

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...

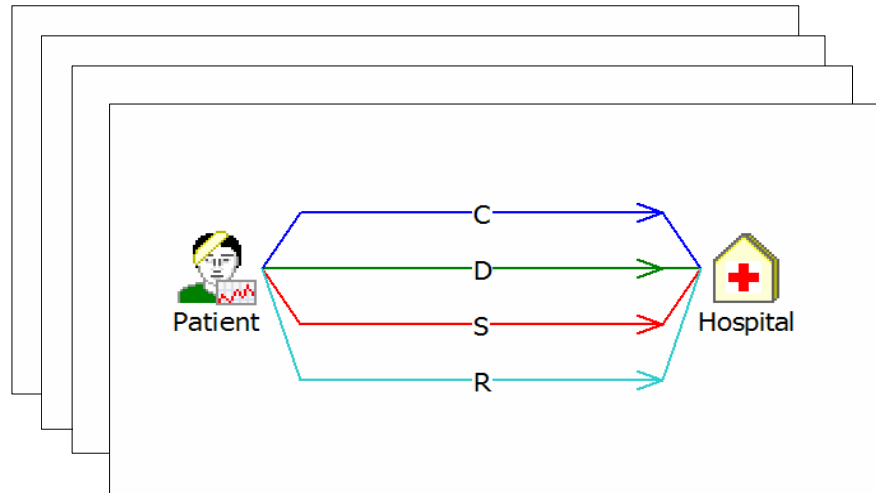
- How can we visualize the whole patient pathway?
- Whilst looking at new innovative systems from other industries we found a company called i2 Ltd.



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

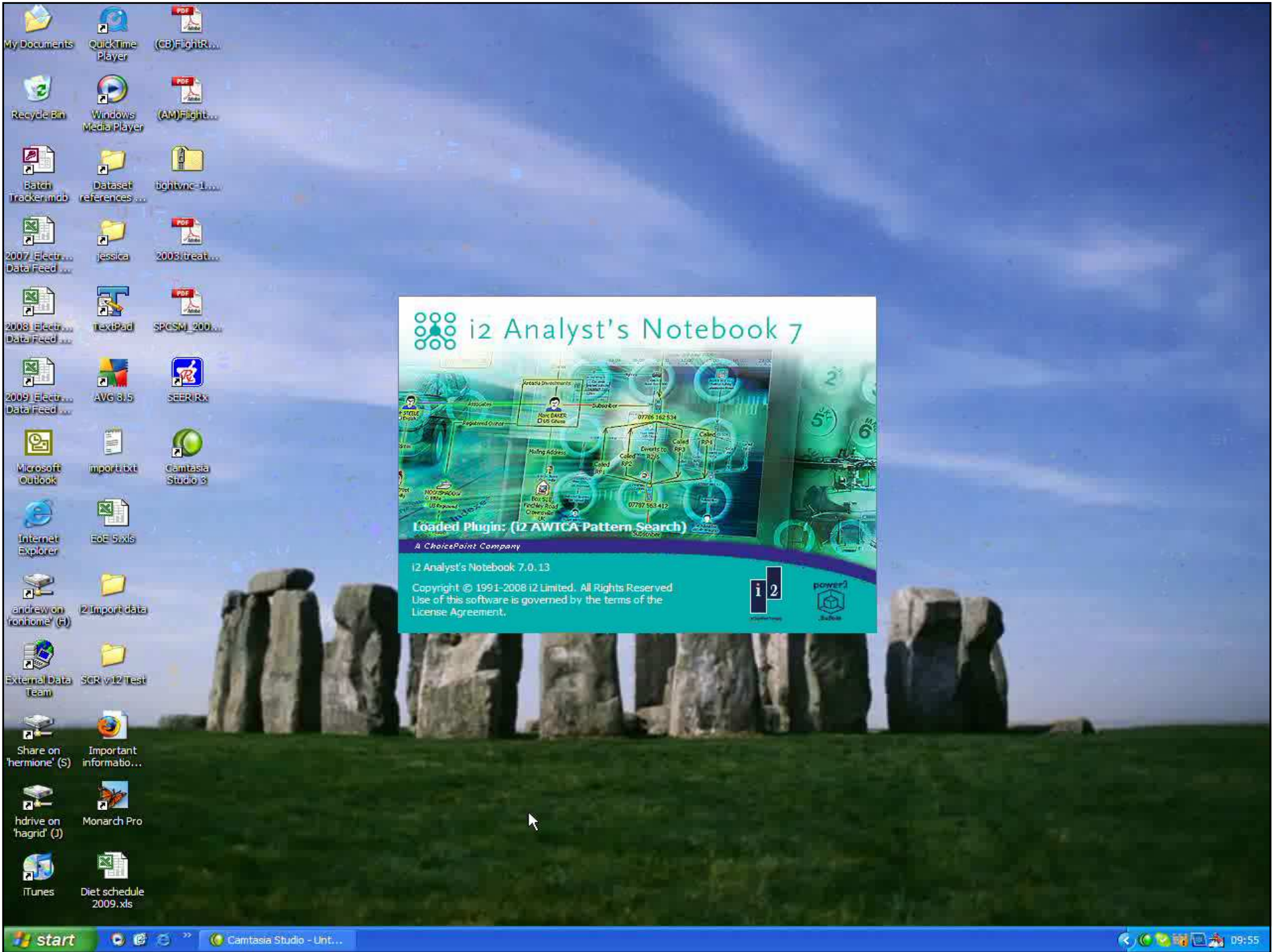
i2 Basics...



- Provides unique analyses useful to
 - Physicians / Specialists
 - PAYERS / HMO's
 - Hospital Managers

Building an i2 chart...

- Short video of how to use i2



i2 Analyst's Notebook 7



Loaded Plugin: (i2 AWICA Pattern Search)

A ChoicePoint Company

i2 Analyst's Notebook 7.0.13

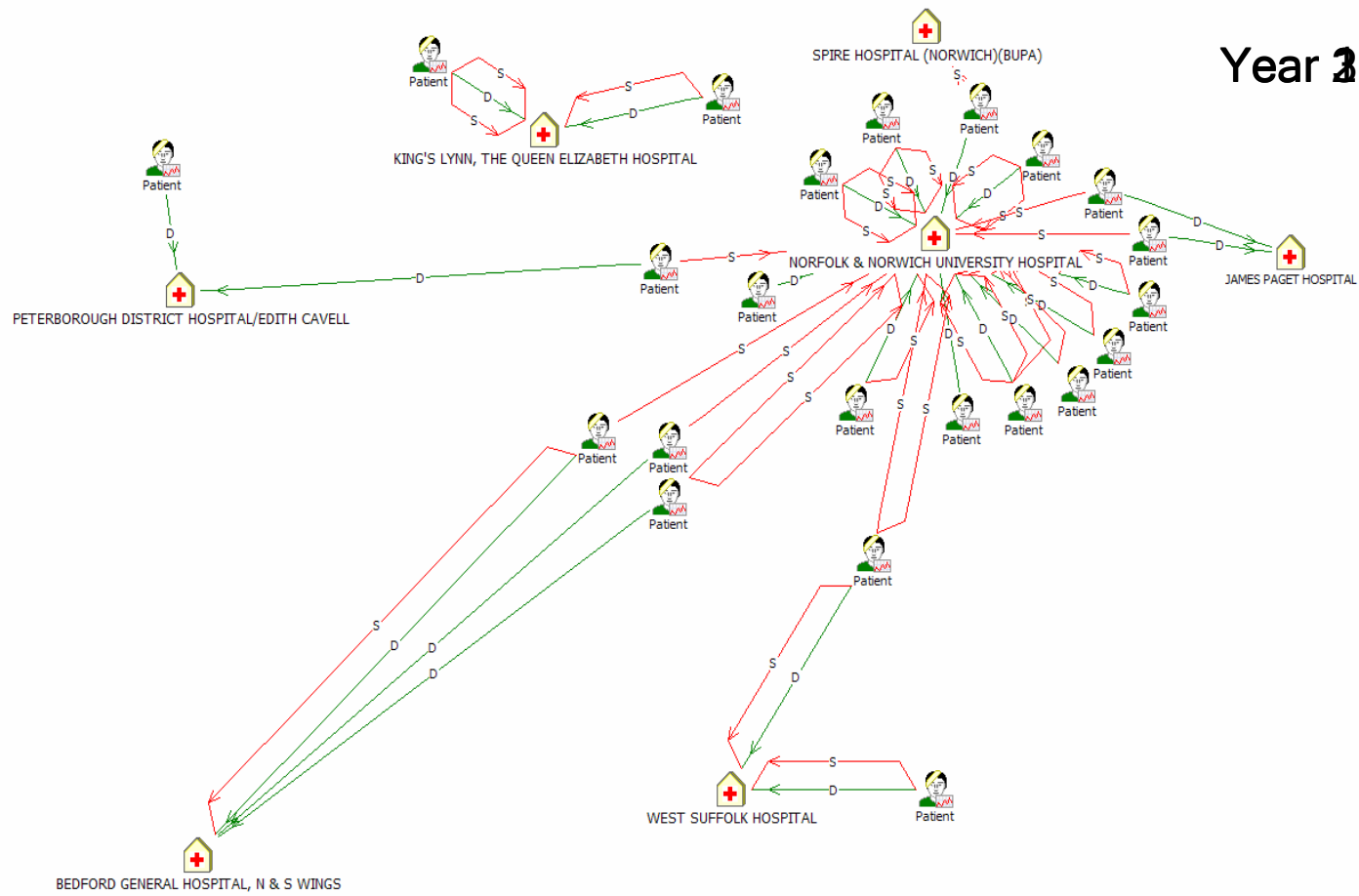
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Example reports...

- Measuring Service Reconfiguration
- Children & Young Adult Cancers
 - Lymphoma Treatment

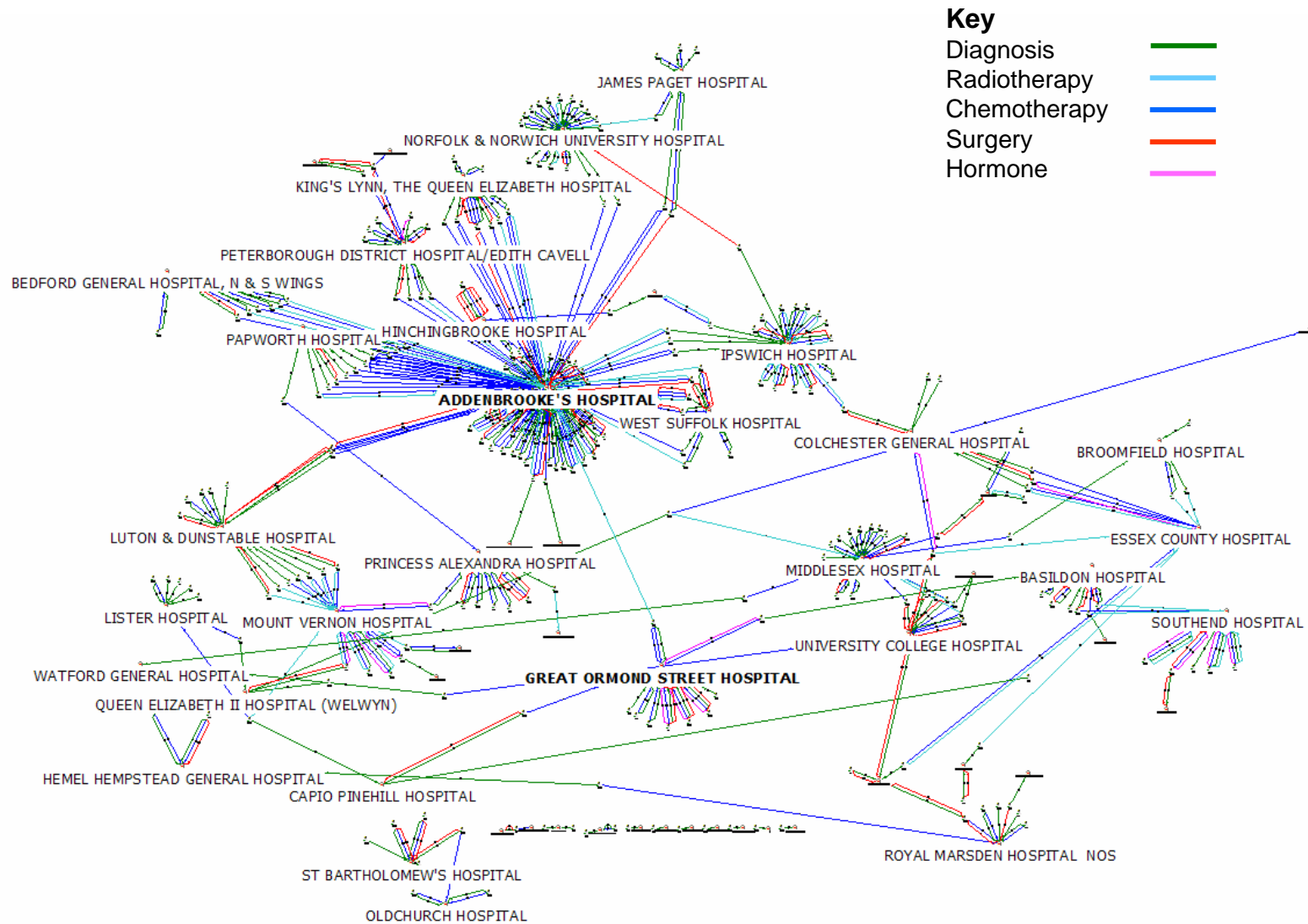
Service Reconfiguration (Penile Cancer)...



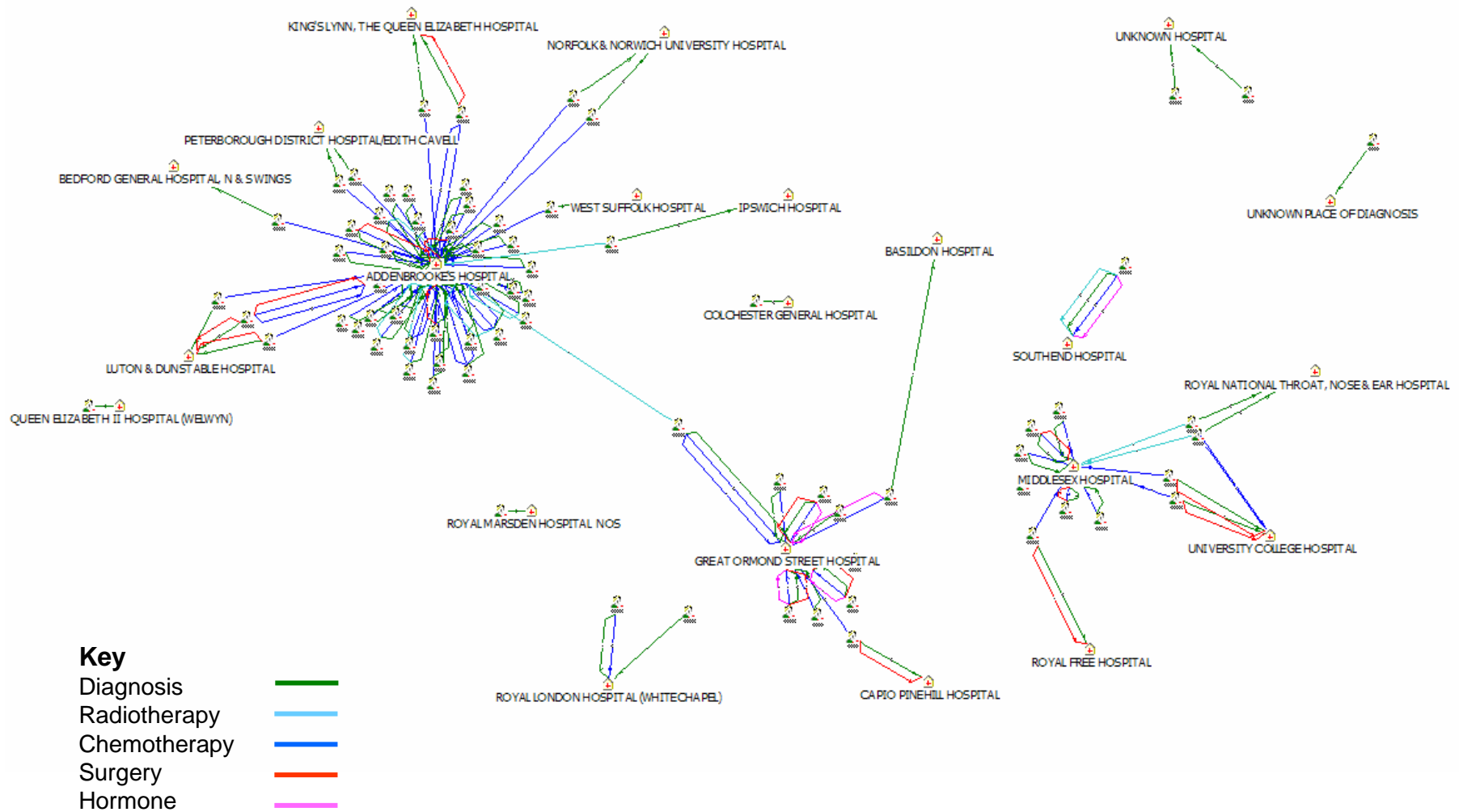
Children and Young Adults...

- 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

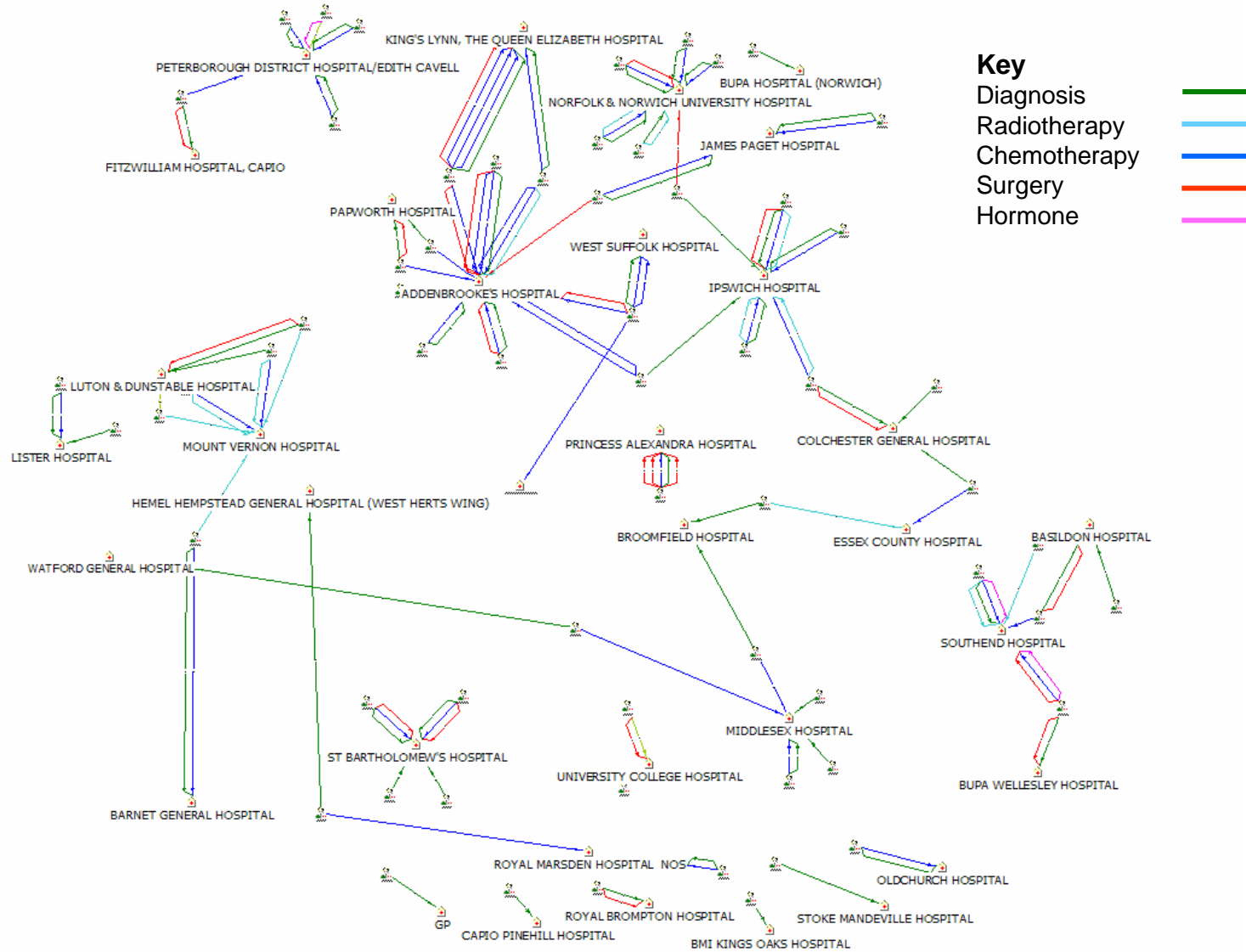
Lymphoma (All Ages)



Lymphoma (Under 16yrs)



Lymphoma (16-19yrs)



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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