

THE STAR APPROACH

Identifying value for money in COPD

Hartlepool and Stockton-on-Tees CCG

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*Hartlepool and Stockton-on-Tees
Clinical Commissioning Group*


North of England
Commissioning Support



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Introduction

- The Star Approach was implemented by NECS on behalf of Hartlepool & Stockton on Tees CCG to address the need for greater spending efficiencies in COPD.
- This was a collaborative piece of work between NECS and the London School of Economics, who developed the Star Approach, and the University of Oxford. Two experts from these institutions supported us throughout the implementation to ensure that we adhered to the principles of the process
- Star is intended to be one method for understanding where to prioritise resources and needs to be used in conjunction with other tools and approaches. It provides a wide stakeholder group with a collective understanding of the issues around resource allocation for a specific service or condition.
- The main objective of this pilot was to test the process while also applying it meaningfully to understand the value for money associated with COPD interventions.
- This report has been put together so that key findings are included toward the beginning with more detail in the subsequent sections.

Executive Summary

- Star is potentially a valuable approach to contributing evidence to support resource reallocation within a health economy.
- Chronic Obstructive Pulmonary Disease (COPD) is a long-term condition where there are a range of strategies across public health, primary and secondary care which makes it suitable for analysis through the Star approach.
- Within this pilot, a very strong case was made for commissioning Cognitive Behaviour Therapy (CBT) in the COPD pathway.
- The benefit from inhalers could be dramatically increased and costs reduced by improving inhaler technique, also reducing the need to step up treatment and prevent exacerbations.
- Reinforced the message that effective smoking cessation is by far the most effective intervention to prevent worsening of COPD and improve quality of life and life expectancy.
- Learning from this process is now feeding into the Integrated personalised commissioning programme.

The Star Approach: Overview

WORKSHOP 1

Participants brainstorm and consider interventions, trying to answer the following questions:

How many people are treated?

How many people benefit?

What is the cost?

At the end of this workshop, there should be a list of 6-10 interventions with estimates for numbers treated, numbers who benefit and the intervention cost*.

WORKSHOP 2

Participants measure the value of a benefit, by thinking about these questions

What is quality of life before intervention?

What is quality of life after intervention?

Does the intervention increase life expectancy?

In addition to the numbers from the first workshop, there is now a figure for the benefit, so the Star tool has all the inputs necessary to be used:

THE STAR TOOL

The Star Tool plays its part in the final section of workshop 2. All the figures are fed into the application, which then generates triangles that show the Value for Money of interventions. Participants then discuss the findings, attempting to arrive at consensus.

* Part of NECS's role was to ensure accuracy around the estimates sourced in workshop 1. This research work takes place between the two workshops

Why COPD?

- Hartlepool and Stockton-On-Tees Clinical Commissioning Group (HAST CCG) has recently been engaged with North Tees and Hartlepool NHS Trust in a programme of work to review and re-specify their respiratory pathway.
- HAST CCG is also working on a programme looking at 'Integrated Personalised Commissioning (IPC)', and specifically at COPD care provision. In addition, COPD continues to be a significant factor in a high non-elective spend and high prescribing costs in primary care.
- These were the key drivers for NECS to focus on COPD with the Star Approach. This suggestion was presented to the CCG delivery team and it was agreed to take this forward for this pilot. In addition, LSE had experience from an earlier project using the Star Approach to look at COPD.

Workshops



A wide range of stakeholders was asked to take part in the HAST workshops. This group provided the different viewpoints of those either working or affected by COPD in the local area. The participants in our workshops are listed on the following page.



In addition to the stakeholders, representatives from NECS attended to help facilitate the discussion or provide relevant expertise.

Workshop Participants

- Gwyn Bevan – founder of the Star Approach, London School of Economics
- Karen Elliott – Senior Commissioning Finance Manager, NECS
- Richard Glover – Project Manager, NECS
- Richard Hall – Clinical Commissioning Intelligence Specialist, NECS
- Richard Harrety – Senior Commissioning Manager, NECS
- Sam Harrison – Senior Communications & Engagement Manager
- Evelyn Leck – Patient
- Catherine Monaghan – Respiratory Consultant, North University Hospital of North Tees
- Nicola D'Northwood - General Manager – Older Persons/Care Pathways, University Hospital of North Tees
- Victoria Ononeze – Public Health Specialist, Tees Valley Public Health
- Joseph Slaughter – Patient
- Michelle Slaughter – Carer
- Will Smith – Senior Commissioning Support Officer, NECS
- Bill Stevenson – Patient
- Debbie Thomas – Carer & Breathe Easy Support Group Leader, Hartlepool
- Denholm Thomas – Patient
- Nick Timlin – GP & CCG Lead, Hartlepool & Stockton-on-Tees CCG
- Peter Tindall - Associate Director of Strategic Planning and Development, University Hospital of North Tees
- Kevin Vickers – Data Analyst, NECS
- Bev Wears – Service Development, British Lung Foundation North
- Elizabeth Weledji – Practice Pharmacist, NECS
- Corinne Wilson – Senior Project Manager, NECS
- Jenny Williams – Business Intelligence Analyst, NECS
- Dorothy Wood – Senior Clinical Respiratory Matron, Hartlepool One Life



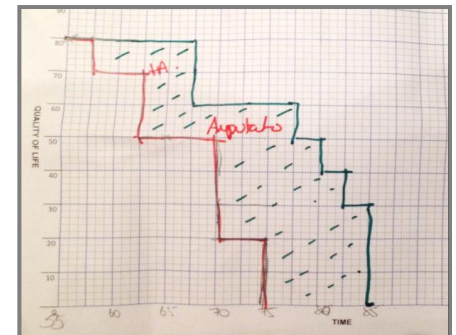
Analysing Interventions

It's important to point out that this value for money analysis looks at the impact of an intervention from the time it is provided to the end of a patient's life. Some are one-off interventions whilst others are provided recurrently. Reducing this timeframe can mean that the value for money of each intervention can go up or down, which is something for commissioners to bear in mind when considering the outputs from the Star process.

To measure the benefit of an intervention, we had to complete a series of tasks. First, identify the patient(s) most likely to access it. Second, identify the point in time that they would access it. Then draw two lines from that point: one to track their quality of life without the Intervention and a second showing what it would look like with the intervention.

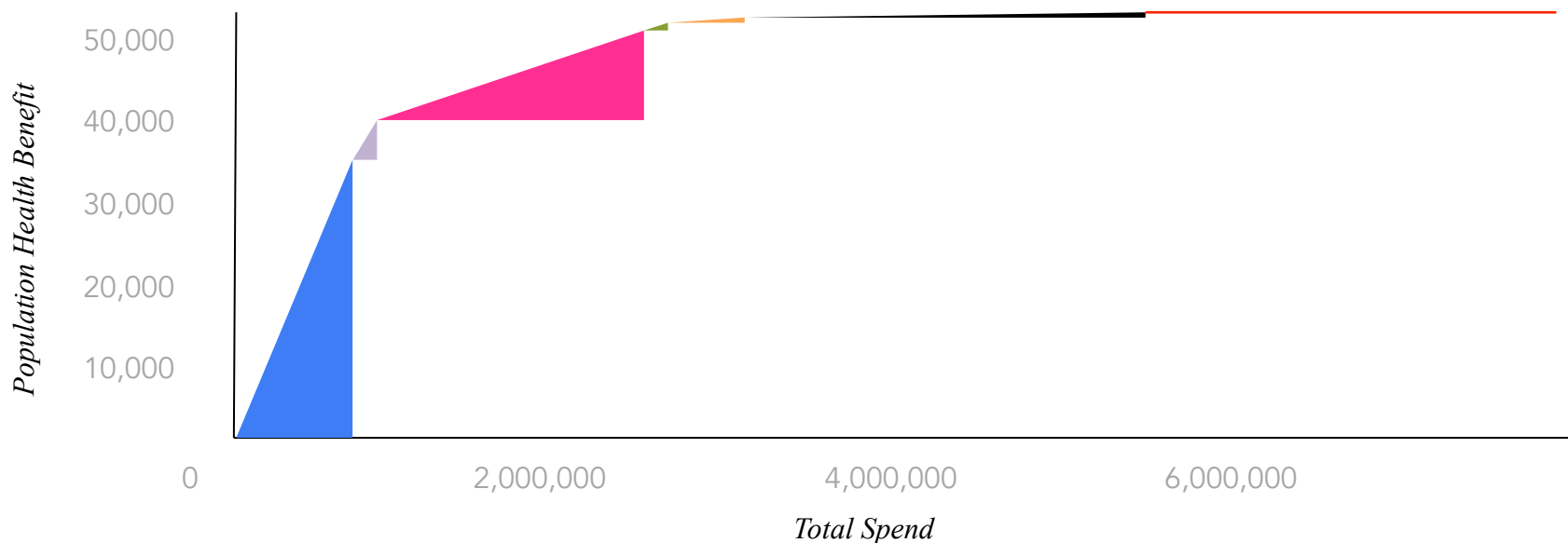
This was done very simply, by providing a sheet of graph paper for participants to draw on (see right).

Once we had these two lines, we could calculate the area between them to give the total value of that intervention to an individual (in QALYs).

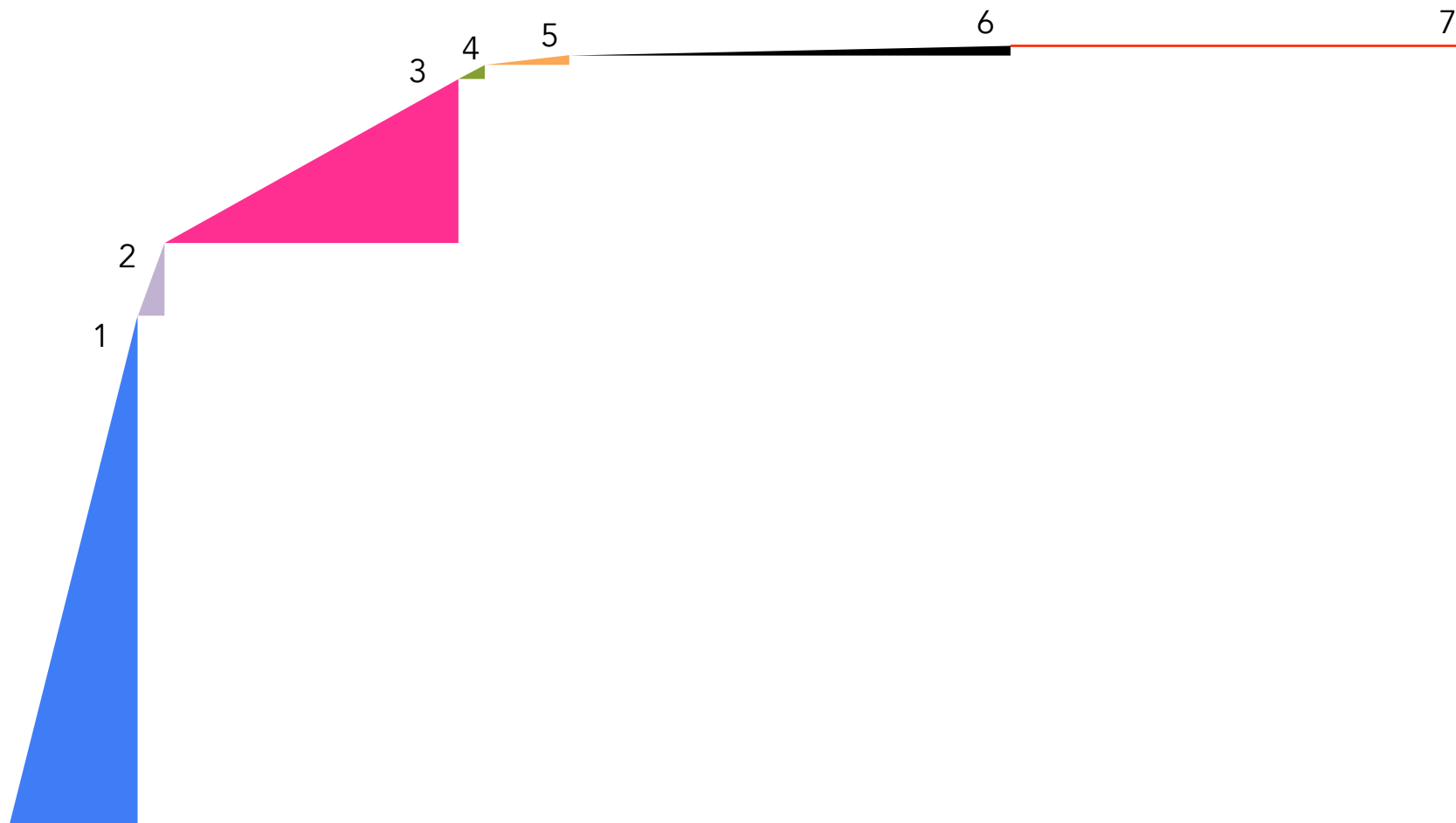


Efficiency Frontier

The diagram below is called an Efficiency Frontier. It shows the value for money profile for the interventions evaluated. Each triangle represents one intervention; a steeper triangle means better value for money. The highest value for money intervention is shown on the left, with the value for money decreasing as you get closer to the right hand side of the chart. The height of a triangle is the total benefit to the population and the width is the total cost.



*See following page for diagram on a larger scale with a key to the interventions.



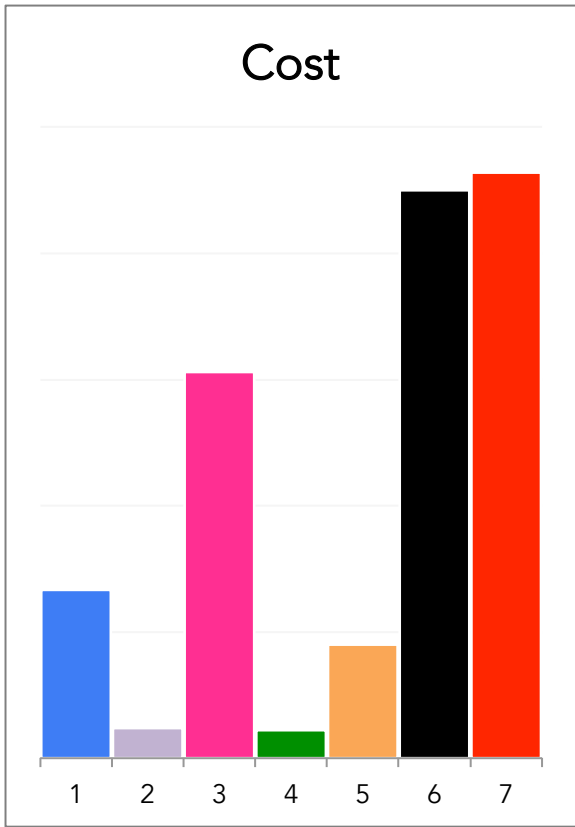
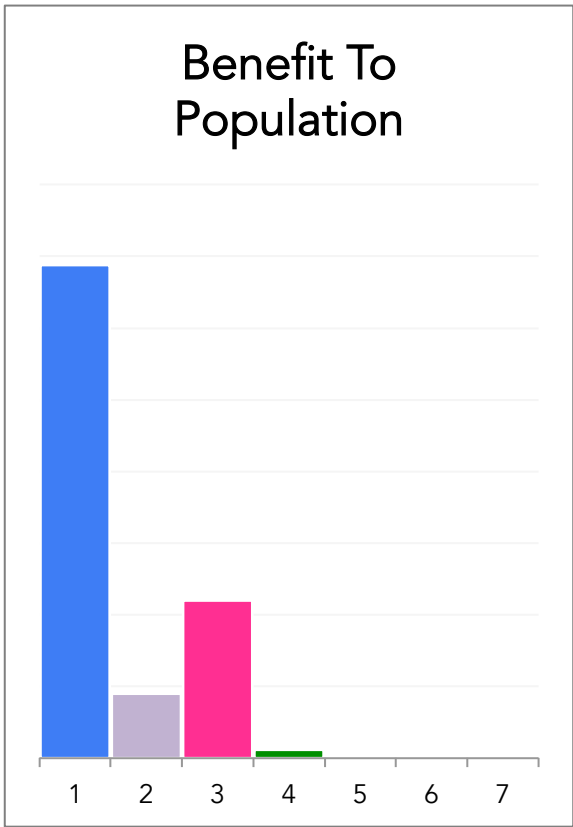
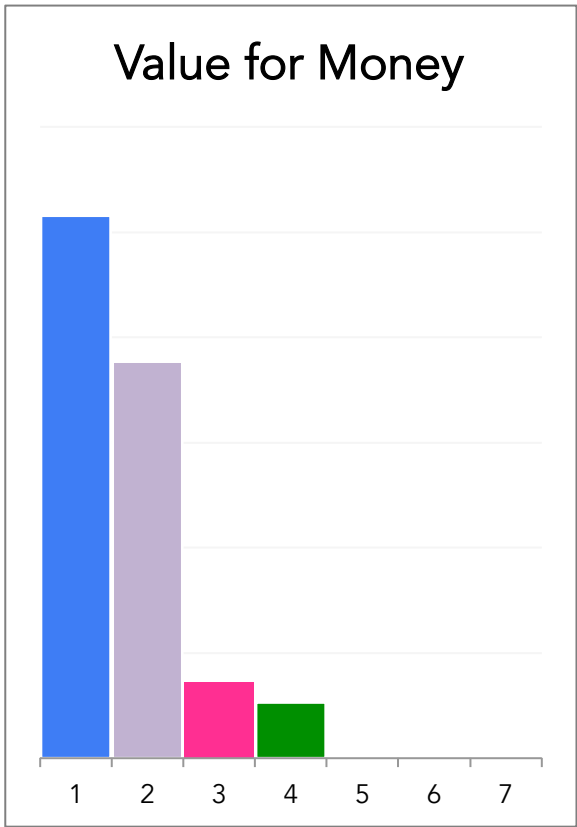
1. Smoking Cessation
2. CBT

3. Flu Jab
4. Pulmonary Rehabilitation

5. Good Inhaler Technique
6. Poor Inhaler Technique

7. Acute Admissions





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Smoking Cessation

The evidence for getting people to stop smoking and the effect this has on COPD is unquestionable in terms of patient benefit.

In the workshops, there was immediate consensus that smoking cessation was the intervention most likely to have the greatest impact at a population level. This was borne out by the analysis where its benefit at population level was over 3 times that of the next best intervention.

- *Highest value for money*
- *Greatest benefit to individual*
- *Greatest benefit to population*

Total intervention cost (£)	666,900
Number of people who benefit	1,678
Benefit to individual (QALY)	20.5
Benefit to population (QALY)	34,399


Cognitive Behaviour Therapy (CBT)

- *Second highest value for money*
- *Second least costly*

CBT is not currently a part of the COPD pathway. It was brought up in relation to the negative impact that patients said anxiety had on their condition in terms of breathlessness, exacerbations and emergency admissions.

Clinicians also gave their support to this but while they were previously aware of anxiety as an issue, the patients' emphasis of its importance was a revelation.

As this was a speculative intervention we spoke with Dr. Karen Heslop Marshall at Newcastle University who has conducted a study with a strong evidence base that strengthens the argument for CBT as a high value for money intervention.



Total intervention cost (£)	119,350
Number of people who benefit	1,500
Benefit to individual (QALY)	3
Benefit to population (QALY)	4500

Influenza Immunisation

- *Third highest value for money*
- *Third most costly*

Flu immunisation is well recognised as a valuable intervention for preventing exacerbations in people with COPD. However, as it's already provided to the majority of patients with long-term conditions, it's not seen as a major area where improvements could be seen.

Total intervention cost (£)	1,530,000
Number of people who benefit	2,500
Benefit to individual (QALY)	4.4
Benefit to population (QALY)	11,000

Pulmonary Rehabilitation

Reduced function caused by COPD can be combatted by exercise – the principal component of pulmonary rehabilitation – alongside education and support.

There were several advocates for pulmonary rehabilitation but differing viewpoints as to how effective it is, owing to issues with uptake. Patients commented on the difficulty accessing this service due to location and time.

- *Fourth highest value for money*
- *Least costly*

Total intervention cost (£)	111,000
Number of people who benefit	140
Benefit to individual (QALY)	4.2
Benefit to population (QALY)	588

Good Inhaler Technique

- *Third lowest value for money*

A large number of COPD patients will use an inhaler at some point, with many moving on to a combination of up to three inhalers. There is a high recurrent and long-term cost associated with inhalers as an intervention.

One of our stakeholders, a pharmacist, stated that incorrect inhaler technique is widespread. We therefore decided to contrast the benefits that good inhaler technique brings with those of poor inhaler technique.

Drugs also don't extend life expectancy for patients suffering with COPD.

Total intervention cost (£)	450,000
Number of people who benefit	30
Benefit to individual (QALY)	3
Benefit to population (QALY)	90

Poor Inhaler Technique

- *Second lowest value for money*
- *Second most costly*

One of the main outcomes of the discussion around inhalers was that they don't provide a great deal of benefit to the patient.

The difference in benefit is marked however, when they use it correctly, as demonstrated by the value that the group arrived at here, which contrasts unfavourably with the findings on the previous page.

Total intervention cost (£)	2,250,000
Number of people who benefit	150
Benefit to individual (QALY)	0.25
Benefit to population (QALY)	37.5

Acute Admissions

- *Lowest value for money*
- *Smallest benefit to population*
- *Most costly*

Acute admissions are the bête noire of most clinical pathways. Predictably, our participants all agreed that they incur a huge cost and bring negligible – if any – benefit to a patient.

They represent a necessary outcome when other strategies have failed through lack of appropriate diagnosis, or ongoing therapeutic management.

Total intervention cost (£)	2,320,000
Number of people who benefit	928
Benefit to individual (QALY)	0
Benefit to population (QALY)	0

Other Issues

There was a lot of ground to cover in the two afternoon sessions so it was important for facilitators to keep discussions on topic. It was clear that certain issues were bugbears for patients and clinical staff alike but if these couldn't be included in the Star evaluation we ensured that they were noted down to be raised at a later date with the CCG or relevant body. These topics included :

Administrative issues with the new 'single point of access' (SPA) in Hartlepool

Patients and clinical staff highlighted the difficulty that patients had in speaking to a trusted and qualified member of staff over the phone, since the change to a single point of access. The problems that patients highlighted were corroborated by the figures reflecting the significant drop in numbers now using the service.

Cheaper 'black triangle' COPD drugs

Clinical staff asked why Hartlepool & Stockton-on Tees could not prescribe drugs that other parts of the country are using for the treatment of COPD. While recently approved, these drugs have proven efficacy and are far less costly.

Public Health Lung Health Check initiative

The Lung Health check campaign, targeting 35 year old+ smokers in the local area at risk of developing COPD, was an area of interest for Public Health. They wanted to know what effect this screening was having on emergency admissions in the area. We decided that this could be effectively evaluated in a separate piece of analysis.

Learning I

From the pilot we learned:

- The relative 'value for money' for a variety of interventions used to manage patients with COPD
- 'Scale' is a factor that is often overlooked – even very beneficial interventions may not provide value at a population level
- The likely resource requirement to run the Star Approach for a single disease area. This is being worked up.
- Some limitations of the process:
 - It doesn't enumerate the full cost of delivering services for this cohort of patients
- The main benefits are:
 - Engaging a wide stakeholder group, including clinicians, business managers and service users
 - The method is designed to ensure everyone can follow the process (to some degree)
 - Doesn't depend on exact costs and benefits – intends to show relative value of interventions

Some questions still remain:

- How do we incorporate other interventions that weren't explicitly analysed through this process?
- Should 'Star' be incorporated as a routine activity for a CCG? And if so, how? And to what extent?
- What is the place of 'Star' alongside other prioritisation methods (e.g. Portsmouth Scorecard)?
- Can we come up with a model for using some 'off-the-shelf' analyses so that each CCG doesn't need to repeat the same exercise from scratch every time?

Learning II

This pilot has demonstrated that bringing together the relevant decision-makers and other stakeholders can start to make some headway in changing the management of COPD in Hartlepool and Stockton-On-Tees. The learning and shared awareness from this process – for both the Star team and all the stakeholders – means that there will be some added value for the programmes that follow.

IPC (Integrated Personalised Commissioning) is concerned with addressing many of the issues that were discussed at length at each of the workshops, and the meetings that are happening now for IPC are building on those initial sessions. Also, specific findings, such as the evidence that CBT may be beneficial for this cohort of patients will feed into both population-based commissioning and into the IPC programme.

However, this information needs to be used in conjunction with a review of commissioning and contracting models as current block contracts don't offer the flexibility that is required to allow shifting of resource around parts of the system.

This pilot also highlights where apparently good value interventions (such as pulmonary rehab) are not having as large an impact as could be achieved, through simply getting more patients through the service.

Next Steps

- Commissioners of any component of the respiratory pathway (specifically COPD) should familiarise themselves with the output from this pilot and the future possibilities of using Star and other prioritisation techniques.
- IPC can use the learning from this pilot both directly in terms of components of a 'package of care' and indirectly in terms of awareness amongst those who participated.
- Discuss the potential place of Star and similar approaches within the commissioning process – for HAST CCG and in general.