#### GaBI Scientific Meetings ROUNDTABLE ON REGISTRIES Practical Considerations for Registries – making them work

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26 January 2017, Pullman London St Pancras, London, UK

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#### GaBI Scientific Meetings

**ROUNDTABLE ON REGISTRIES** Practical Considerations for Registries – making them work



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#### Registry: how to set up spontaneous reporting – practical challenges, information sharing, multi-source environment, limitation of registry data

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Registry: how to set up spontaneous reporting – practical challenges, information sharing, multi-source environment, limitation of registry data

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## What is the purpose of a registry?

"An organized system that uses observational study methods to collect uniform data (clinical and other) to evaluate specified outcomes for a population defined by a particular disease, condition, or exposure, and that serves a predetermined scientific, clinical, or policy purpose(s)"

Gliklich et al 2010



## Inputs: Obtaining data

- Identify and enroll representative patients
- Collect data from multiple sources and settings
- Use uniform data elements and definitions
- Link data from different sources
- Maintain security and access

Gliklich et al 2010



# Outputs: Care delivery and coordination

- Provide real time feed back (with decision support?)
- Generate patient level reports and reminders
- Send relevant notifications to providers and patients (supported self management, monitoring etc)
- Share information with patients, other providers
- Link to relevant patient education Gliklich et al 2010



# Outputs: population measurement and QI

- Provide population level reports
  - Standardised measures
  - Benchmarking
  - Different reports for different levels of user
- Enable ad-hoc reports
- Provide utilities to manage populations or subgroups
- Generate dashboards
- Facilitate 3<sup>rd</sup> party quality reporting Gliklich et al 2010



**IBD Registry** 

Making information work for patients, their clinical teams and the NHS

#### **IBD Registry Purpose**



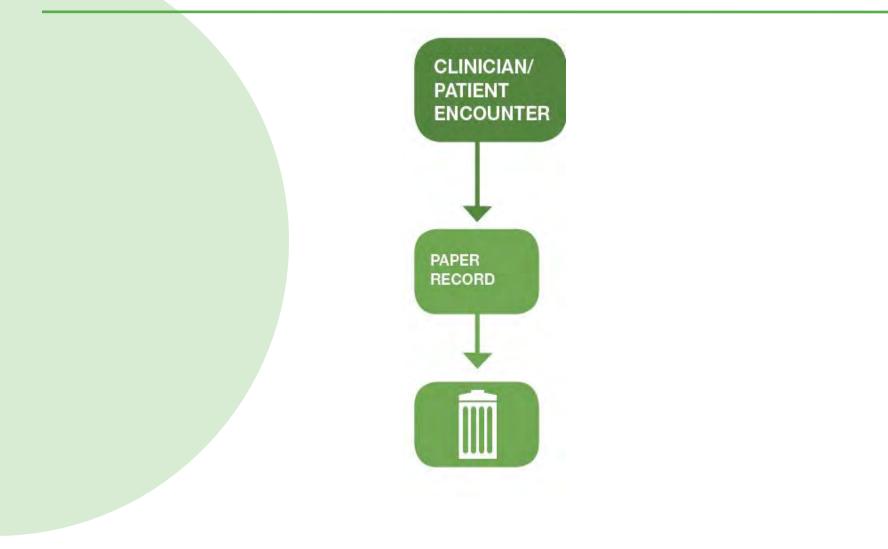
The IBD Registry will provide the first ever UK-wide repository of pseudonymised IBD adult and paediatric patient data for prospective quality assurance, audit and research purposes. Bringing this data together for the first time will:

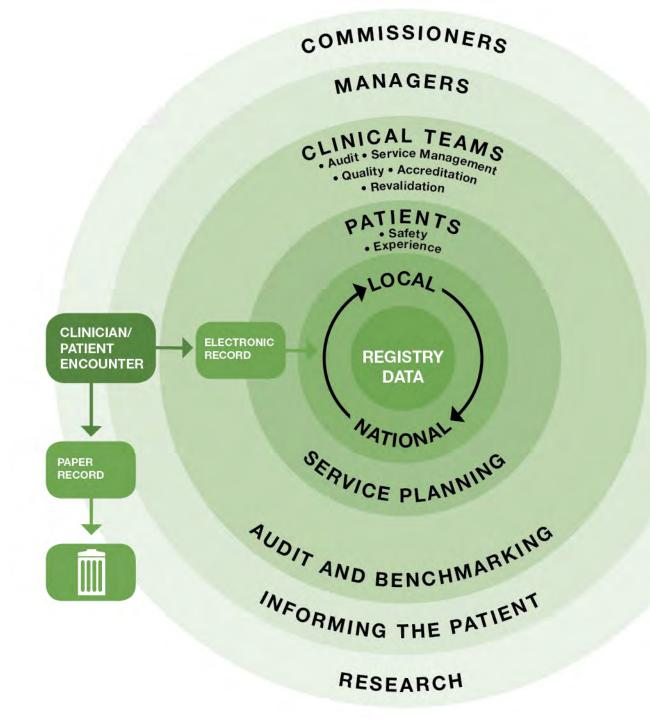
- Drive continuous improvement in patient care and access to care across the UK
- Inform commissioning and service design
- Improve our understanding of long term outcomes
- Provide local, regional & national data in order to better define the pattern of ulcerative colitis and Crohn's disease
- Support IBD research



# Enter data once and use for multiple purposes

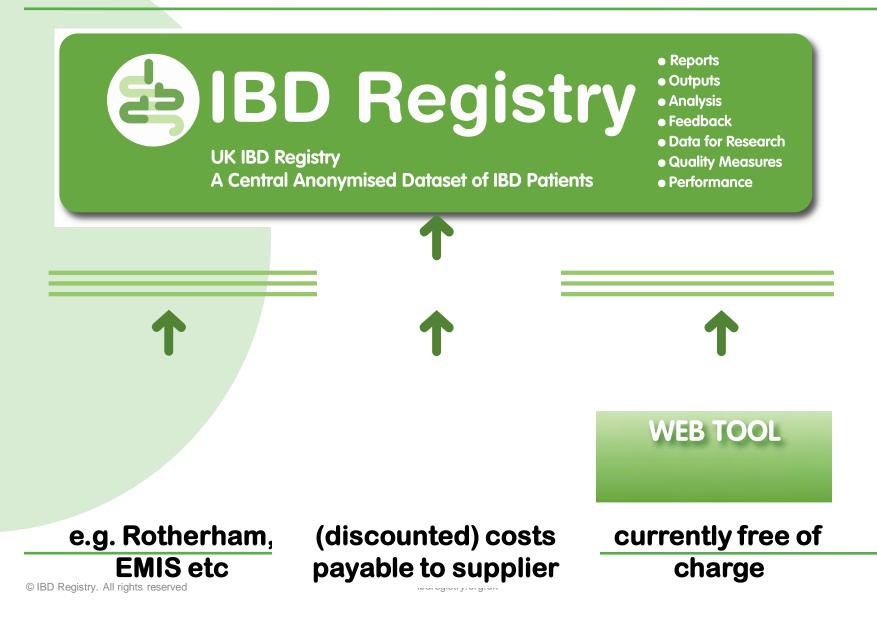






#### Data entry options







## **Data Submission Framework**

- Standardised data definitions
  - Demographics
  - Phenotype
  - Medications
  - Disease activity scores
  - PROM
- Data extract structure to facilitate upload to NHS Digital via secure portal



#### Data Collection tools

- Duplication of data entry
- Supplier engagement
- Technology?
- NHS IT
  - Resources
  - Engagement



## Using the tools: behavior change?

- Cultural change
- Time
- Technology adoption
- IT system challenges
- Incentives?
- NHS support

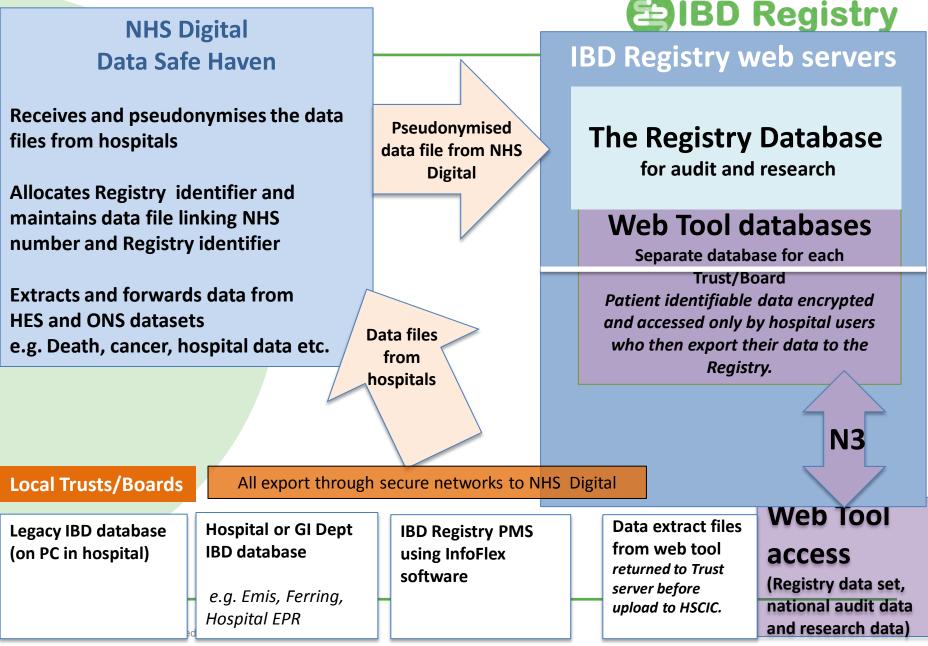
# **IBD** Registry Tools



- Patient Summary
- MDT
- Flare line
- Nursing support
- Drugs
  - Biologics
  - IMM monitoring
  - Steroids
  - 5-ASA

- Cancer Surveillance
   system
- Bones
- Letters
  - GP
  - Patient Summary, information etc.
- Virtual clinics

Overview of Registry data-flow & pseudonymisation in England



© iBD Registry, April 2015

## Data governance.....



#### NHS patient data to be made available for sale to drug and insurance firms

Privacy experts warn there will be no way for public to work out who has their medical records or how they are using it

Randeep Ramesh, social affairs editor

Sunday 19 January 2014 21.34 GMT

#### NHS

NHS

#### NHS data will not be sold to insurance companies, Jeremy Hunt says

Health secretary to provide assurance that confidential information will not be used for commerical insurance

Press Association

Friday 28 February 2014 23.31 GMT

#### HOME \* NEWS \* HEALTH \* HEALTH NEWS

#### Nearly 1million patients could be having confidential data shared against their wishes

Calls for an official investigation as it is disclosed that at least 700,000 patients opted out to having their GP data shared with third parties only to have their demands ignored.

By Peter Dominiczak, Political Editor 6:34PM BST 05 Jun 2015





The Telegraph



# Why Pseudonymise? NHS Digital?

- Identification of patients for future research
- HES data linkage
- Linkage to other NHS England databases
   BUT
- Huge bureaucratic challenge

EBD Registry	WHICH ORGANISATIONS ARE INVOLVED IN THE 18D	Instian will: retheir care of Crohn's disease ing of how by IBD Relevant information protected? How Is the confidentiality of my Relevant information protected?
IS TAKING PART IN THE UK IBD REGISTRY The IBD Registry collects Information about patients who home Informationy Bowel Disease	BD Registry      IBD Registry      IBD REGISTRY CONSENT FORM The purpose of the IBD Registry is to collect information about Inflammatory Bowel Disease (IBD) across the UK. Collecting this Information will:     Help hospitals to improve their care of people with colitis and Crohn's disease     Help the NHS to design better services     Support research into IBD	BD       medical record and your IBD care is sent by your hospital to the Health and Social Care information Centre (HSCIC). Before the HSCIC sends that information to the BD Registry, they change your identifiable personal information into a different format so that no one at the IBD Registry can identify any infoidual patient. (This process is called pseudonymiseiton) The HSCIC keeps a master file so that future information can be added to the right patient's registry record and hospitals can be fold if any of their patients are suitable for a clinical research study. <ul> <li>What is the Health and Social to collect and process information about patients and the healthcare they received to collect and process information about patients and the healthcare they received to collect and process information about patients and labe to them from other confidentially, and which is authorized to collect and process information about patients and labe to them from other contral UK NHS bodies, may be used for analysis of the healthcare they receive, to help contact patients (e.g. about a research project for which they might be suitable) or to provide information to the IBD Registry about patients' health status.</li></ul>
<ul> <li>Biblion:</li> <li>Help hospitals improve their service.</li> <li>Improve our understanding of how, IBD difects people.</li> <li>Support research into IBD.</li> <li>What does it mean for me as a patient?</li> <li>Some information about your IBD with be sent to the IBD Registry. A system has been put in place to protect your confidentiality and you can have any questions or you want.</li> <li>Boas ask a member of staff for antormation leaflet.</li> <li>Difference in the IBD Registry information collected will help to not want your information to be used then it is your IBD doctor or nurse it</li> <li>Sone is to your IBD doctor or nurse it</li> </ul>	Please read the IBD Registry Information Leaflet and then initial the boxes below to confirm how you wish your personal information to be managed:         1(a) I give permission for relevant information from my health records to be submitted to the IBD Registry for analysis and audit.         OR         1(b) I do not wish information from my health records to be submitted to the IBD Registry.         IBD Registry.         IBD Registry for analysis and audit.         OR         1(b) I do not wish information from my health records to be submitted to the IBD Registry.         IBD Registry.         If you have agreed to information being submitted to the IBD Registry, please also consider the following three options and initial the boxes if you agree:	

BDR Consent Form for adults - England & Wales - January 2015



#### Consent

- Currently s251 exemption
- Linkage of registry data to NHS records
- Their information to be used for
  - non-commercial research projects
  - Commercial partners (report only)
    - Research
    - Pharmacovigilance
- Contacted for future research projects



#### Who should fund registries?

- NHS?
- Specialist Societies?
- Industry?
- Individual NHS trusts?
- Charities?
- Research funders?



## Collaboration/opportunities

- UK IBD Biologics audit
- UK Quality Improvement Program
- Academic

- Crohn's and Colitis UK/Dr Keith Bodger

- Industry
  - Pharmacovigilance projects
  - Real world evidence
  - Specific projects

VFST

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Anaemia service evaluation



#### The story so far....

- Infrastructure and governance
- 23,000 patients
- 40 sites actively up loading data
- 80 set up to up load data
- 150 expressions of interest to participate in audit



# Aims for 2017

- Focus on biologics treated patients
- Funding model
  - Subscription model
  - Pharma projects/support
- Reporting
- Data visualisation
- Pharmacovigilance system



#### Conclusions

- Huge opportunity to change patient care
- Culture change
- Registry infrastructure
- IT platforms
- Funding
- Defined outputs