## **Andy Hyde**

- Nycomed Imaging, Oslo
- Clinical R&D Clinical Systems Developer
- 10 years experience with computers professionally
- 6 years with systems development
- Specialist interest Human Computer Interaction



## **Remote Data Capture - Why?**

- 1) Cut clinical trial duration times
- 2) Reduce resource use
- 3) Improve data quality



#### The Incentives for RDE

- Reduced time to locked database
- Resource cost 1 FTE @ £250 per day. 10 days resource saving = £2500
- 10 days opportunity cost = £10m
- Quality improvement ?



#### **NYCOMED IMAGING**

#### Where is it?

- 10 years of experimenting
- 50% of companies have at least tried RDE
- 50% of those report still using RDE
- 50% of Investigators have tried RDE
- ▼ 75% of those would use RDE again
- 85% think RDE is better than paper
- 75% of all companies are still using paper!



## **Failure of Expectations**

- One system for all trials and all data types
- × Error free data
- × Less time used to collect data
- **×** More convenient
- × Investigators will fill in forms themselves
- × International data transfer



#### **Business Case Problems**

- × Requirement for parallel systems
  - Traditional and New Technology
- × Not all trials need to go faster Critical path
- × Underestimation of cost of ownership



## **Legal Requirements**

- +SOP
- +GCP/GMP
- +ICH4 M2
- + Electronic records with signatures FDA
- +SYSTEM VALIDATION



#### **NYCOMED IMAGING**

#### **A New Direction**

- ✓ Forget one system for all idea.
- √ Specialist systems for each situation/data type
- ✓ Data exchange not data entry



#### **Data Exchange**

- ✓ Patient record systems import/export
- ✓ MRI/Ultrasound machines export data
- √ Repetitive measurements spreadsheets
- ✓ Image evaluation export data
- Less transformations of data
- ✓ Easier to validate



## **New Design Methodologies**

- Previous IT project failures
  - Main reason lack of user involvement
- User...User...User...User...
- Human-Computer Interaction
- Developer becomes a user.
- User Developer partnership



# What is Required Now?

- ✓ IT systems developers to realise users' abilities
- Medical equipment standardisation
- ✓ A systemic viewpoint
- ✓ Realistic expectations
- ✓ A better understanding of The Investigator

