBS

- Linking primary and secondary care data, build a Health Profile of patients within Northern Ireland. Incorporating prescribing trends, secondary care uses and patient profiles by geographical area identifiers – beneficial in resource allocation.

- Link patients on medication used to treat diabetes (BNF 6.1) from the Enhanced Prescribing Data to secondary care data to assess the demands placed on the health service by these patients – useful for future planning.
<table>
<thead>
<tr>
<th>BNF Chapter Name</th>
<th>% of patients in receipt of at least 1 diabetes item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastro-Intestinal System</td>
<td>55.58</td>
</tr>
<tr>
<td>Cardiovascular System</td>
<td>84.13</td>
</tr>
<tr>
<td>Respiratory System</td>
<td>35.07</td>
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<tr>
<td>Central Nervous System</td>
<td>69.35</td>
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<tr>
<td>Infections</td>
<td>57.80</td>
</tr>
<tr>
<td>Obstetrics, Gynaecology and Urinary-Tract Disorders</td>
<td>21.89</td>
</tr>
<tr>
<td>Nutrition and Blood</td>
<td>32.50</td>
</tr>
<tr>
<td>Muskuloskeletal and Joint Diseases</td>
<td>35.94</td>
</tr>
<tr>
<td>Ear, Nose and Oropharynx</td>
<td>17.88</td>
</tr>
<tr>
<td>Skin</td>
<td>48.32</td>
</tr>
</tbody>
</table>

**Co-Morbidity**
84% of patients that received at least 1 diabetic medication were also in receipt of items relating to the Cardiovascular System.
Resident Patients Registered with a Practice in Down LCD Dispensed a Cardiovascular Drug - (13,800 Patients)

Geographic distribution of patients receiving Cardiovascular drugs

Data could be linked with secondary care data to see what services they have accessed.
http://www.hscbusiness.hscni.net/services/2454.htm