Visualizing Cancer Care Patterns
In the UK National Health Service

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Population of 5.5 Million People
Cancer Registry in the UK...

- United Kingdom Association of Cancer Registries
  - Defined national datasets
  - Common standards (NHS Number)
  - Data collection
  - Agreed data exchange mechanisms between cancer registries

- Eastern Cancer Registry is also the National Brain Tumour Registry
Delivery of cancer care in England...

- Cancer Networks
- Hospital Trusts
- Multi Disciplinary Team Meetings
- Cancer Registries
What is the problem?

• How can we visualise the whole patient pathway?
  - Care can be delivered in many hospitals
  - Specialist hospital centres

• Are there any tools available for us to do this?
The challenge...

• How can we visualize the whole patient pathway?

• Whilst looking at new innovative systems from other industries we found a company called i2 Ltd.
New tool for data analysis....

- What is i2 Analyst’s Notebook?

- Can we use the same tool to demonstrate the whole patient pathway?
  - Yes because of the unique NHS number
i2 Basics...

- Provides unique analyses useful to
  - Physicians / Specialists
  - PAYERS / HMO’s
  - Hospital Managers
Building an i2 chart...

• Short video of how to use i2
Example reports...

- Measuring Service Reconfiguration
- Children & Young Adult Cancers
  - Lymphoma Treatment
Service Reconfiguration (Penile Cancer)...

Year 2
Children and Young Adults...

- New Guidelines from Department of Health
- What was the current pathway
- Is there any significant difference in treatment patterns within age groups?
  - Looked at Lymphoma (All Ages 0-24)
    - Then by 0-15; 16-19; 20-24
Lymphoma (All Ages)

Key
Diagnosis
Radiotherapy
Chemotherapy
Surgery
Hormone

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Lymphoma (Under 16yrs)

Key
- Diagnosis
- Radiotherapy
- Chemotherapy
- Surgery
- Hormone

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Lymphoma (16-19yrs)

Key
Diagnosis
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Next Steps (the future)

- Better integration with GIS
- Temporal pathway analysis
- Correlation in clinical outcomes
Summary...

• Patients diagnosed and treated with cancer follow complex pathways involving multiple organisations.

• Tracking patients across their care pathway and monitoring outcome is essential if we are to deliver the best care.

• i2 has provided us with a first step to build this complex picture.
Any Questions?

• For further information visit our website at www.ecric.nhs.uk

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