Health Informatics

What's all the fuss about?

Max Hughes

Why talk about this subject?

- One of the fastest developing areas in Information and Communications Technology today
- Huge potential for health improvement worldwide from application of HI techniques
- Exciting career possibilities in multiple settings
- A core BCS area

The plan for tonight

- 30 minute talk (an overview)
- Followed by interactive session for 15 minutes
- Drinks and networking opportunity afterwards

Who am I?

- Enthusiast and practitioner of HI

- Practical experience more than academic expertise

- Keen to link up different types of professionals and students in these areas

- Psychiatrist, but it's my day off and I'm not psychoanalysing you (if you believe that...)
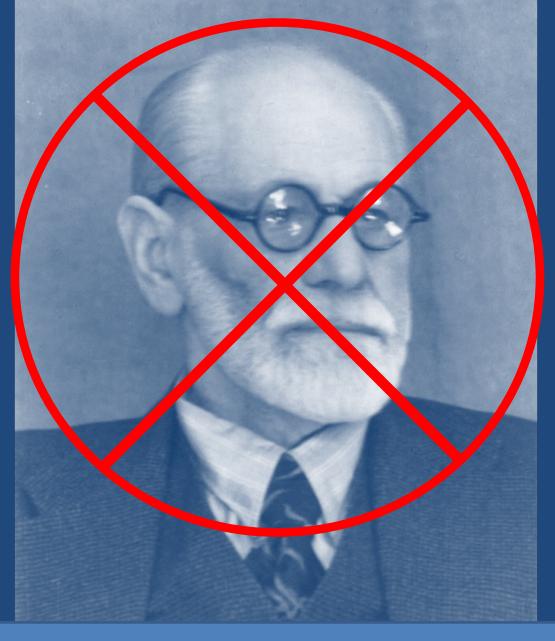
Image courtesy of National Library of Congress

So, what is Health Informatics?

Technology-focused approach

- Asks, "How can I apply this (existing) technology in the health setting?"

- Examples include most of Telemedicine, improving e-mail systems, automating record creation etc

- Includes formal terminologies e.g SNOMED

- The dominant trend at present

Health-centric approach

- Asks, "How can (any) technology solve this problem in health?"

- Often poses problems that are complex and may be beyond scope of existing technology, e.g. interpreting free text entries in Health Records

- Beginning to be adopted by larger firms, e.g. Microsoft

Domains of HI

- Telemedicine
- Electronic health records
- Electronic prescribing
- Decision support
- Healthcare databases
- Communications

A problematic field

- Healthcare is complex; technologically, legally and ethically

- Healthcare professionals have often rejected solutions they perceive as bureaucratic and unnecessary (they don't like IT!)

- Lack of effective liaison has led to some costly mistakes which have been well-publicised (by others who don't like IT)

Ailing project at heart of NHS
Loss of IT chief is only the latest setback in ambitious scheme to computerise records

Poor morale undermining NHS IT project, study says

Yet another setback for Blair's vision of a hi-tech NHS

MPs condemn £12bn upgrade of NHS computer network

HOWEVER...

A dynamic field

- Major activity in computing worldwide
  - Major associations throughout world
- Well-supported and recognised by BCS
  - Healthcare Computing conferences (with bursaries!)
  - Health Informatics forum etc
- Many specialised companies doing well
  - E.g. iSOFT, System C, First Data Bank etc
- Sub-specialisation common amongst companies and professionals

CSW Group in UK's 'Hot 100' for Second Year

Tri-Continental Foundation of Experts, Open Health Tools, Collaborate on Global Health IT Solutions

ROBOSOFT Introduces a New Robuter Aiming at Assisting People at Home

Garments that can measure a wearer's body temperature or trace their heart activity are just entering the market, but the European project BIOTEX weaves new functions into smart textiles

Retrieved from http://www.ehealthnews.eu on 23/04/08

Information is central in HI

- Good decisions require timely, accurate and in-depth access to knowledge
  - Of the patient
  - About therapeutics
  - About services
  - About research
- Employing this knowledge is Evidence Based Practice
- Examples

And so is *Technology*

- Not just electronic
- Technophobes can become your greatest supporters
- Communication technology and Information technology

Summary

- Health Informatics is big and getting bigger
- There are lots of opportunities for individuals as well as companies
- There are also plenty of hazards
- Creative discussion and networking is key to developing new ideas and methods in HI
- Tonight is one such opportunity to network

Thank-you

- ***Questions and comments***
- My contact details:

  maxehughes@yahoo.co.uk

- Useful websites
  - http://www.connectingforhealth.nhs.uk
  - http://www.healthcare-computing.co.uk
  - http://www.bcs.org