



Workshop on Ethics & Governance in Cancer Biobanking

January 2009



in
association
with



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Members of the CCB:

- CamUro-Onc Biorepository
- CCLG Leukaemia Research Fund
- Central England Haemato-oncology
- Childhood Leukaemia Cell Bank
- Glasgow Biobank
- Human Biomaterials Resource Centre
- Liverpool Cancer Tissue Bank Research Centre
- Northern Ireland Tumour Bank
- onCore UK
- Tayside Tissue Bank
- UK DNA Banking Network
- Wales Cancer Bank

Joining the CCB:

Any organisation based in the UK, which collects and distributes biosamples for cancer research (not necessarily in the UK), may apply to join the CCB. The NCRI also encourages new banks that are planning to collect and distribute materials, to join at an early stage of setting up. Please see the CCB website or contact us for further information.

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Foreword

The Confederation of Cancer Biobanks has the potential to become a significant voice on behalf of the whole community. We have in a very short space of time hosted meetings such as the one recorded here that have enabled those involved across the spectrum of biobanking to come together to discuss areas of common difficulty.

These meetings have sought to find solutions to resolve any difficulties and to produce principles and policies which are rooted in practice. This booklet sets out to highlight the key elements from the talks and presentations that were given to allow others to benefit.

As both a former cancer patient and as Chair of the Confederation, I fully appreciate the importance of creating a dialogue between the public and science. I am also extremely grateful to all those who work behind the scenes to bring together these events and wish to thank them.

Derek Stewart, OBE

Chair, Confederation of Cancer Biobanks

Introduction

The National Cancer Research Institute's Confederation of Cancer Biobanks (CCB) is a consortium of organisations based in the UK that are involved in the development, management and use of biobank resources for cancer research.

The Confederation aims to promote and disseminate a collective view on best practices for biobanks and to promote transfer of knowledge and experiences between banks. While individual banks retain their full autonomy, the Confederation's vision is to work towards a seamless operation so that sample users experience what appears to be a single virtual biobank for the collection and distribution of biosamples for cancer research.

In January 2009 the CCB held a workshop in London on Ethics and Governance in Cancer Biobanking. Approximately 200 participants attended the meeting to hear presentations and take part in discussions. The day began with an introduction to the CCB Guiding Principles from Dr Brian Clark, followed by a presentation by Dr Alison Parry-Jones highlighting the need for biobanks to obtain generic and enduring consent and some of the challenges that this poses. The second session focused on information governance and the audience heard presentations from Harry Cayton, Chair of the new National Information Governance Board and from Chris Carrigan, Head of the National Cancer Intelligence Network.

Adrian McNeil, Chief Executive of the Human Tissue Authority (HTA) took part in an illuminating question and answer session on the regulation of human tissue banking and was also able to update the participants on developments at the HTA. Next, Dr Martin Yuille gave an illustration of how 'fair' rather than 'open' access has been approached in the UK DNA Banking Network. These presentations were followed by an introduction to the procedures in place for ethical review of research tissue banks from David Neal of the National Research Ethics Service and an overview of the Integrated Research Application System from Dr Janet Messer of the NHS R&D forum.

In the closing session Prof. Graeme Laurie gave an insight into the work of the UK Biobank Ethics and Governance Council and the ways in which it attempts to take an 'ethics plus' approach. Finally, Derek Stewart, Chair of the CCB, presented a powerful argument for greater public engagement in biobanking and the need for biobanks to actively pursue this.

The following pages summarise each of the presentations given at the meeting. Further information on the CCB, including the presentations given at this and previous meetings, is available from the website www.ncri.org.uk/ccb/.



CCB Guiding Principles – a cornerstone for good biobank governance

Based on a presentation by Dr Brian Clark

Chief Executive, onCore UK

Background to biosamples and biobanks

Many organisations are involved in enabling the use of human samples in biomedical research, whether through procurement or acquisition, annotation and quality control, storage, cataloguing or distribution. These organisations use a variety of terms to describe themselves (bank, biobank, resource, repository, collection, registry, archive, library, etc.) and the samples that they collect (tissue, biosamples, biospecimen and disease, body part or sample specific terms). This range of terminology reflects the diverse range of human samples that are used for biomedical research, the different roles that organisations may play and the different types of collection in existence. For example, collections may be:

- 'Private collections' where samples are procured directly or indirectly from a donor by the researcher, who uses the samples immediately or accumulates them for use later.
- 'Study-associated collections' where samples are collected in the course of a particular research project, study or trial.
- Diagnostic pathology (or laboratory medicine) department archives where sample collections are accrued as a consequence of normal healthcare practices.
- Sample resources arising as a by-product of transplantation or transfusion.
- Sample collections that were set up specifically to serve as human biological sample resources / banks.

Despite this variety, the issues associated with sample collections are common to many organisations. Common issues include: consent; maintaining a transparent relationship with donors; problems of 'ownership', e.g. custodianship and access rights; and the financial aspects of a collection, especially around the 'value' of biological assets. Problems may also arise in balancing the requirements of the NHS, universities and funding agencies; from dealing with data, including claims of intellectual property, copyright, and appropriate acknowledgment of contributions; and from changes to personnel, funding, management, or the law.

Guiding principles for biobanks

The NCRI Confederation of Cancer Biobanks (CCB) has published

a set of Guiding Principles, available from the website <http://www.ncri.org.uk/ccb/>. The guiding principles might be applied to the management and operation of a human biosample resource / bank in the ethical and legal environment of 2006 onwards.

These guiding principles are derived from a variety of sources and, in particular, they reflect a composite of the views of several leaders of national not-for-profit human research biobanks from a number of countries ('The Marble Arch Group'). They are in keeping with opinions expressed in other publications and in other fora, both national and international, in recent years and reflect the principles underpinning the formation of the CCB.

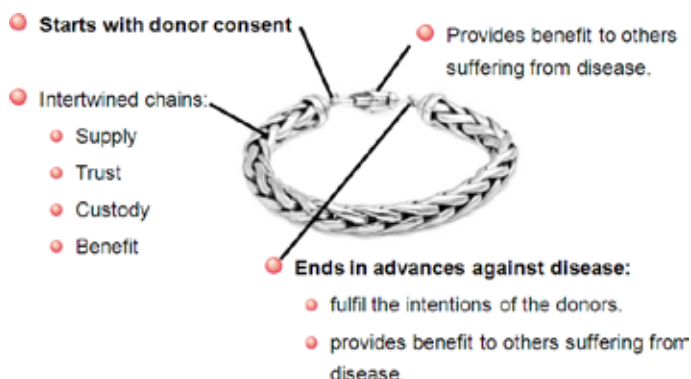
Research biobanks are 'ecosystems' of diverse stakeholders including the public, patients, healthcare workers, scientists, government, funders of science, providers of healthcare services, ethicists, regulators and others. Biobanks play a central role in the multidisciplinary 'chain of supply' that carries samples and data between donor and researcher. Each person involved with this supply chain should adhere to common overall guiding principles to ensure biosample supply in line with the original donors' wishes. There is a responsibility on all involved to maintain the chains of trust, custodianship and benefit along the supply chain for samples from donors to end-user researchers. In addition, such activities should be conducted with consent and under cost-recovery / contribution financial models for the onward provision of samples along the supply chain.

Consent

Although donation with informed consent is a gold standard, work using samples without consent can be acceptable in circumstances where consent is deemed legally and ethically unnecessary. Even where consent is held it means different things in different cultures and jurisdictions; further work is required to find acceptable common principles and practices for gaining consent in various circumstances. Policies for the reciprocal recognition of the consent to donation provided in one culture / jurisdiction are necessary (within UK as well as beyond).

Chain of Trust

Biosample resources should protect public trust and a loss of public trust jeopardises research biobanking and the potential benefits. Those involved in the supply chain have a responsibility



An ethical framework for research biobanks.

to protect that trust. Biobanks should operate a culture of communication, transparency, fairness and accountability to all stakeholders, but particularly donors and the public, to maintain trust. Disrupting the supply chain, or the chain of benefit, or acting possessively, however well intended, risks betraying the trust of the donors.

Chain of Custodianship

By ethical and legal convention there are no ownership rights over parts of the human body *ex vivo*. Anyone in possession acts as a custodian of the sample and has a responsibility to the donor, under the terms of the donor consent, to fulfil their intentions. Custodians should not assume rights of ownership or possession as these will almost inevitably interfere with the purpose of the gift by the donors.

Difficulties arise when changes occur such as change of personnel managing a resource / bank, mergers between parent organisations such as NHS Trusts, policy changes by funding bodies, closure of a study management group, etc. Individuals or organisations acting as custodians should have plans for maintaining continuity of resources in such circumstances – an “ethical preservation order” should exist over resources.

Chain of benefit

Donation is an act of sharing intended to further research into human health and disease for the benefit of others. Furthermore, the collection of samples is often funded in whole or in part by public or charitable funds, levied or gifted to be used for the wide public good. Individuals in receipt of such samples have moral obligations to act within an ethical framework to use these samples or share them with others for use in the best interests of the public.

Any researchers who are capable of conducting studies to derive public benefit are valid end users of samples. This includes researchers in public and charitable sectors or commercial organisations although, in some cases, samples may need to be reserved to prevent depletion of the resource and allow

them to be used in a more significant study at some point in the future. Access to samples should be provided on the basis of the likelihood of the samples being put to a good and beneficial use in as scientifically feasible a time as possible after donation. End-users of samples should only request access to samples from a bank when they are actually required for a funded and approved project.

Samples prior to use in research metaphorically represent latent information / data stores that will be deciphered through the research conducted on the samples. Once this information is derived through research, the principle of benefit suggests that this data should also be available for sharing with others to maintain the chain of benefit in a fashion analogous to the sharing of the samples themselves.

Other requirements on biobanks

Most samples are collected from donors in healthcare settings and in the course of diagnostic or therapeutic interventions in the direct interests of the donors as patients. It is imperative that the interests of the donor are served first, for example by using the samples for diagnostic purposes. However, it is possible to accommodate both the provision of direct healthcare and also to facilitate research biobanking. Sample donation in a healthcare



setting should be a routine and positive act of providing healthcare to patients and providers of healthcare should see research biobanking as an integral activity and one that is not at odds with their mission.

Quality management should be integral to the management of any biosample resource but a commitment to provide a service is also required. Poor service to donors upstream and researchers downstream diminishes the utility of the resource and disrupts the chains of trust and benefit. Samples are best held in specifically designated facilities and premises to maintain quality and security and ensure that the integrity of the chains of trust, benefit and supply are best served.

The collection, storage and distribution of human biological samples for research should be driven by real scientific needs. The creation of large 'stockpiles' of samples for no defined use does have scientific merit, but should not be the operating standard for most banks; it is important that samples are distributed and used, not hoarded. Additionally, those who manage biosample resources should not be passive participants in the supply chain, but should work to lead opinion and actively promote the merits of research using the banked resources.

Human biosamples cannot be owned per se and as such cannot be assigned a monetary 'value'. The processes involved in creating, maintaining and providing the service of biosample resources do cost money and it is legitimate for those operating biosample resources to levy fees to cover some costs when supplying samples to others. Profit may even be gained from services additional to the supply of samples; however, 'price tags' should not commoditise samples on a market basis.

Summary

The field of human research biosample banking needs to 'mature' rapidly in terms of ethics, governance, policy and practices. This is a multidisciplinary endeavour and many opportunities exist for the spirit, purpose and benefit of the activity to be lost along the chain.

Commonly agreed guiding principles have been proposed that are based on the need to maintain interlinked chains of trust, benefit and custody along the supply chain, respecting the need for consent and without commoditising the human body. Principles of this sort are natural accompaniments of an informed, proportionate regulatory environment.

Questions and answers

Should applicants to a biobank request access before or after securing funding?

NCRI, together with onCore UK and the National Cancer Intelligence Network (NCIN) have consulted recently on 'Access to samples and data for cancer research'. The results of this consultation (a summary of which is available from the [NCRI website](#)) suggest a pragmatic approach allowing both options. We will be releasing a template document to help those who must address such issues when creating their access policies later in the year. [NB The template has also now been released and is available from the same address.]

Should patients receive information about the research carried out on their samples?

Individual results should not generally be released back to patients. However, it is important that the general results of research using patients' samples are made available to donors, especially where this affects care in the future.

Generic and enduring consent – the essential elements

Based on a presentation by Dr Alison Parry-Jones
Manager, Wales Cancer Bank

The meaning of consent

The origin of the term consent is in the Latin word 'consentire', deriving from 'con' meaning 'with' or 'together with' and 'sentire' meaning 'to think and feel'. Thus, consent is 'to think and feel together'; or to take two dictionary definitions:

- To agree in opinion or sentiment; to be of the same mind; to accord; to concur.
- Capable, deliberate, and voluntary assent or agreement to, or concurrence in, some act or purpose proposed by another, implying physical and mental power and free action.

In research and tissue banking we talk about 'informed consent', i.e. consent given after being completely advised of the nature, benefits, costs, and risks of a suggested course of action. However, the scale and scope of consent can vary from 'specific consent', granted for a defined, strictly specified and time limited piece of work; through 'generic consent' (often referred to as 'broad' consent in the USA) where the type or purpose of research defined in general terms; to 'blanket consent' where no restrictions are placed on the type or purpose of research.

All this leads to the question, which of these can truly be informed consent when the patient does not know how samples will be used at the time of their donation?

The duration of consent can also vary and tissue banks will generally seek 'enduring consent'. Here, no time limit is placed on the consent to use samples and tissue banks do not have to re-contact patients in the future. This approach enables research in the future using as yet unspecified or conceptualised hypotheses or techniques. However, it may create administrative difficulties if consent is withdrawn after samples have been released to researchers.

Existing collections

Where collections have been created for a particular purpose and specific consent obtained for this, is it possible to use the collection again for a different purpose and how should this be approached? Should further consent be sought and, if so, how should this be obtained, especially if patients may be difficult to contact or simply do not respond?

This problem was faced by a German collection, who took the



approach that silence indicted consent. This is a long standing legal convention described by '*Qui tacet consentire videtur.*' - He who is silent (about a thing) appears to give consent (to that thing). Is it the right approach for a tissue bank?

Do tissue banks fit?

A further question is whether tissue banks are trying to fit into consent definitions and parameters designed for others. Historically, consent is used where an intervention is being suggested, for example in surgery or clinical trials. Tissue banks have changed the possibilities for sample research and may require different approaches to consent.

Standardisation

Should there be greater standardisation of consent for research tissue banks in the UK and internationally? This is likely to be a challenge internationally: certain countries run 'opt-out' rather than 'opt-in' systems (for example the Netherlands); the requirements for ethical review vary and the material and purpose of collection may affect the level of consent required. When working across national borders it is necessary to respect law or practice in those countries where samples are collected.

Consent forms

The design of consent forms is crucial. Taking the Wales Cancer bank form as an example, this asks for all or nothing consent to avoid the administrative complexities caused by allowing donors

to opt in or out of certain parts of the consent. It provides for broad and enduring consent and, most importantly, it fits onto a single page.

Can generic and enduring consent work?

Requesting broad and enduring consent has worked for the Wales Cancer Bank for over four years. During this period 99.1% patients (2650) have agreed to consent and no patients have (yet) withdrawn consent. To achieve this patient information sheets need to be clear and consent recorded on clinical databases.

Why ask?

One commonly voiced opinion is that excess tissue should automatically be used for research, without specific consent. Patients often assume this happens, in some case seeing it as a 'pay off' for free NHS treatment. The Human Tissue Authority describes consent as the 'Gold standard' but this does this need to be written or can oral (or even implied) consent be recorded in a patient's notes?

One option is for surgical consent forms to include an option to consent for the reuse of excess tissue. As well as the problem of how informed this would be, a further question arises about who should take such consent. Research nurses might be ideal but their time is valuable. Alternatively, could ward staff, research fellows or clinicians / surgeons take consent? What training should be required to do this – is good clinical practice enough or should there be a recognised tissue bank training course to address the issues specific to tissue banking including consenting?

Conclusion

Generic (broad) and enduring consent for future research is valid ethically and useful for tissue banks, but safeguards are required. Personal information related to research must be handled safely; donors of biological samples must be granted the right to withdraw consent; and changes to the legal or ethical authority or status of a tissue bank must be approved by an ethics committee.

CONSENT FORM FOR PATIENT

Key
White(WCB), Green(Surgeons notes), Blue(Pathology),
Yellow(Patient), Pink(Patient Notes)

Patient Identification Number for this study:
Title of Project:Wales Cancer Bank
Name of Principal Researcher:Professor Malcolm Mason
Contact telephone number:029 2031 6964

To confirm agreement with each of the statements below, please initial in the box

- I confirm that I have read, understood and have had time to consider the information sheet dated (version number 3) for the above study and have had the opportunity to ask questions.
- I understand that my participation is voluntary and will not affect my medical treatment or legal rights in any way.
- I understand that sections of my medical notes may be looked at by responsible individuals from the Wales Cancer Bank where it is relevant to this study. I give permission for these individuals to have access to my records.
- I understand and agree that parts of my medical information may be passed to other organisations involved in the research on the understanding that my personal patient confidentiality will be maintained.
- I understand, and agree to, data relating to my donated samples being stored electronically.
- I agree that I will ask my partner/friend if they would be willing to participate in this study as a control.
- I confirm agreement to take part in the above study.

Name of patient.....Date.....Signature.....
Name of person taking consent.....Date.....Signature.....
OR
Researcher.....Date.....Signature.....

www.walescancerbank.com
The Wales Cancer Bank is funded by the Welsh Assembly Government and Cancer Research Wales

Chairman/Cadeirydd
Professor Malcolm Mason
Director/Kyfaerwyddwr
Professor Gerry Thomas
Manager/Rheolwr
Dr Alison Parry-Jones

**Wales Cancer Bank
Banc Cancer Cymru**
Tel: 029 20529 226

Version 3 - 03/09/08

Wales Cancer Bank consent form

Information governance requirements to protect donor confidentiality

Based on a presentation by Harry Cayton OBE

Chair, National Information Governance Board for Health and Social Care

Creation of the NIGB

The National Information Governance Board for Health and Social Care (NIGB) was formally established by the Health and Social Care Act 2008, although it had existed in 'shadow' form prior to this. Its purpose is to consolidate information governance functions for health and social care and to provide a single authoritative source of information.

The NIGB's objectives include providing mechanisms for the secure and ethical sharing of data; establishing patient confidence in the security and confidentiality of electronic patient records to ensure that these can deliver their full potential and providing advice on information governance (whether or not this is requested by the organisation receiving the advice). The NIGB can also ask organisations what they have done with the advice given and publish the organisation's response in the NIGB annual report.

The Board itself is large with over 20 appointed members and representatives of key organisations. The Board frequently splits

into subgroups and working groups to carry out its duties. It is open about its decision making and the minutes and agendas of meetings are published on the NIGB website (www.nigb.nhs.uk).

Overall the NIGB aims to strike the appropriate balance between individual rights and the greater public good that can be achieved by linking and using the information now available.

Ethics and Confidentiality Committee

Since 1st January 2009, the Ethics and Confidentiality Committee (ECC) of the NIGB has taken on the role of the Patient Information Advisory Group (PIAG). The ECC is responsible for the administration of applications under Section 251 of the NHS Act 2006 which allows the common law duty of confidentiality to be set aside in specific circumstances (for example where it is not practical to obtain patient consent for a research study).

The ECC is also working with Dr Mark Walport (Chief Executive of the Wellcome Trust) on data confidentiality and in particular the challenging issue of 'consent for consent', where it is necessary to know about a patient in order to contact them to invite them to be involved with research.

Future Workplans

The NIGB is not only interested in research, although this has a high profile. Other issues to be addressed are: children's summary care records, in particular when a child can prevent their parents seeing the child's record; access controls for locum staff; and the concept of "honest brokers" and "safe havens" for processing patient information.



Linkage of clinical information to annotate samples

Based on a presentation by Chris Carrigan

Head of the National Cancer Intelligence Network

The National Cancer Intelligence Network

The National Cancer Intelligence Network (NCIN) exists to deliver five core objectives:

1. Promoting efficient and effective data collection throughout the cancer journey
2. Providing a common national repository for cancer datasets
3. Producing expert analyses, based on robust methodologies, to monitor patterns of cancer care
4. Exploiting information to drive improvements in standards of cancer care and clinical outcomes
5. Enabling use of cancer information to support audit and research programmes

These five objectives underpin the challenge set by Prof. Mike Richards (National Cancer Director for England) in 2007 that “Quite simply, we want to have the best cancer information service in the world by 2012”.

The NCIN has started from a strong base as the UK's regional cancer registries have ensured complete population coverage for the last 30 years. This involves collecting 276,000 new diagnoses annually and has produced a national database of more than 10m patients. No other such extensive national databases exist about cancer (internationally) or other diseases (nationally).

Strict information governance requirements apply to the data held by cancer registries. This is collected with the support of regulations made under Section 251 of the NHS Act 2006 (originally Section 60 of the Health and Social Care Act 2001) and the cancer registries provide an annual report to the Ethics and Confidentiality Committee of the National Information Governance Board for Health and Social Care (NIGB). Mechanisms also exist for patients to opt-out of the system and have their data deleted if they so choose. Strict conditions for data release are in place, especially for the release of identifiable or potentially identifiable information. Finally staff contracts strictly enforce confidentiality.

More efficient national processing

Classically cancer registration data have been used for analyses of incidence, mortality and survival, and for comparisons of trends in these through time. The collection and analysis of data has been resource hungry and slow. In the ‘New World’ NHS trusts require timely data to manage and improve their services and these data may come from multiple linked sources. Other bodies (such as the NHS Information Centre and the Research Capability Programme) also require cancer registration data. The challenge is to increase the timeliness of the information from the current 18 months to 6 weeks.

As a first step towards more effective national usage of data, the English cancer registries have linked cancer registration records to inpatient Hospital Episodes Statistics (HES) data supplied by the NHS Information Centre. This contains more than 40m records, linking activity to diagnosis and outcomes and allowing previously unavailable data items (e.g. ethnicity) to be derived.

Additional work is now needed to improve the timeliness of this retrospective data and move to a system of prospective data collection. NCIN will also be working to extend the range of data sources to include (among others) cancer waiting time data, screening and radiotherapy data, and primary care information (General Practice Research Database, GP Extraction Service).

Testing sample linkages

A pilot project is underway to link patient information held by the South West Public Health Observatory (held under Section 251) to the samples held by onCore UK (who have patient consent to access medical records). This will establish the required governance models, examine data structures and completeness, and test options for linkage. Provided the timeliness of cancer registration is sufficient for onCore UK's requirements this could serve as a model for linkage to a national repository.

The real limiting factors

The technical limitations to data collection and linkage are gone. Instead, the governance and control of these processes is key. In particular it must be clear who will handle requests for access, who will authorise them and what additional controls are required. A 'federated' approach, where many sources of information are linked may be more appropriate than a single large database. This requires a trusted 'intelligent exchange' mechanism between, for example, Connecting for Health's Secondary Usage Service (provided by BT), the NHS Information Centre and the NCRI Informatics ONIX platform. Above all clear rules for access (an access policy) are needed.

Summary

The future potential of data linkages is massive. These will enable improvements in primary, secondary and end of life care. They will support research ranging from genetics and informatics through to clinical trials and their value will extend beyond cancer. There is scope to transform the 'information landscape' using new linked datasets as research tools and to monitor clinical care and outcomes properly for service improvement and, above all, for patient benefit.



Regulation of Human Research Biobanks – a Q&A session

Based on a presentation by Adrian McNeil

Chief Executive, Human Tissue Authority

The Human Tissue Authority (HTA) regulates organisations that store and use human tissue under the Human Tissue Act and European legislation. The HTA interprets this legislation pragmatically and believes it has improved the quality of research governance without restricting the types of research that can be undertaken.

HTA update

- The HTA has published summary inspection reports, including one which contains information gathered from ten visits to sites with research licences. These demonstrated good compliance, although there was room for improvement in compliance with the HTA's licensing standards on governance and quality systems standards.
- A new code of practice on research, incorporating consultation feedback from two workshops and 34 written comments, were approved by Parliament in the summer and will be published in September 2009.
- In addition to the European Union Tissue and Cells Directives, which the HTA enforces through domestic legislation, an EU Directive on Organ Donation is being drafted.
- The HTA is working with the Medicines and Healthcare products Regulatory Agency (MHRA) to ensure clarity between our responsibilities and theirs for regulating Advanced Therapy Medicinal Products (ATMPs).

Questions and answers

Q. What should be done with samples already collected if a site fails to obtain a licence?

A. This hasn't yet happened with a research site. The samples should not be destroyed if this can be avoided but should instead be stored on other premises licensed by the HTA if the samples are being stored for research (which is a scheduled purpose).

Q. Will the premises that have had their HTA licences revoked be revealed along with the reasons for the revocation?

A. The HTA is in discussions about this and will try to be as open as possible, subject to the provisions of the Data Protection Act and other relevant legislation.

Q. Is an HTA licence required for the storage and collection of DNA?

A. Provided extraction of the DNA occurs within hours or days, and certainly no longer than a week, after the blood or tissue is taken then no storage licence is required, as stated in the HTA's new Research Code of Practice. The removal of relevant material from the deceased for research "in connection with disorders, or the functioning, of the human body" is an activity that requires a licence from the HTA.

Q. How much flexibility exists in the seven days allowed to transport tissue?

A. Providing that human tissue being stored pending transfer elsewhere is held for a matter of hours or days but for no longer than a week, an HTA storage licence is not required.

Q. How can the HTA and the Human Fertilisation and Embryology Authority work in a more 'joined up' way?

A. We work together where appropriate as we are both competent authorities for implementing the European Tissue and Cells Directives and the HFEA attend meetings of the Tissue and Cells Working Group convened by the HTA.

Q. Are ten inspections of research sites enough?

A. The HTA adopts a proportionate approach to inspections. From the outset it appeared that the research sector would be lower risk and so fewer licensed establishments were, and are planned to be, inspected. Each establishment sends in a compliance report which is used to weight risk (this process is called a "Phase 1" inspection). The risk assessment is used to determine if and when an establishment should be visited. The HTA will, in addition, also carry out random, unannounced inspections.

Follow up from questioner. The Phase 1 inspections should be publicised as it would reassure patients to know that these are occurring.

A. The summary inspection report for the research sector contains information from both Phase 1 and Phase 2 inspections.

An example of fair access in principle and practice

Based on a presentation by Dr Martin Yuille

UK DNA Banking Network

Access to human biomedical resources

'Open access' to human biomedical resources is not an option. Its denial of restrictions on use is incompatible with privacy of data and the non-renewable nature of samples. Instead, 'Fair access' seeks to respect interests of all stakeholders: subject; study-funded collector; investigator; funder and employer. 'Science-driven access' is fair access plus: permitting access by a wider range of collectors.

UDBN construction

In the late 1990s the government allocated funds for Medical Research Council (MRC) to exploit the imminent human genome sequence. In 2000 MRC identified genetic epidemiology as key and issued a call for proposals for large genetic collections. In 2002, MRC funded the UK DNA Banking Network (UDBN) infrastructure, with a mission to store and distribute these collections.

The UDBN consists of an 'aggregation network' – in which principal investigators, each focussed on a single disease type, collect DNA samples – and the underlying research infrastructure. Focusing each principal investigator on a single disease type ensures that samples are collected and processed in a consistent way.

Principles of access

In 2000, MRC told collectors "All DNA collections in the Initiative are funded on the understanding that they are to be managed as shared national resources, and must be made readily available to collaborators. MRC (and the joint funder, if appropriate) retain(s) formal responsibility for the custodianship of sample collections funded under this initiative, but day to day responsibility for custodianship and management of the sample collection is delegated to the grant holders and the host institution".

In 2001, MRC told bankers "Council now wishes to establish a network of centres with a remit to house large DNA collections. The network will be required to make these resources available to the UK scientific community and manage the associated databases".

Evolution of UDBN access arrangements

The first UDBN Steering Committee in March 2004 noted that each of the collections envisaged establishing 'guardianship' committees (and some collections had already done so) to assess applications for access to a particular resource. It would be important to ensure that procedures were standardised across collections, and that equitable standards were being reached in terms of the decisions made. The Steering Committee could act as a 'Board of Appeal' should an applicant file a grievance about a decision made by a guardianship committee.

The second Steering Committee decided that the independent chair of the collection guardianship committees could be drawn from individuals involved in other collections. Funds for the DNA collectors meetings could be used to support the guardianship committees and working groups

The third Steering Committee in April 2005 decided that maintaining 13 committees was unlikely to represent an efficient, effective and transparent mechanism for access via the bank, or a good use of people's time. A generic access committee model was proposed which included an independent chair and members, collection representatives and the bank.

Finally in October 2005 the fourth Steering Committee decided on a model based on the bank brokering a 'collaboration' between a third-party user and the originator of the collection. Where a collaboration could not be achieved then the Committee would be asked to help resolve this. The Committee suggested that one possible reward for sharing would be replenishment of the collection. The more an originator is happy to share/ collaborate, the higher up the priority list the collection goes for replenishment.

The current access arrangements require users to register with the UDBN 'My LabSpace' system (the online access form takes just five minutes to complete) and review the resources available. Based on the information available researchers produce a wish list, write their proposal and request a collaboration with the appropriate partner. The proposal is submitted to the UDBN Technical Access Committee and, if it is accepted, the wish list becomes a 'pick list' that will be held for one year while peer reviewed funding and ethics approval are obtained. Once these are in place the DNA is released.

The principle of 'fair access'

Article 18 of the UNESCO International Declaration on Human Genetic Data 2003 covers Circulation and International Cooperation. It says that "States should regulate the cross-border flow of data and samples so as to foster international... cooperation and ensure fair access". The UDBN's principles attempt to ensure that access is fair to the subject, fair to the collector, fair to the investigator and fair to the funder.

Fair to the subject

The privacy and confidentiality of subjects are maintained through alphanumeric identifiers with the key held by principal investigators. Access to the collections is restricted to *bona fide* investigators and UDBN, not the collector, defines who is bona fide. To ensure that uses of samples and data are ethical all deposits and withdrawals must be backed with evidence of research ethics committee approval and national methods for consent management are in place to permit effective withdrawal of consent. To support public engagement UDBN funds public meetings and patient groups and promotes epidemiology that requires 'citizen scientists'.

Fair to the collector

The UDBN provides collectors with the right to sole access when a collection proposal includes an investigative proposal. All UDBN collections have been funded with investigational goals (e.g. candidate gene studies).

Fair to the investigator

UDBN tracks all website communications between collectors and collaborator groups to facilitate collaboration management and

ensure transparency. Researchers are able to access usable published and unpublished data, which is linked by UDBN to sample data, phenotype data and genotype data. To conserve native DNA, this is only used where required, otherwise whole genome amplified DNA may be supplied. UDBN advocates that it commission genotyping because this will help ensure consistent high quality experimental data.

Fair to funder

The UDBN keeps a log of all aliquot movements to allow long term tracking of samples and data and appropriate intellectual property management.

Science-driven access

What exploration rights should collectors retain:

- when their intended investigation is overtaken by events?
- when they are not funded for investigations?
- when they are an institution, not a person?

All of these circumstances have arisen during UDBN's development. For example the UDBN's MRC collectors envisaged candidate gene investigations but opted for genome wide association studies; creation of a resource without any experimental investigation is a recognised funding topic (e.g. UK Biobank); and hospital-based accrual of research samples (e.g. BioBank Japan) does occur.

Where creation of a national resource is funded, those who have made an intellectual and/or operational contribution to its creation and management should be in the best position to get authorship of a paper describing the resource. Failure to get published implies the resource is not as good as suggested. Similarly, where a resource can be scientifically exploited the collectors should be well placed to design the best means of exploiting the resource and thus write the best proposal. However, proposals are likely to be improved through collaboration to combine external insights with the collector's knowledge of the collection.

In conclusion, peer review is sufficient to ensure optimal exploitation of a national resource. A corollary may be that there should be no exploitation without peer review and a rider on this is that peer review should assess the impact of a proposal on sustainability of a national resource. Good management of a national resource should include promotion of collaboration – does the culture of competition need replacing by a culture of collaboration?

Dr Yuille was speaking in his personal capacity.

Research infrastructure

- DNA
- Cells and lines
- Website

Aggregation network

- Collector PIs

Alzheimer's Disease;
AML;
Asthma and Eczema;
Breast Cancer;
Colorectal cancer;
Coronary artery disease;
Glomerulonephritis;
Hypertension;
Macular Degeneration;
Malaria;
Multiple Sclerosis;
Parkinson's Disease;
Type 2 Diabetes;
Unipolar Depression



UDBN construction

Ethical review of biobanks - policy and procedure

Based on a presentation by David Neal

Head of Policy, National Research Ethics Service

Introduction

The National Research Ethics Service (NRES) policy on review of research tissue banks (RTBs) has been developed through consultations with stakeholders including the Human Tissue Authority (HTA), onCore UK, the Medical Research Council (MRC), UK Biobank and others. Pilot applications by Wales Cancer Bank and UK Human Tissue Bank were processed in 2006 and the application process was introduced in October 2006.

Terminology varies but NRES has adopted RTB as a generic term. NRES defines a RTB as:

“A collection of human tissue or other human biological material, which is stored for potential research use beyond the life of a specific project with ethical approval or for which ethical approval is pending”

The ethical review scheme includes banks holding non-HTA relevant material, e.g. DNA, plasma, serum and may also include diagnostic archives with plans to support research.

Ethical review is voluntary and there are no formal requirements for ethical review of research tissue banks under either the Human Tissue Act or NHS research governance. However, many banks welcome ethical advice from Research Ethics Councils (RECs) on their arrangements and ethical approval provides assurance to donors, funders, “collection centres” and regulatory bodies. It also facilitates research by enabling generic ethical approval for research projects using stored samples and data.

NRES aims that the ethical review of RTBs should be complementary to HTA licensing rather than duplicate it.

Main issues for ethical review

1. Prospective research purposes and uses of tissue/data
2. Arrangements for sample collection
3. Information sheets and consent forms – terms of generic consent
4. Access policy
5. Information governance
6. Donor involvement and feedback
7. Data sharing and publication of research findings

Applications for ethical review

A specific application form for RTBs is available within the Integrated Research Application System (IRAS) (www.myresearchproject.org.uk) - select “research tissue bank” on filter page. IRAS should be used for all new applications. The previous NRES application form system (www.nresform.org.uk) is no longer available.

Review procedures

Booking via the NRES Central Allocation System with a “flagged REC” is recommended. Reviews will follow the normal procedures for ethical review, based on a 60 day timeline with one set of further questions only. “Site-specific assessments” (SSA) by local RECs are not required. Approvals last for five years and are renewable at that time.

Approval conditions may be issued as part of the ethical opinion and the REC may vary the standard conditions issued by NRES. All RTBs must obtain an HTA storage licence if legally required. No licensing requirement arises under the Human Tissue Act where the bank is established in Scotland or holds only non-HTA relevant material.

To allow for generic approval for future projects, RECs will require that arrangements are in place to ensure scientific critique of projects. The research must be within terms of generic consent and donors must not be identifiable to the end user. RECs will also need to see model supply agreements with end users and



the RTB must supply an annual report to REC listing projects receiving tissue.

The RTB must notify the REC of any substantial amendments, e.g. new classes of tissue or research purposes; further procedures involving donors; changes to consent arrangements; or changes in custodianship. Any serious adverse events must also be reported.

Once ethical approval has been granted, the REC continues to play a role and will give further ethical advice at any time if requested. The REC will also: review any substantial amendments; note annual reports and request further information or assurance if appropriate; and will review the RTBs application for renewal after five years.

Impact on researchers

Researchers have two routes to ethical approval. Research studies may be ethically approved: either by making a project-specific application or by sourcing anonymised tissue from a RTB with generic approval. Both forms of ethical approval will be valid

for the purposes of the Human Tissue Act and NHS research governance.

Project-based applications should still be made where:

- a specific research project involves additional interventions or procedures involving participants, including the collection of new samples or data
- identifiable data is to be released with the banked samples
- the bank providing the samples and data has not sought ethical approval

Summary

NRES has introduced special arrangements for ethical review of RTBs on a voluntary basis. Review of RTBs aims to add value to licensing without duplicating it, and to facilitate access to samples for valuable research. The REC may give generic approval for future research subject to conditions without further review of individual projects. Researchers can obtain ethical approval via an approved bank or by project-specific applications.



Tissue banks and R&D review: IRAS, CSP, TCCs and other acronyms

Based on a presentation by Dr Janet Messer

Deputy Director, NHS R&D Forum

The Integrated Research Application System

The aim of the Integrated Research Application System (IRAS) (www.myresearchproject.org.uk) is to provide a web-based system that will capture all the information required to apply for relevant permissions and approvals for health research in the UK. Researchers enter information about their project once and use filters to ensure that the data collected is appropriate to the type of study, approvals and permissions required.

IRAS is the result of a wide collaboration between regulators, funders and the NHS across the UK. The system builds on familiar features of the National Research Ethics Service (NRES) online form, which has continued to evolve since the creation of a standard R&D application form alongside the Central Office for Research Ethics Committees (COREC) online form in 2005.

Applications for the following bodies are included:

- Administration of Radioactive Substances Advisory Committee (ARSAC)
- Gene Therapy Advisory Committee (GTAC)
- Medicines and Healthcare products Regulatory Agency (MHRA) – Medicines and Devices
- Ministry of Justice – England and Wales
- NHS / Health and Social Care (HSC) research offices
- NRES / NHS / HSC Research Ethics Committees
- Patient Information Advisory Group (PIAG) (now National Information Governance Board) – England and Wales

Development & Consultation

IRAS was launched in January 2008 with consultation-in-use to July 2008. Version upgrades have provided import/export between EudraCT and IRAS; an entry point for the National Institute for Health Research Coordinated System for gaining NHS Permission (NIHR CSP); electronic authorisations and improvements in response to feedback. The existing (parallel) application systems will be withdrawn in due course and feedback continues to be encouraged from users on the content, design and practical operation of IRAS to iras@nres.npsa.nhs.uk.

Use of IRAS will only become mandatory once user acceptance

is high and any issues resolved. Take-up is encouraging with over 50% of Research Ethics Committee (REC) applications now made using IRAS. Timing for move to mandatory use of IRAS for new applications will be decided by the IRAS Management Board – no date has been published. Transitional arrangements will be made for existing applications in progress.

Using IRAS

Setting up a user account

The URL for IRAS is www.myresearchproject.org.uk. Users who have a NRES (COREC) account can use their current log-in and password. Those without a NRES account can easily create a new account by following the instructions on help page.

IRAS – project filter

The project filter asks a short list of questions about the project. These are dynamic and subsequent filter questions may alter depending on responses. The project filter generates the project dataset questions and application forms required for the study type. Answer all the questions carefully and refer to question specific guidance as necessary.

How does IRAS work?

IRAS consists of a single integrated dataset. This is the set of questions and answers for all the questions in all the application forms. The set of questions that need to be answered by a researcher will depend on the type of study and the types of applications required. The application forms for each reviewing body are generated from the single dataset. The single dataset and application forms cross-populate (i.e. information about the project in response to a question is entered only once).

Printing and submitting application forms

Each review body has different submission requirements. Select the appropriate form on the navigation page and then select the submission tab for specific guidance. To print a hard copy for submitting, follow the instructions on the submission tab and create a submission code.

Application forms in IRAS cannot be locked, instead IRAS allocates a “submission code” once the applicant proceeds to final

submission. This code will appear on the foot of the application form on print-out and an audit trail is created of the dataset at the time at which a submission code is generated. It is the responsibility of applicants to keep their IRAS project dataset up to date. When applicants make changes to the dataset following a submission, they will be prompted to consider whether other review bodies need to be notified of the change.

Electronic authorisations

A new functionality from December 2008 allows electronic authorisation in IRAS as alternative to ink signatures. Authorisation operates by secure internet transfer, with audit trail confirming what has been authorised, when and by whom. This can be used for investigator declarations, sponsor declaration, academic supervisor, and radiation experts. Some ink signatures are still required, in particular the Chief Investigator (CI) declaration on REC application for Clinical Trials using an Investigational Medicinal Product (CTIMPs).

Research tissue bank applications

A specific application exists for ethical review of research tissue banks (RTB). Applications for ethical review of RTBs are not mandatory but are accepted for review on a voluntary basis. There is no R&D form for RTBs as NHS R&D management is expected to be involved in establishing the bank and licensing with HTA. A copy of the REC form should be provided to R&D for information if the tissue bank is within the NHS.

Tissue Collection Centres

Organisations supplying samples to a research tissue bank are not research sites but Tissue Collection Centres (TCC). Details of each TCC should be entered in Part C of the REC application and a copy of the full application with the accompanying documents (see submission checklist) submitted to the R&D office for each TCC. There is no facility to create SSI Forms, as these are not necessary. If additional collection centres agree to take part following initial approval of the bank, these should be added to Part C and submitted to the R&D office at the new collection centre. Addition of new centres is not a substantial amendment and there is no need to notify the REC, unless there are also significant changes to the arrangements for collection e.g. new classes of donor, or revisions to information sheets and consent forms.

TCCs are not responsible for the research conducted by the RTB. The role of R&D in TCC review is to agree information governance and material transfer arrangements – only needs copy of REC Form. Custodianship and accountability for research is handed to RTB. TCCs only need R&D Form and SSI Form if project-specific application that involves further contact with NHS patients

Projects from REC-approved RTBs

Applicants may seek generic ethical approval for future projects undertaken using tissue from the RTB, provided the research is within the terms of the approval conditions issued by the REC. Future projects exempted from ethical review still require NHS R&D permission, where the research will be taking place in or through an NHS organisation. An R&D application and SSI Forms can be completed for such applications, without the need to create a REC application.

NIHR CSP

The NIHR CSP is a new system designed to support the application and approvals process for NHS permissions for NIHR Clinical Research Network Portfolio studies. Initially it is available only to studies eligible for the NIHR Clinical Research Network Portfolio (either those automatically eligible or actively adopted, including commercially sponsored studies). CSP may be accessed via IRAS and applicants should select the lead R&D office in England and choose to apply through CSP. They will then complete and submit a Portfolio Adoption Form (PAF) which will be used to assess eligibility for the NIHR portfolio.

Post-meeting note:

The NRES online form was closed to new applications from 1 April 2009. From 1 September 2009 all REC and R&D applications will need to be submitted via IRAS. IRAS will include arrangements for submitting amendments and setting up new sites for studies that used the NRES online form system.

Governance models and benefit sharing. The UK Biobank Ethics & Governance Council: An exercise in added value?

Based on a presentation by Professor Graeme Laurie

University of Edinburgh; Chair, UK Biobank EGC

Introduction to UK Biobank

The purpose of UK Biobank is: 'to provide a resource for research with the aim of improving the prevention, diagnosis and treatment of illness and promoting health throughout society for public benefit'. The resource is expected to contain health and lifestyle data and biological samples from 500,000 voluntary participants from the UK aged 40-69. Participation involves:

- providing information about health, lifestyle, memory, work and family history
- undergoing some physical measurements (including blood pressure, pulse rate, height and weight)
- providing biological samples (including blood and urine)
- allowing UK Biobank to access information from individual NHS medical records
- granting consent for researchers to access data and samples for uses that meet the purposes of the project

UK Biobank and ethics

Two notable governance features of UK Biobank are its Ethics and Governance Framework (EGF) and Ethics and Governance Council (EGC).

The EGF establishes that consent will be sought 'to participate in UK Biobank'. This is based on an explanation and understanding of a number of features of participation (such as the kinds of information and samples that will be collected at enrolment, the possibility of being re-contacted in future by UK Biobank and a broad description of potential research uses of data). The framework affirms the right to withdraw at any time and makes a commitment to protect the confidentiality of both samples and data. It confirms UK Biobank's role as steward of the resource and legal owner of the database and the sample collection. It also sets out the principles which govern access to the resource by researchers and the broad benefit-sharing that will be required (including the obligatory publication of findings and accessible archiving of data and findings for future use).

The independent EGC monitors UK Biobank's conformance with the EGF. It also advises the project on revisions to the Framework and on the interests of the participants and public in relation to

the project. Members of the EGC are appointed by the Medical Research Council and the Wellcome Trust following the Nolan Principles of Standards in Public Life.

In principle: Why is there an independent council?

The activities of UK Biobank are subject to a variety of legislation (e.g. Human Tissue Act 2004, Mental Capacity Act 2005, Data Protection Act 1998) and regulatory controls (Human Tissue Authority, Information Commissioner's Office; Charity Commission, Companies House), as well as other governance mechanisms (research ethics committees, NHS as data controller) and research good practice (e.g. MRC, professional bodies etc). However, a critique of research governance and regulation for biobanks and genetic databases¹ found undue complexity despite the overall governance framework remaining incomplete. Governance was seen as over-dependent on self-regulation or 'soft' options and suffering from a legitimacy deficit due to a lack of transparency, lack of accountability and lack of consistency.

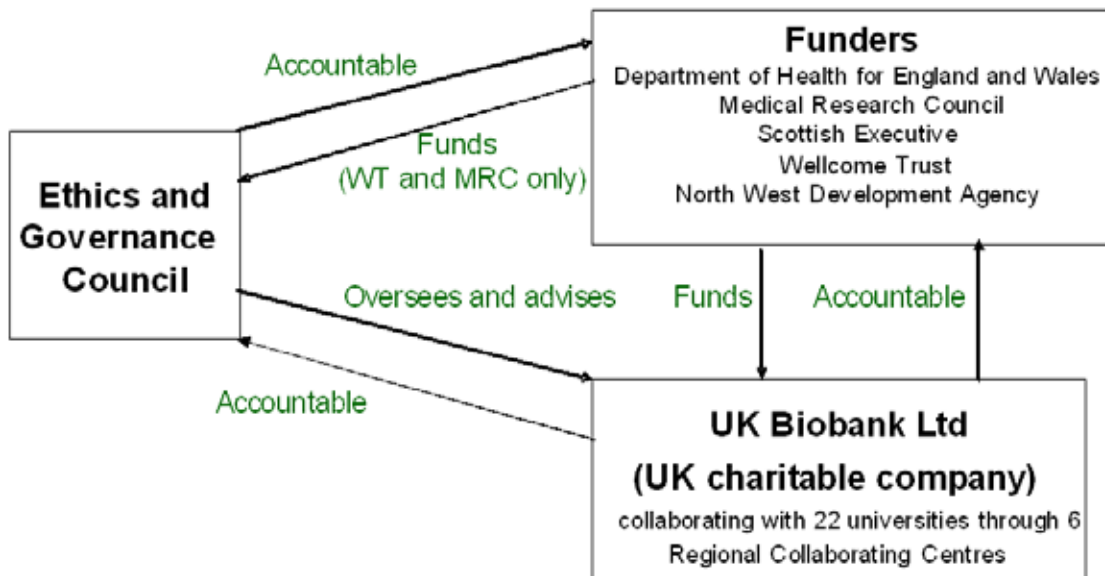
In addition to the limitations in the remit of existing mechanisms, (e.g. monitoring research was not in REC remit), an Ethics and Governance Council was considered necessary due to the breadth of the project's purpose (broad consent) and the long term nature of the endeavour. Public engagement exercises showed support for the idea, which as a trusted third party can act as an additional safeguard and a foundation of trust.

In practice: The EGC and its work

The EGC was established in November 2004 as a multi-disciplinary group that draws together a wide range of expertise in law, ethics, biomedical science, social science, policy and consumer issues. The council has 12 members and holds 4 meetings a year, at least one of which is public.

In advising, reviewing and reporting on UK Biobank's activities, the EGC will serve as a "mirror" for UK Biobank, providing critical and constructive advice. The EGC has not been established

1 Kaye J. and Gibbons S. (2008) Mapping the Regulatory Space for Genetic Databases and Biobanks in England and Wales *Medical Law International*, 9(2):111-130.



Organisation of UK Biobank

to assume responsibility for the ethical management of the resource, to speak on behalf of UK Biobank (instead the Council speaks about UK Biobank) or own and develop the EGF and associated policies.

The focus of the EGC’s remit has changed over time to reflect the changes in the UK Biobank project. This now includes an advisory role regarding the EGF and associated policies/procedures, monitoring of complaints and enquiries and a foresight role looking ahead at, for example, access procedures.

The EGC’s advisory role

Privacy concerns: withdrawal from UK Biobank

The original EGF and information leaflet contained the following statement for participants withdrawing from the study and requesting no further use of their samples or information:

“No further use”: In addition to no longer contacting the participant or obtaining further information, UK Biobank **will destroy all of their health-related information** and samples collected previously (although the participant would be told that it may not be possible to trace and destroy all distributed anonymised sample remnants)... **[emphasis added]**

Although fundamental guarantee to participants that there would be no further use of data and samples was never in question, it proved impossible to destroy all information about participants; some must be retained for audit purposes. On the advice of the EGC, the EGF and information leaflet have been revised with the following text and new pages added to the UK Biobank and EGC websites:

“No further use”: This means that, in addition to no longer contacting you or obtaining further information about you, *any information and samples collected previously would no longer be available to researchers*. UK Biobank would destroy your samples (although it may not be possible to trace all distributed sample remnants) and *would only hold your information for archival audit purposes*. ...

Policy on the feedback of health information

Currently participants receive limited feedback of measures taken during the assessment centre visit only. There is no feedback of subsequent findings. However, it is proposed to collect new data including MRIs and the EGC must consider whether this policy is appropriate to the proposed new measures and questionnaires.

Access and intellectual property challenges

Recruitment to UK Biobank is expected to finish in 2010 and the challenges posed by access to the resource must start to be addressed:

1. Who should have access, who decides and how?
2. How are scientific decisions taken which might require use of (depletable) samples?
3. What role might an Access Committee play? And what of an Ethics Council?
4. What IP policies or principles should guide use of the resource?
5. What might benefit sharing look like in practice?

Core principles and the EGF

The UK Biobank is a managed research resource for public good. Access is to be managed in order to:

- Protect participants, honour commitments made to them and act within the scope of their consents
- Ensure compliance with legal and regulatory requirements
- Prioritise access to those parts of the resource that are limited in availability (i.e. samples that are depletable)
- Manage intellectual property rights in the resource and the results that flow from it

Subject to these constraints, UK Biobank will encourage and provide access to the resource and the results that flow from it as widely and openly as possible in order to maximise its use and value for research. This will include access for researchers from the academic, commercial, charity and public sectors, both in the UK and overseas.

However, there are some strict exclusions where access will not be granted (para 1.2.5). No identifiable individual's test results will be provided to their doctors, their relatives or anyone else (e.g. employers or insurance companies). Nor will UK Biobank allow access to the resource by the police, security services or lawyers, unless forced to do so by the courts, and it will resist such access (in particular by seeking to be represented in all court applications).

Benefit sharing

UK Biobank is managed for the public good, which means that users are to disseminate results as widely and rapidly as possible (with caveats), they will be encouraged to share findings and data as openly as possible and they should provide a copy of all results to UK Biobank, including negative findings, for use by others (even if there is resulting intellectual property).

Benefit sharing can take the form of a number of realities and governance must take many different forms to respond to many kinds of biobanks and benefits. The EGF states that:

“The Ethics and Governance Council will keep use of the resource under review in order to advise on conformance with this Framework and the IP and Access Policy, and to assure itself, and others, that the resource is being used in the public interest.”

The EGC commissioned a report on public interest and the public

good² and maintains a living document³ on “Advising on the public interest and the public good”. This says that

“Public interest may be seen as a system to which all, or a majority of, reasonable individuals would approve and which promotes accepted community values and goods while not leaving individuals disproportionately or irrevocably worse off.”

“Public interest should not be thought of as a conglomeration or amalgam of individual interests. If measured as a sum of opinion, it can lead to uncertainty, whims and “tyranny of the majority”. This has lessons for the value of public attitude surveys and the way they are used to inform advice and policy.”

The EGC has commissioned research on public attitudes to third party access⁴. This revealed particular concerns about data security and protection of anonymity, ambivalence on access by the police and heightened concerns about international access/transfer. The EGC will continue to consider these and other issues as UK Biobank's access policy develops.

EGC: An exercise in added value?

The EGC represents an ethics plus approach. It is an exercise in reflexive governance that plays an active role in maintaining public engagement and public commitment and commissions research to inform its advice. However, the EGC review in 2008 recognised future challenges. These arise from the evolutionary nature of the UK Biobank project; the need to shift from a responsive to a more pro-active role and the challenges of internationalisation.

Contact: EGCinfo@wellcome.ac.uk

Website: www.egcukbiobank.org.uk

2 Benjamin Capps, Alastair V. Campbell and Ruud ter Meulen (2008). Access to the UK Biobank Resource: Concepts of the Public Interest and the Public Good. Retrieved 28 July 2009 from <http://www.egcukbiobank.org.uk/assets/wtx048965.pdf>

3 UK biobank EGC (2009). Access to the UK Biobank Resource: Advising on the public interest and the public good (Version 2, 17 February 2009). Retrieved 28 July 2009 from <http://www.egcukbiobank.org.uk/assets/wtx054552.pdf>

4 Andrew Webster et al (2008). Public attitudes to third party access and benefit sharing: their application to UK Biobank. Retrieved 28 July 2009 from <http://www.egcukbiobank.org.uk/assets/wtx052208.pdf>

Harnessing stakeholder engagement and support

Based on a presentation by Derek Stewart OBE

Chair, NCRI Confederation of Cancer Biobanks

Responsible biobanking

Responsible biobanking is biobanking that:

- Serves a purpose and delivers public benefit
- Provides value for money / return on investment
- Involves all major stakeholders in its work – patients/donors, healthcare organisations and workers, biobank staff, funders of the biobank, researchers
- Operates with transparency, equity and accountability
- Is, at all times, legal and ethical.

Stakeholder engagement

When biobanks are formed primarily to serve the needs of an individual, small group or institution, the sense that they are community resources for all that will succeed by the efforts of all is rarely there. These 'pet projects' for a few do not embark on wide stakeholder engagement and as a result wide stakeholder support is not obtained.

A wide range of stakeholder engagement methods are available to biobanks. These could be a presence at conferences – although this should be visible and contributory, not just a trade stand; hosting of events, conferences or workshops; written materials in peer reviewed journals or in general healthcare or scientific press. For a wider audience, biobanks can produce newsletters, hold open days and form patient and public partnership groups.

The principle stakeholders who are most often 'overlooked' are patients / public who are required to become donors. Reaching these stakeholders requires public engagement.

Prior to 2000, longstanding doctor / researcher-centric tissue storing behaviours led to 'Retained organ scandals' including the Bristol Inquiry, Alder Hey Report and the Isaacs Report. The government reacted to complaints and press attention through the Chief Medical Officer's Recommendations in January 2001, the establishment of the Retained Organs Commission and reviewing the relevant law. This led to near paralysis of human sample based research due to uncertainty.

Under the new Human Tissue Act (2004) patient or donor consent is central. Since this time there has been a massive surge of interest in human sample based research amongst professionals,

policy makers (and funders). Several large scale sample banks have been launched, including UK Biobank, Wales Cancer Bank and onCore UK. There is published evidence that patients and the public support biobanking and research. An Ipsos MORI Poll for the Human Tissue Authority (HTA) in 2007 showed that 31% of the participants think of research when asked about "tissues" and 59% would be certain or likely to donate.

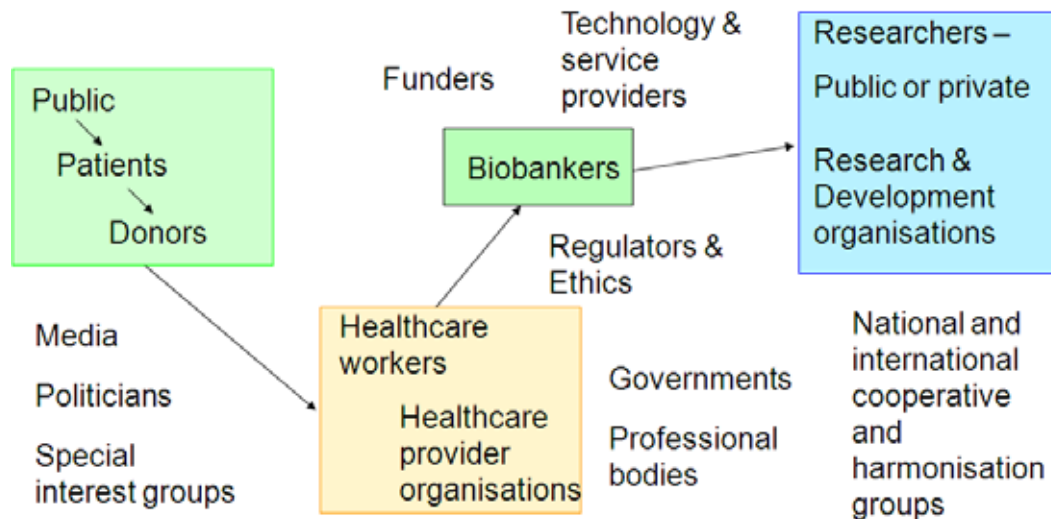
Communications and public relations efforts are required to be aimed at the public in addition to professionals. The HTA Ipsos MORI Poll showed that doctors, health professionals and the media are the most frequently used sources of information on human tissues. If these groups do not receive the correct information it leads to a chain reaction of ignorance:

"To me it's uncertain what the processes and procedures are. I know it's not really heavily communicated to the public. It's something that I'm happy doing, but I wouldn't know how to go about it."

Public engagement

Innovative ways are needed to include sample donors in biobanking to overcome the tendency for 'donation without representation'. To this end, onCore UK has launched a Donor Forum. This allows donors to feel they are giving, rather than researchers taking. It gives donors an ongoing connection with the biobank and the research they are supporting rather than the one off donation experience, hopefully producing 'citizen scientists'. The forum gives donors a clear channel by which they can receive information updates about the biobank and the research it facilitates. It also gives donors a conduit through which their opinions, perspectives and voices can be sought and heard; ultimately it may give donors a means by which they can hold the biobank to account.

Gaining the trust and cooperation of all stakeholders requires biobanking that operates with demonstrable transparency, equity and accountability. This is difficult to achieve from within the public sector, where issues of institutional rivalries, lack of transparency and vested and conflicting interests may arise and where some professional stakeholders don't buy-in. It is also challenging to achieve from within the commercial sector where concerns about intellectual property, profit, commercial advantage and



Who are the stakeholders in a biobank?

commodification may arise.

The Charitable Trust Model

A charitable trust model may provide the solution. It gives organisational independence from stakeholders, especially users and funders avoiding specific alliances that appear unfair. As a service organisation, not a research unit, the charitable trust has no local vested interest in the samples. Its only role is to serve patients/donors and researchers and to serve as an honest custodian and agent between donors and researchers – a facilitator of the donated sample journey from donor, via healthcare, to researcher

The strengths of this model arise from its charitable nature.

Charities are highly regulated entities under the Charity Act and have specific financial accounting requirements. This makes the full economic costs of biobanking visible, including those given “in kind” and allows stakeholders to receive and study Annual Reports & Accounts. Charities have a duty in law to demonstrate delivery of wide public benefit and a duty to demonstrate accountability to stakeholders. Perhaps most importantly, charities in general have a good ‘image’.

The charitable trust does have weaknesses. It exists at arms length from the healthcare setting where donations usually take place and therefore needs to form partnerships with hospitals. It must protect its interests and put relationships with partner organisations on a proper basis through contracts. Finally attracting high quality staff can be difficult in a small charity and small size can lead to financial vulnerability.



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