



All-Ireland Cancer Consortium Telemedicine Update

Donal Hollywood

Professor of Clinical Oncology, TCD

Des O'Loan

Head of ICT, Belfast City Hospital



All-Ireland Cancer Consortium Telemedicine Update

Background

Participants

Projects



The Beginning

- Oct 1999 All-Ireland-US
 - Memorandum of Understanding



The Beginning

- Oct 1999 All-Ireland-US
 - Memorandum of Understanding
 - Dept of Health and Children (ROI)
 - Dept of Health and Social Services (NI)
 - National Cancer Institute (US)



The Beginning

- Oct 1999 All-Ireland-US
 - Memorandum of Understanding





The Beginning

- Oct 1999 All-Ireland-US
 - Memorandum of Understanding
- Partnership in Science™





Board of Directors

Implementation Group

Working Groups

Scholar Exchange

**IT
Telecommunications**

Cancer Registries

**Telesynergy
Net-Trials***

Clinical Trials



Board of Directors

Implementation Group

Working Group

Scholar Exchange

**IT
Telecommunications**

Cancer Registries

Epidemiology Fellows

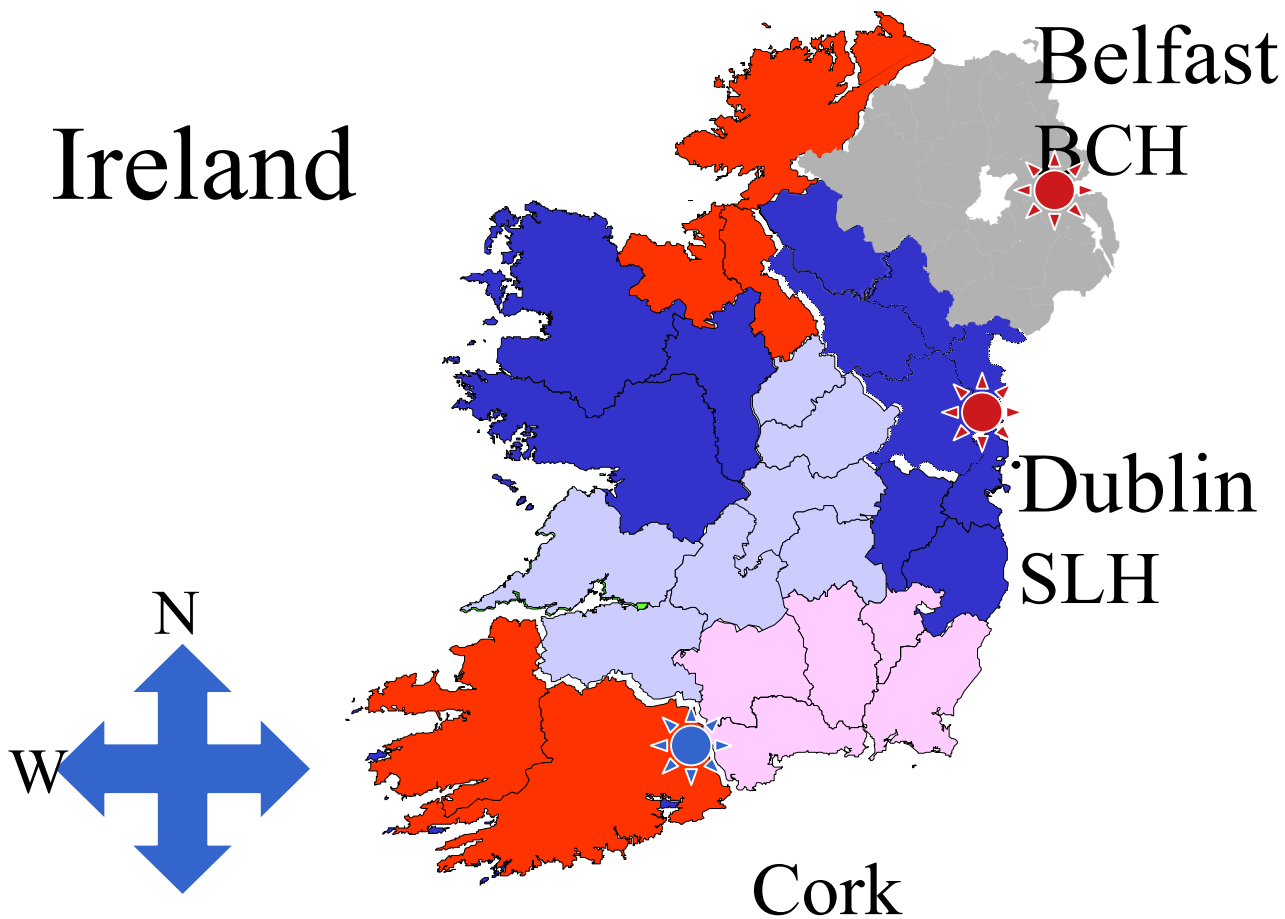
**Telesynergy
Net-Trials**

Clinical Trials

Nurse training



Ireland



ROI
Pop ~3.8M

NI
Pop ~1.7M

Cork



- **National Radiation Oncology Centre**
- More limited medical and surgical oncology
- Linked to 5 University Hospitals and 16 'regional' units
- 4200 new patients (Catchment pop ~ 2-2.5 million)
- 165 beds (20 bed day ward)
- 6 linear accelerator (mixed vendor), ^{60}Co , MDR, HDR, radio-isotope, 3D-CRT, IMRT, Radio-isotope





City Hospital Profile

Acute General Hospital

- Local population 200 000
- Regional 1.7 million
- 800 Beds, 4000 staff
- Inpatients 73 500 per year
- Outpatients 192 000 per year
- Day cases 21 000 per year
- Regional Cancer Centre
- Regional Centre
 - Oncology, Breast Surgery, Genetics, Haematology, Nephrology Respiratory





Regional Cancer Centre

- Work commenced July 2002
- Cost approximately £55m (\$85m)
- 73 inpatient beds
- 6 Linear accelerators
 - Plus two spare bunkers
- Completion due Late 2005







Participants and Projects

Telesynergy: Dublin / Belfast



- 2000 Funding request
- 2001/2 Outline funding
 - Steering Groups (both SLH and BCH)
 - Technical Group
- 2001 'Approval' to purchase
- 2002 Equipment purchase & Commissioning
(Aug -Oct)
- 2002 First patient case October 2002
 - » Dr Morris Haematologist – BCH
 - » Front page news
- 2002 **Demonstration (Nov)**



Nov 2002 Demonstration





Challenges



- **Difficulty generating interest**
 - Preparation is key
 - PC slide show, digital Photos
 - CT & x-ray via Document imager
 - BCH or SLH connection to NCI is excellent
- **Technical challenges**
 - PC image quality
 - Sound quality
- Needs to identify appropriate people at NCI
- **Need key strategic projects**

Proposals



Research

- Clinical Trial
 - Neo-adj. Esophagus
- Study /Analysis Benefit
 - Process Change
- Technology transfer & development
 - RT-DICOM data exchange
 - Imaging tools

Education / Training

- Grand Rounds
- Complex case
- Education



QuickTime™ and a YUV420 codec decompressor are needed to see this picture.



Summary

- Establishment of potential 1999-2001
- Assessment of system 2000-2001
- Commissioning the system 2002
- Key Projects 2003
 - These may differ between centres
 - Discovery pathway
 - Development of advanced care
 - Delivery of improved treatment

Challenges



- **Difficulty generating interest**
 - Preparation is key
 - PC slide show, digital Photos
 - CT & x-ray via Document imager
 - BCH or SLH connection to NCI is excellent
- **Technical challenges**
 - PC image quality
 - Sound quality
 - Dublin / Belfast perfect
 - Belfast / Dublin via Bethesda poor
 - 3 way audio poor
- Needs to identify appropriate people at NCI
- **Need key strategic projects**