



SiNAPSE

Scottish Imaging Network - A Platform for Scientific Excellence

Scottish Imaging Network: A Platform for Scientific Excellence

Project Update

Dr Trevor Carpenter - SFC Brain Imaging Research Centre

SINAPSE - Overview

Acquisition

- Subject Demographics
- National PACS
- Reporting

Information Governance

- Data Access
- Data Protection
- Connections

Data Sharing

- Subject/Study Representation
- NESC and WTCRF

SINAPSE

Subject Demographics:

CHI numbers

A Scotland Wide Representation

Requires access to CHI helpline or central database

Means subjects must be positively identified PRIOR to scanning

Modality Work lists

Stream lines work flow

Avoids transcription errors

Controls DICOM representation

SINAPSE

National PACS:

What to transfer

Clinical decision

FMRI ~ 10,000 images (but structural required for reporting)

MPPS Transfer CAN be deactivated

DICOM routing possible solution

Data representation

'my belief':

Data should have same representation at modality as in NHS

SINAPSE

Control Room Work Flow:

Management Systems and RIS

Still require separate entries

Ideally provide one 'screen'

Requires data to be sent/retrieved to/from NHS RIS

Develop application against RIS systems 'standards'

No National RIS (HL7 / Core Radiology Data Standards)

Single entry work flow

Project set with WTCRF (Edinburgh)

Feasibility and requirements stage

Pilot at SBIRC and CRIC

SINAPSE

Reporting:

SINAPSE meeting

To decide upon reporting standard

Research Episodes

New entries to Radiology Data Standards:

Data Item	Number
Research Status	3.1
Research Type	3.2
Research Impact –	3.3
Additional/Extended Examination(s)	

Allows Research imaging to be excluded from audit

Relate to entry in PACS/RIS

SINAPSE

Information Governance:

Data Access

Imaging of Patients requires access to NHS IT systems

Core staff

- Honorary (or Full) NHS Contract

- Access to patient identifiable information

Research staff

- Research Access Letter

- Access to pseudo-anonymised data

Other

- Access only to Fully-Anonymised data

SINAPSE

Information Governance:

Data Protection

New Guidance and SOPs

Developed with SBIRC, DCN and WTCRF

New IT systems will enforce SOPs

Central message:

“where a task can be carried out with access to an individual's identity that is the course of action that must be taken”

“Any IT developments must include privacy enhancing technology to improve an individual's anonymity”

USE AND DISCLOSURE OF HEALTH DATA – Information Commissioners office 2002

SINAPSE

Information Governance:

Research Modality Connections

Required to reconcile Ethics, GCP and Data Protection!

Standardised Requests

Will allow for auditing.

Will reduce lead time in obtaining connections

Will specify responsibilities

Will provide accountability

- Scottish system based upon NHS IGTK?

<http://www.connectingforhealth.nhs.uk/systemsandservices/infogov>

SINAPSE

Data Distribution:

Subject/Project Representation

CHI number:

Individuals can be tracked between centres

Research representation based on encryption
data pseudo-anonymised

R&D number:

To be standardised across Scotland

Aids multi-centre trials

Simplifies role based data access

Simplifies centralised data archiving

Neutral entry in patient records!!

SINAPSE

Projects:

SINAPSE-NESC Data Distribution Project

Interviewing for post (10th Dec)

SINAPSE-TMRC (Dundee)

Repository to support Wyeth study

SINAPSE PhD's

Project proposals accepted

Open for applications....

SBIRC-WTCRF Study Management

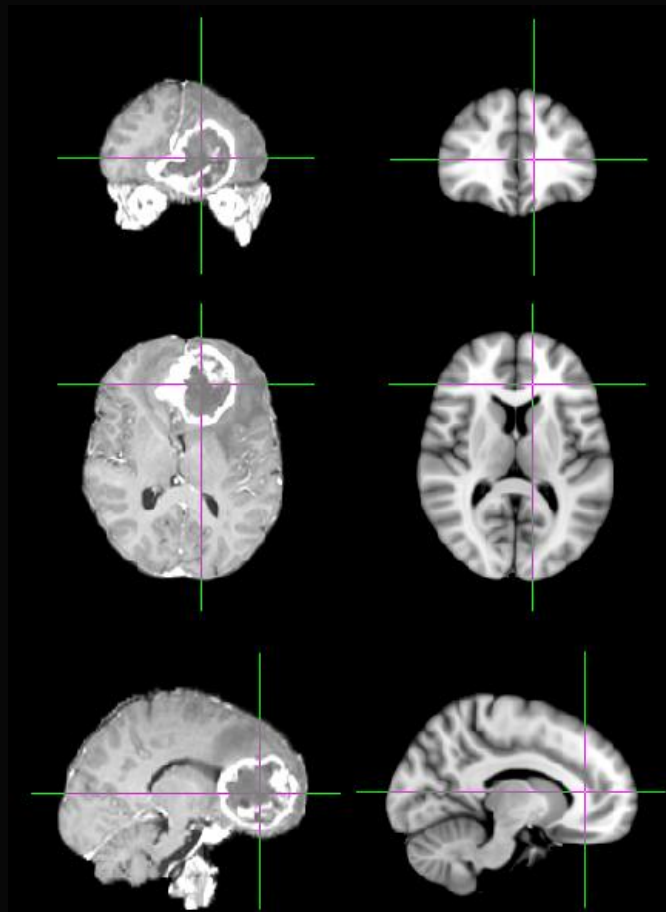
Project

Feasibility / Requirements gathering

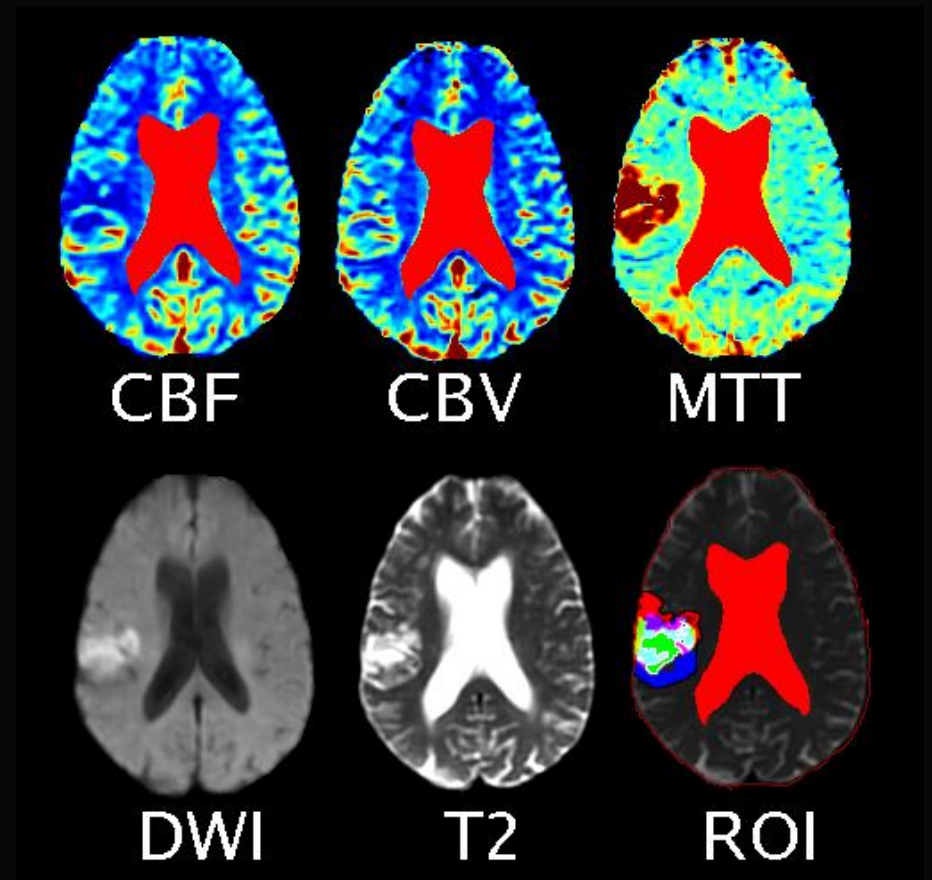
SINAPSE

Opportunities:

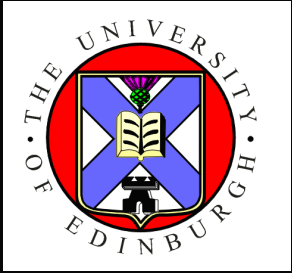
Surgical Planning



Outcome Prediction



SINAPSE



Elizabeth McDowell

Prof. David Newby

Prof. Joanna Wardlaw

Dr. Sam Wilson



Prof. Donald Hadley



Peter O'Byrne

Gavin Grieg

James Veitch



John Potts

Gus MacDonald

Patricia Ruddy

Dr. Rod Muir



Tom Mortimer

Malcolm Teague



Trevor Carpenter
Research Fellow

Email: trevor.carpenter@ed.ac.uk

Tel: 0131-537-3284

SFC Brain Imaging Research Centre
Clinical Neurosciences
Western General Hospital
Edinburgh
EH4 2XU