C-PORT for chemotherapy nurses

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C-PORT

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What is C-Port?

Chemotherapy **P**lanning **O**ncology **R**esource **T**ool

So ...

It is a **Tool** hat helps **Planning Resources** in the **Chemotherapy** and **Oncology** environments

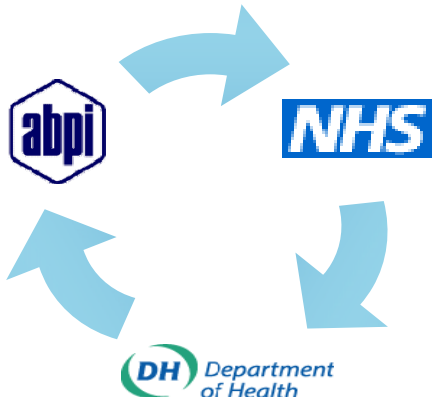
AND

Will help in answering the broader question of how to plan capacity in chemotherapy service delivery within the NHS

The POIP was formed and it initiated the C-Port project

- **The Pharmaceutical Oncology Initiative Partnership** is a working partnership of the:

  - Pharmaceutical Oncology Initiative Group (POI) of the **Association of the British Pharmaceutical Industry (ABPI)**



  - **The Cancer Services Collaborative "Improvement Partnership" (CSCIP)**
  - The Cancer Action Team (CAT) of the **Department of Health (DH)**

- **The aims and objectives of the Partnership are to identify and implement activities (projects) of mutual interest that would ultimately benefit cancer patients by improving uptake and access to cancer drugs.**

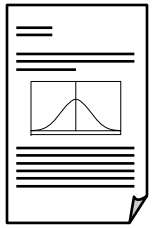
C-Port as a means to an end, not an end by itself

- Redesigning chemotherapy services is not just about using a tool
- C-Port aims at facilitating and making more effective the process redesign task, but as a system, it is only one component within the broader science of process improvement

Understand the real-life situation

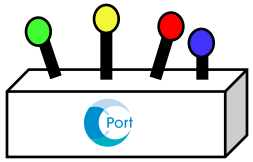
- What is the problem?
- Break it down into smaller issues
- Validate with relevant stakeholders

Hypothesise solutions



- What is the current situation?
- Measure and analyse data
- What could be the potential solutions to the problem?
- What variables are involved?

Effectively use C-PORT



- Translate hypothesised solutions into C-PORT items
- Create scenarios and run simulations
- Identify most optimal scenarios and optimise

Complement simulation results

- What additional data / analysis is required to support C-PORT findings?
- Formulate your case thoroughly

Implement change

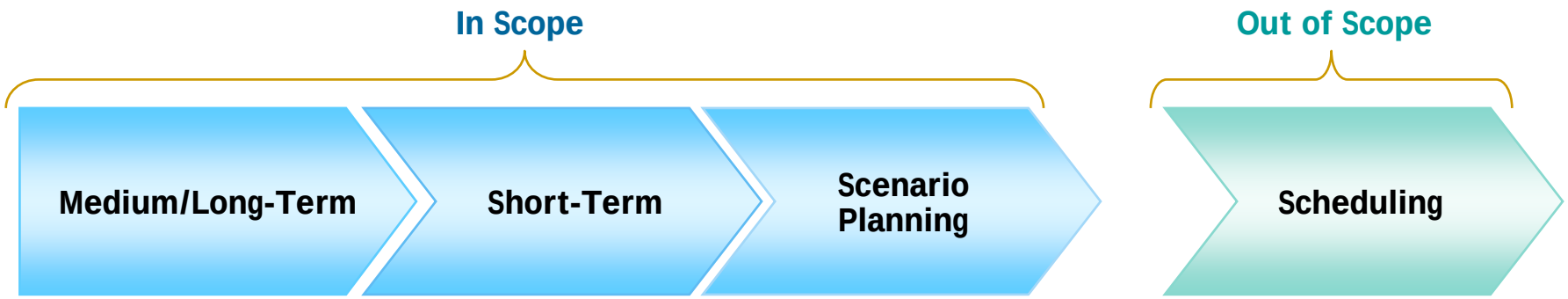
- Develop an implementation plan with clear milestones and timelines
- Get buy-in from stakeholders
- Measure results

Therefore, C-Port is …

- … A toolkit that helps the NHS better understand resource and capacity planning
- … An initiative launched by the POIP that attempts to address the important and difficult task of planning capacity in chemotherapy
- … A component within the process redesign science (so, a means to an end rather than an end by itself)

- **FREE to all NHS Chemotherapy services**

The scope of the tool allows effective capacity planning but not scheduling



- Forward looking 1-3 years
- Impact of changes in demographics
- Impact of new drugs and/or protocols
- Infrastructure planning, e.g. how large should the unit be, how many beds
- Increase usage of existing protocols

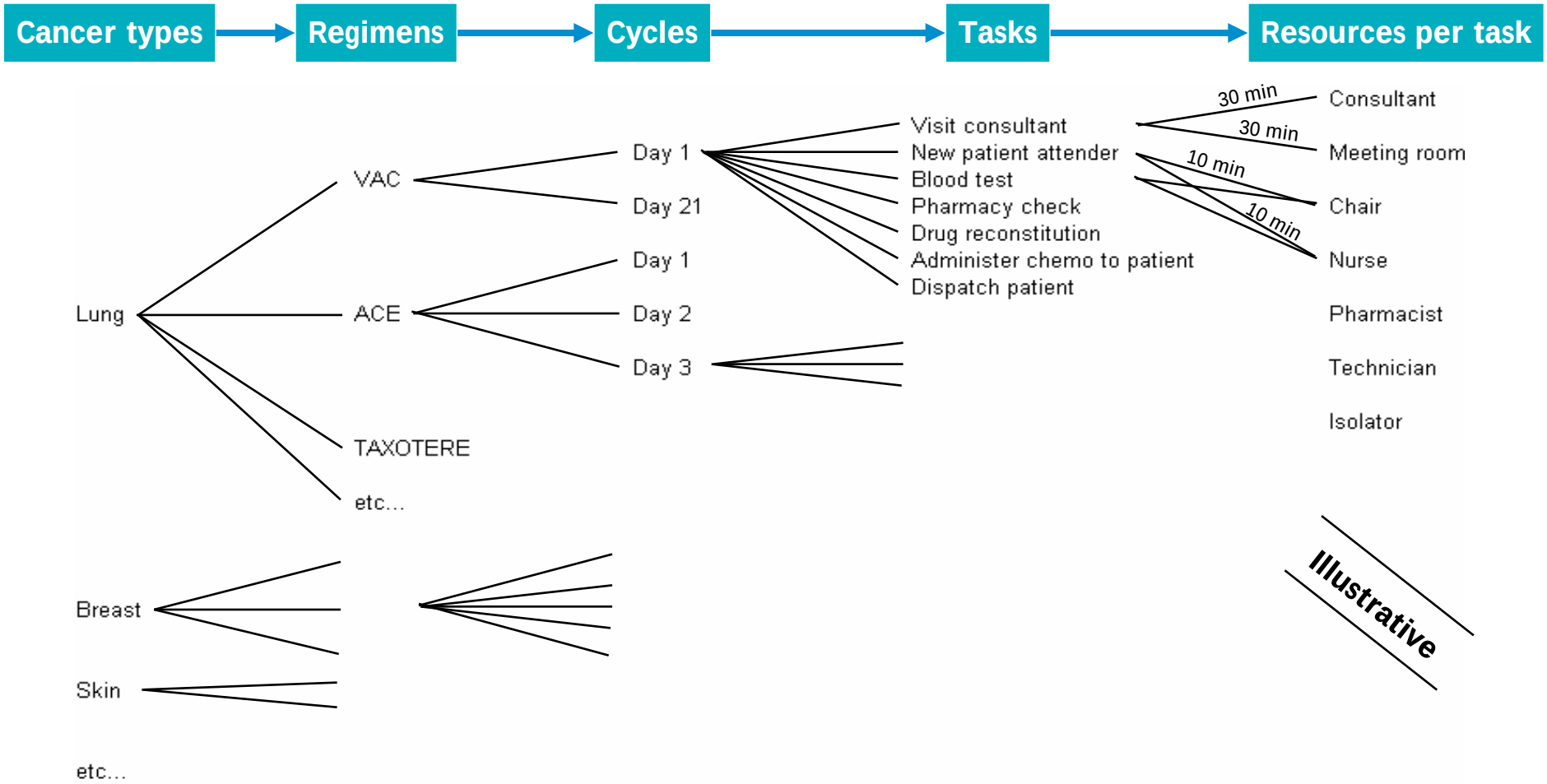
- Annual planning and input to budget
- Optimisation of:
  - Nurses versus beds versus isolators
  - Shift patterns
- Develop understanding of impact from new drugs, protocols

- Immanent term
- Planning holidays, training and understanding risks
- Running what-ifs in order to check coverage

- Which patients will be treated when
- Allocation of beds
- ..

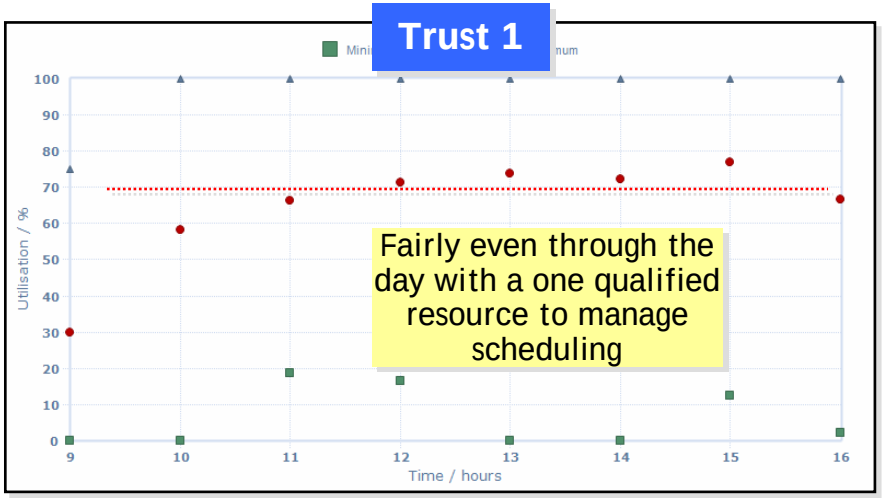
Because of the complex processes involved in chemotherapy delivery, and the innate uncertainty in many of the variables involved, C-PORT has been developed as a simulator

The “transformation rules” of the chemo service delivery involve regimens, cycles and tasks

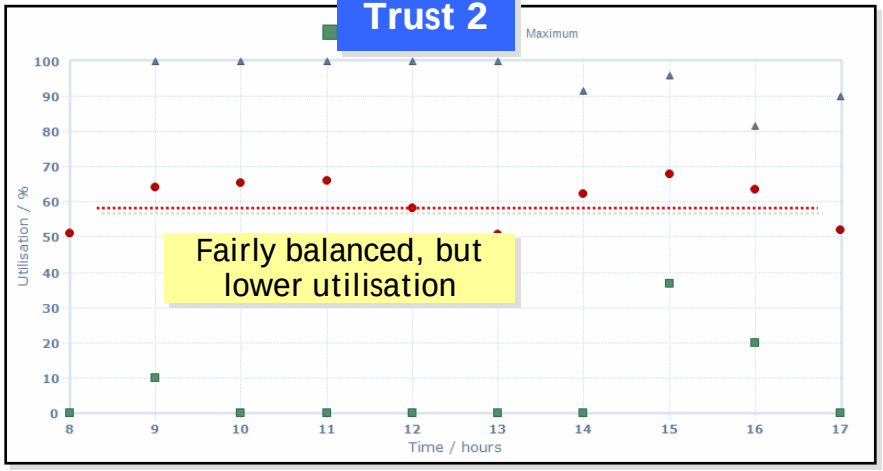


We are beginning to be able to make meaningful comparisons between trust data

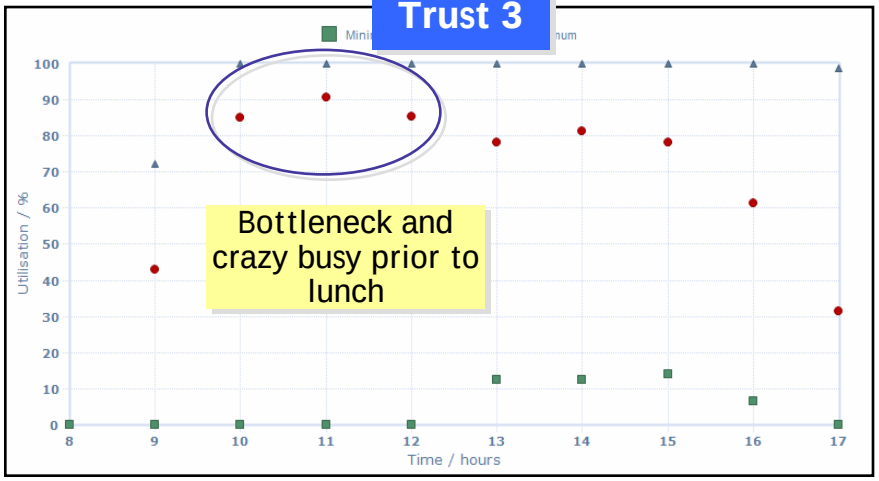
Trust 1



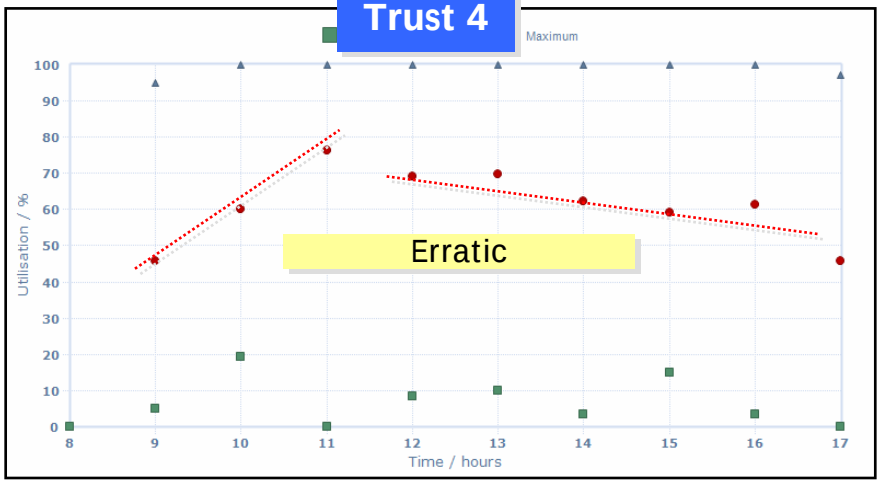
Trust 2



Trust 3



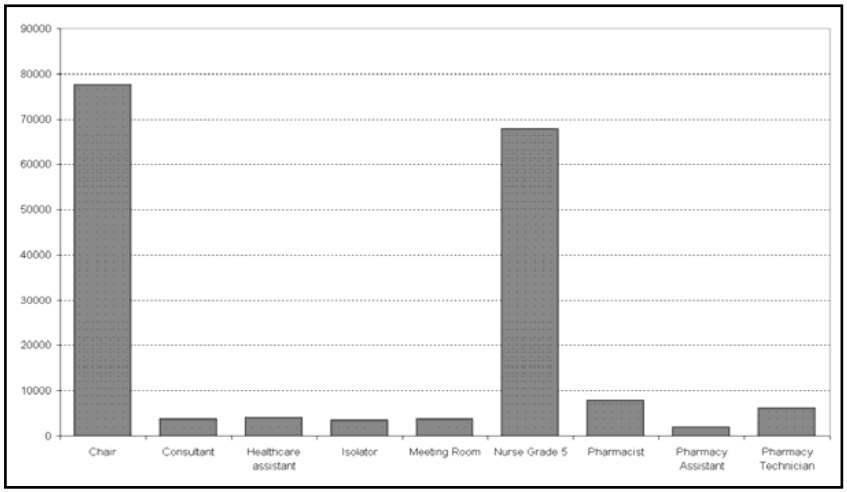
Trust 4



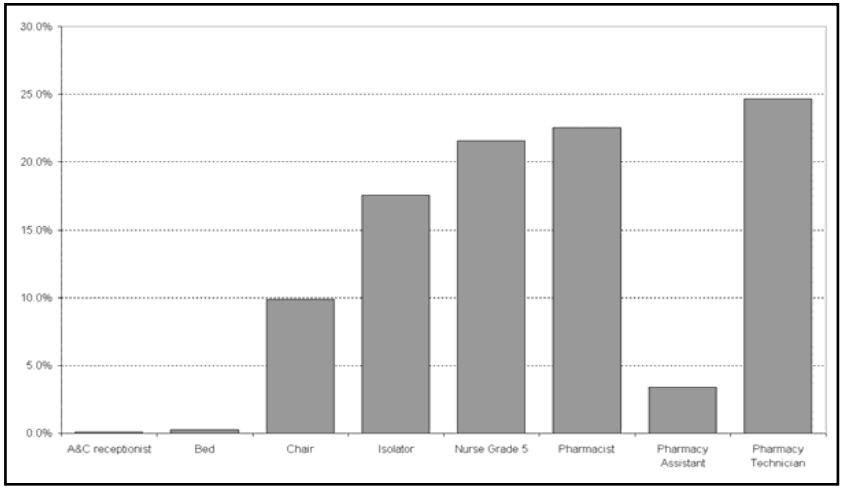
There was a great benefit in debating the reasons for these patterns across a network.

Insight vary considerably and the different reports are useful at reviewing the “Trust Operations” from multiple angles

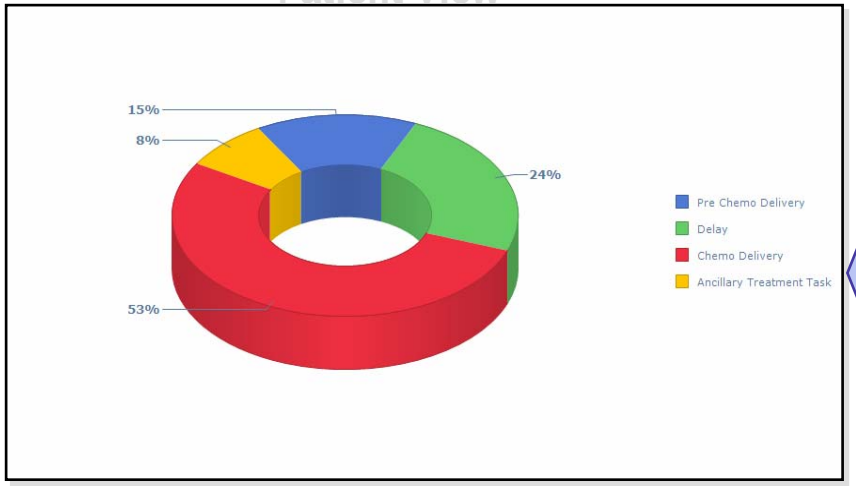
Clear Bottleneck



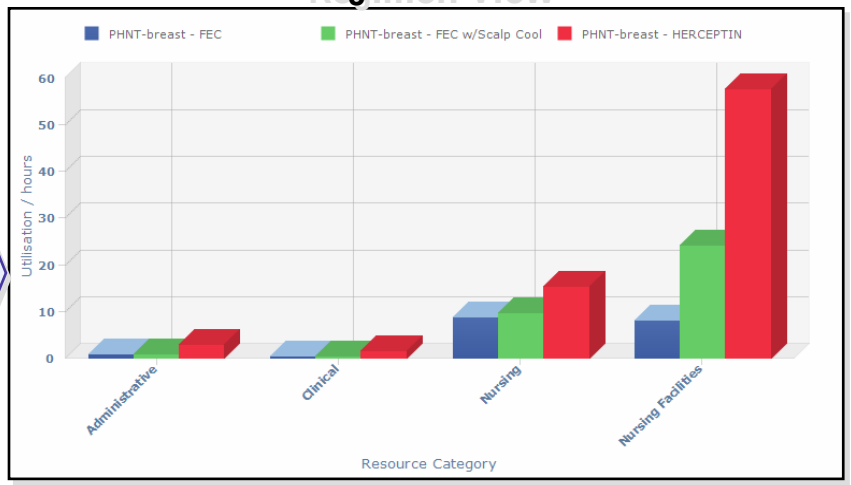
Bottleneck varies throughout the day



Patient View



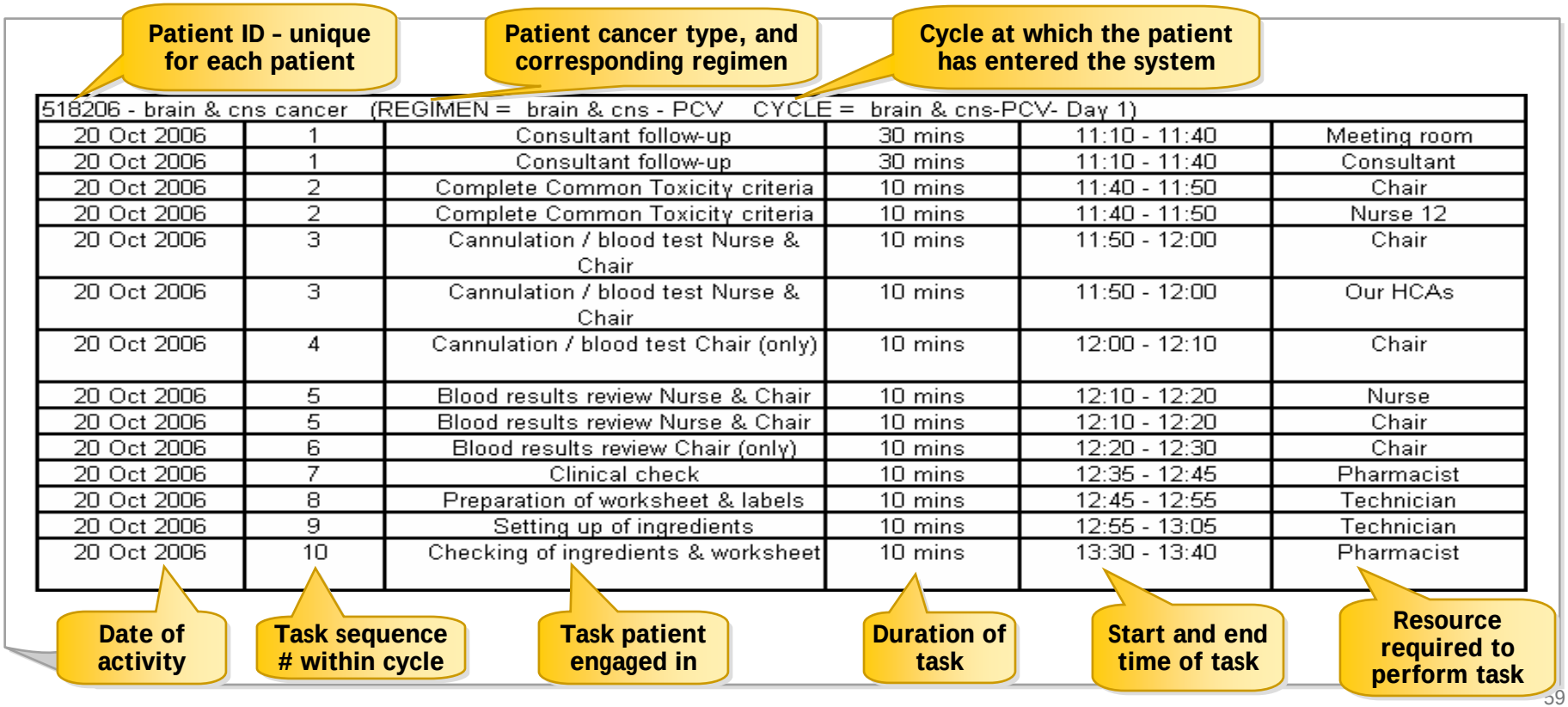
Regimen View



Simulation reports

Patient Log

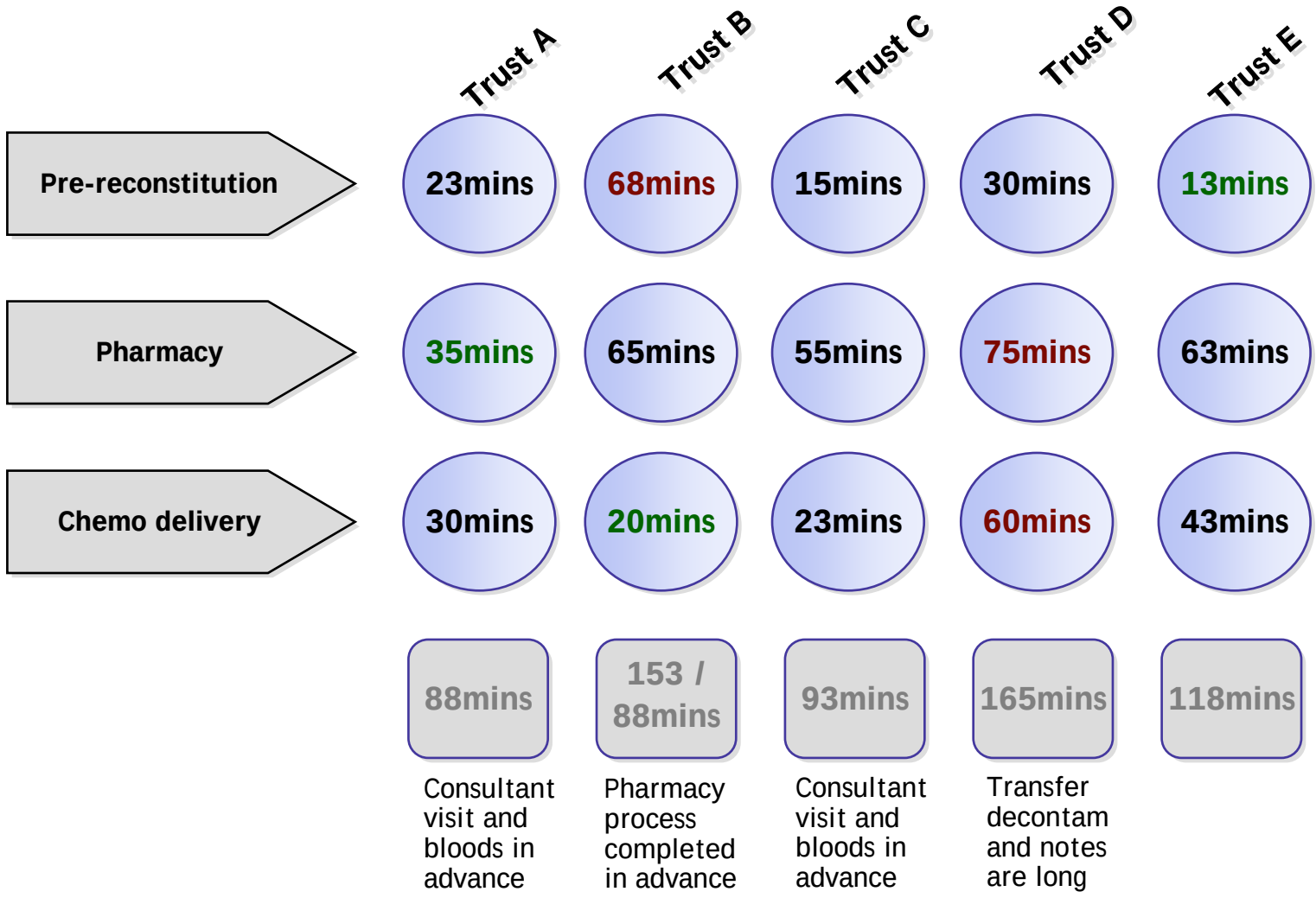
- Displays the event details for each patient that enters the system over the date range of the simulation, across all cancers and regimens
- Tasks are listed sequentially for each patient
- The raw data is used to generate other C-Port reports, and can be used to create new user-defined reports



518206 - brain & cns cancer (REGIMEN = brain & cns - PCV CYCLE = brain & cns-PCV- Day 1)					
20 Oct 2006	1	Consultant follow-up	30 mins	11:10 - 11:40	Meeting room
20 Oct 2006	1	Consultant follow-up	30 mins	11:10 - 11:40	Consultant
20 Oct 2006	2	Complete Common Toxicity criteria	10 mins	11:40 - 11:50	Chair
20 Oct 2006	2	Complete Common Toxicity criteria	10 mins	11:40 - 11:50	Nurse 12
20 Oct 2006	3	Cannulation / blood test Nurse & Chair	10 mins	11:50 - 12:00	Chair
20 Oct 2006	3	Cannulation / blood test Nurse & Chair	10 mins	11:50 - 12:00	Our HCAs
20 Oct 2006	4	Cannulation / blood test Chair (only)	10 mins	12:00 - 12:10	Chair
20 Oct 2006	5	Blood results review Nurse & Chair	10 mins	12:10 - 12:20	Nurse
20 Oct 2006	5	Blood results review Nurse & Chair	10 mins	12:10 - 12:20	Chair
20 Oct 2006	6	Blood results review Chair (only)	10 mins	12:20 - 12:30	Chair
20 Oct 2006	7	Clinical check	10 mins	12:35 - 12:45	Pharmacist
20 Oct 2006	8	Preparation of worksheet & labels	10 mins	12:45 - 12:55	Technician
20 Oct 2006	9	Setting up of ingredients	10 mins	12:55 - 13:05	Technician
20 Oct 2006	10	Checking of ingredients & worksheet	10 mins	13:30 - 13:40	Pharmacist

Comparison of process times across the network can be made...

Note: timings may not be directly comparable

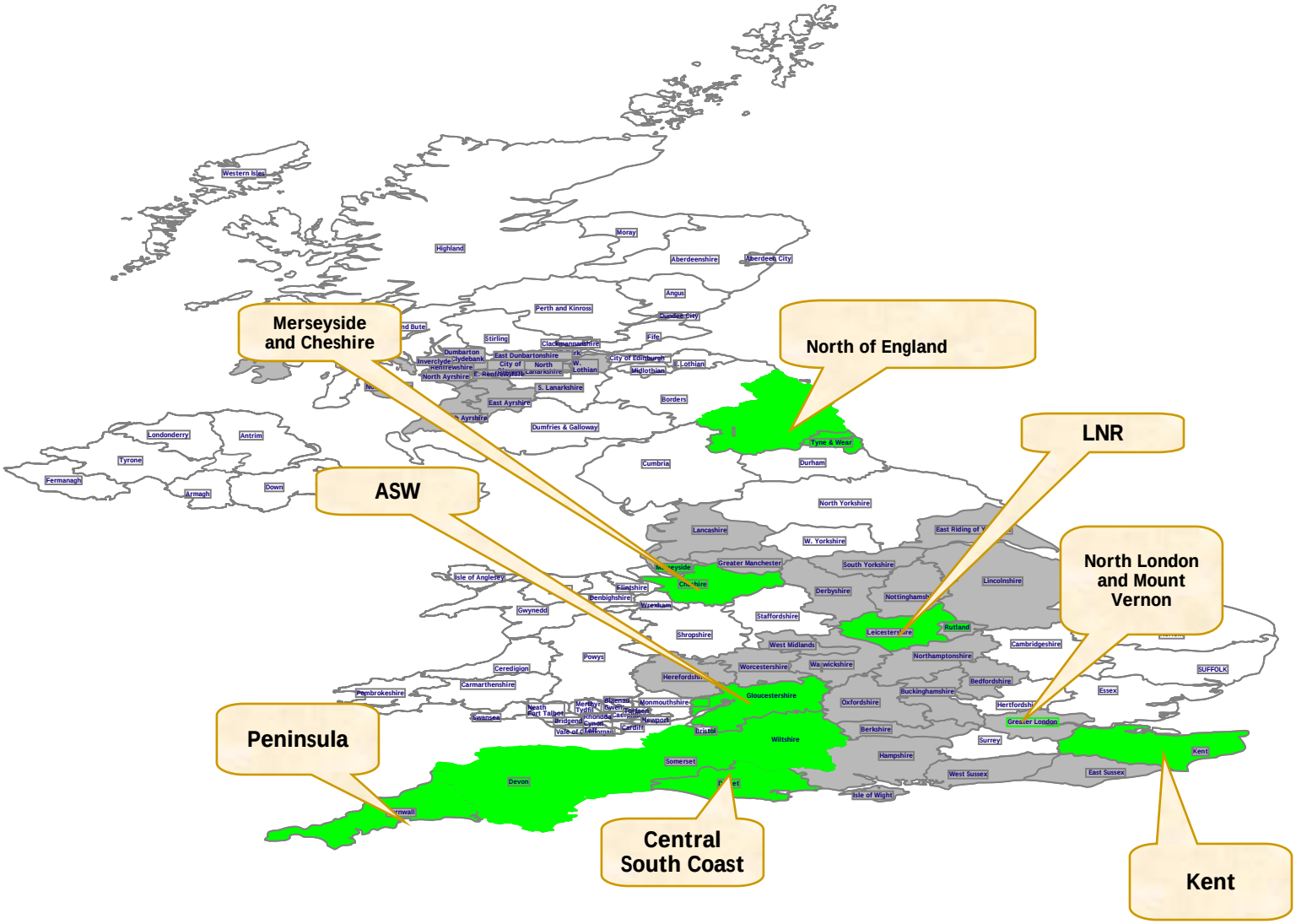


There are a number of key success factors that need to be considered

C-Port is very powerful and WILL help you significantly improve the service that you provide however:

- The initiative needs to be strongly lead and supported from the network and within the units
- Spending time getting the initial data is somewhat painful, but the better the data is the better C-Port can help you reduce time and effort optimising your service
- C-Port is not a one-off exercise – it should be seen as the fastest way of testing any proposed changes to your service over the coming years.
- Buy-in from clinicians, nursing, pharmacy and managers are all crucial to making C-Port work – you need to spend sometime "selling" its benefits - we can help you do this
- CAT / CSCIP wants to give as much support as it can – but we can only work at the pace you set.

Current Activity for roll out



- FOR more info please contact

marie.palmer@cscip.nhs.uk or via mobile 07880725207

3 Newly appointed staff

Claire Barton

John Wheeler

Michael Yare

Download a brochure at www.cancerimprovement.nhs.uk/chemotherapy

The clinical experience

Chemotherapy **P**lanning **O**ncology **R**esource **T**ool

Deborah Grimes, Lead Chemotherapy Nurse, University Hospital North Durham

Why did we feel that C.Port would be beneficial?

- Following capacity and flow issues identified as part of the Chemotherapy Service Improvement Project, which commenced in September 2006.
- The Network had signed up as a pilot site for C. Port, we were given the opportunity to access C.Port as a means of addressing some of the issues.
- As a team we were eager to standardise chemotherapy delivery and address capacity issues.
- Commitment to improve the service for patients

Starting point- setting the baseline

- Discussions with the Service Improvement Facilitator (SIF).
- Time and resources.
- Clinical staff did not have time to collect data, SIF agreed to do the work with consultation from clinical staff.
- Access problems with C.Port therefore a spreadsheet was used as alternative collection tool to collect the baseline data to upload to C.Port
- Action plan to create the baseline.

Data collection

- Meetings were set up between the Chemotherapy Day Unit Manager and SIF
- A list of all chemotherapy regimens delivered in the Day Unit was generated
- Created Individual profiles for each regimen
- Timings for specific tasks were standardised

Findings so far

Benefits so far

- Standardisation of tasks and reduction in variation in practice
- Enhanced team work
- Highlighted examples of good practice
- Highlighted areas for improvement

Drawbacks

- Time consuming collecting data and creating baseline adding capacity modifiers
- Access problems causing delays
- Difficulty running simulations so far- teething problems!

What do we hope to gain from C.Port?

- Plan and work efficiently within recognised capacity and resources, particularly when planning for delivery of new regimens.
- To evaluate the effect of changes to the service without having to test it in a “live” environment and without financial commitment.
- To provide evidence towards business cases and help us to maintain a stronger position when trying to secure funding
- To effectively monitor and audit workload, capacity and processes
- Ultimately to improve the patient experience

Simulations

- To assess the impact of adjuvant herceptin
- To compare new regimens to old eg; A/CMF to FEC-Docetaxel
- Maintenance rituximab

What next?

- An exciting time ahead to see the benefits of carrying out simulations and adapting the service to obtain maximum efficiency
- With acknowledgements to Anne Louise Grant, Service Improvement Facilitator who has worked tirelessly to create the baseline in North Durham