



## Achieving Value in Health Systems

May 2013

### Foreword

There are many ways of achieving value in health systems. This paper looks at the NHS Right Care approach which practitioners may find helpful when trying to identify areas of healthcare spend to review. As an NHS organisation, Right Care is now sponsored by NHS England and Public Health England, and is focused on increasing value for patients and commissioners.

As there are a number approaches to this challenge, the paper looks to inform the debate in this area: the Right Care approach can support an understanding of where priorities should lie. It is however important that the focus for all commissioners should be on the delivery of quality services for patients and the on-going review and improvement of those services by focusing on effective partnership working and the practical things that can be done to deliver change.

This paper does not represent the views or a recommended approach of the Healthcare Financial Management Association (HFMA). In our view, it is vital that commissioners and providers of healthcare establish a common understanding to deliver changes to patient services while sharing in the associated risks.

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## **Introduction**

This paper describes one way in which a clinical commissioning group (CCG) may achieve financial sustainability by adopting an approach that follows the principles endorsed by the Right Care programme. The paper considers one of the ways in which efforts may be targeted to improve services for patients.

Right Care's approach supports the delivery of reform and improvement in a robust and systematic way, ensuring that the effort of the organisation and its partners is focused on transforming the right services to deliver improvements to patients while saving money. The programme is aimed at clinicians and commissioners but its approach is equally valid for healthcare providers, local authorities and health and wellbeing boards.

## **Part of a Decision-Making Process**

Before we look in detail at the Right Care approach, it is important to recognise that the steps outlined below must be part of an overall considered approach to decision-making, based on a business case to consider the options available, their impact and affordability. When considering a proposal to deliver improved services for patients it is important to consider:

- The impact on the local health economy
- The non-financial considerations
- The financial impact of the decision.

### ***The impact on the local health economy***

As well as the impact of any proposal on your own organisation, the effect within the local health economy needs to be clearly understood. It is important to consult with those organisations and patient groups affected by and associated with the proposal for example, the local authority, other healthcare providers and commissioners as well as the third sector where appropriate. Ideally, you are seeking to be pro-active and secure local support for the improvement.

Although a provider may claim that a particular reform, or group of reforms, will take them close to or beyond their economic 'tipping point', it is important to understand if this is indeed the case. For example, a hospital may well hit its tipping point as a consequence of a commissioner decision if it fails to change (close beds or reduce staff) but provider unwillingness to change or lack of acceptance of change cannot and should not be a barrier to improving patient care. It is also important to consider whether or not the proposed change-although detrimental to a particular provider, creates an efficiency that ensures the longer term sustainability of the service under review.

### ***Non-financial considerations***

As part of the wider decision-making process, evaluation of a number of non-financial criteria is fundamental to the project. Although not exhaustive in its coverage, the following table contains a number of areas to review within any business case supporting the proposed change:

Organisation-wide criteria	Risk and risk management  Equalities and reducing inequalities  Public and stakeholder involvement and engagement  Performance monitoring and management arrangements
Quality criteria	Impact assessment  Need  Appropriateness of proposal  Effectiveness of proposal in delivering quality standards and objectives
Public health criteria	Need  Anticipated health gain  Suitability to deliver need  Sustainability
Medical/ clinical governance criteria	Link to local and national core standards, objectives etc.  Appropriateness of proposal  Effectiveness of proposal in delivering quality standards and objectives
Leadership	Evidence of support/ endorsement/ engagement/ leadership from sponsoring clinician(s) and senior officers

## ***Financial considerations***

When undertaking the financial evaluation within a business case, it can be helpful to consider the following:

- Income, costs, savings and the net effect
- Affordability
- Sustainability (financial)
- Value for money
- Return on Investment and rate of return
- Phasing of all change projects (for example, net saving projects to begin at the start of the year to create financial space for net cost projects to come on stream later in the financial cycle)
- Financial mitigation of risks and impact ranges.

## **Principles and Key Ingredients of the Approach**

In order for the proposal and associated business case to receive support and approval, and given the pressures on all NHS organisations to deliver improvements for patients without compromising the quality of services it can be helpful to target specific areas for improvement. The Right Care approach is one approach which can be used to identify where to focus the organisation's efforts.

### ***Underlying principles: where-what-how***

The underlying principles of the Right Care approach are:

- Know **where** to look for opportunities to improve
- Use research and evidence to determine **what** needs to change to deliver that improvement
- Understand **how** to deliver the changes by adopting and following a systematic business process that drives delivery.

These principles, including how they support the domains of commissioning development and CCG authorisation<sup>1</sup>, can be captured graphically as:

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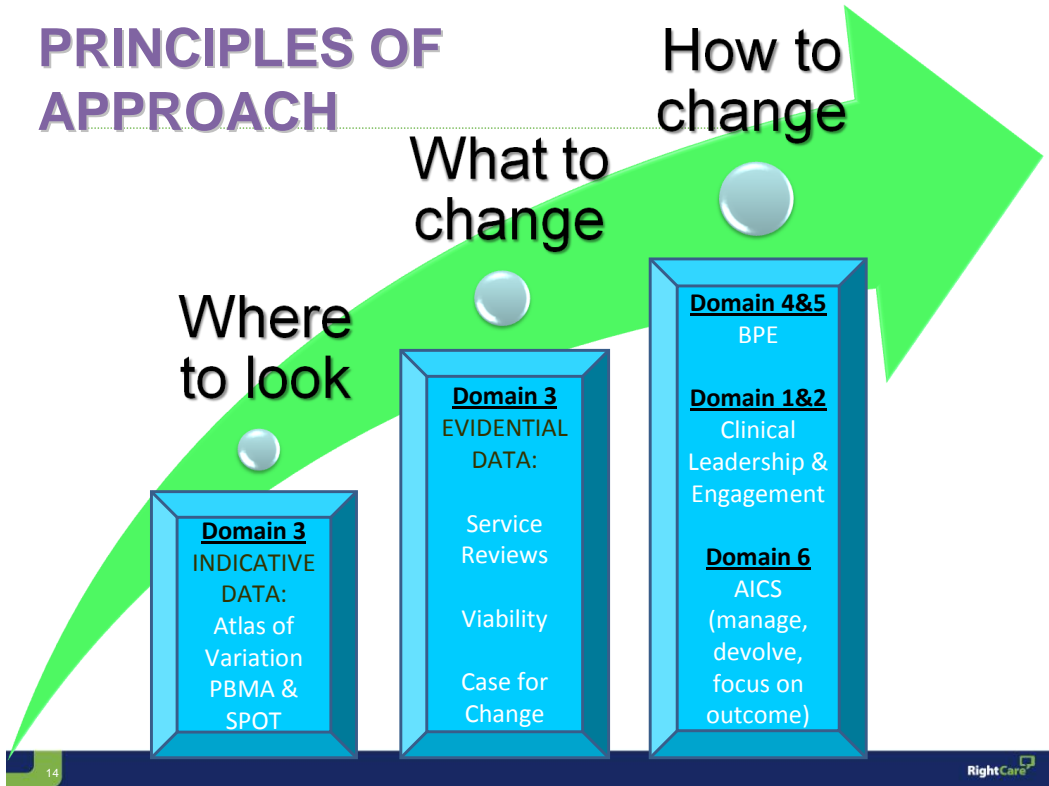
<sup>1</sup> Clinical commissioning groups authorisation resources, NHS England, 2012:  
[www.england.nhs.uk/resources/resources-for-ccgs/auth/ccg-auth-facts/](http://www.england.nhs.uk/resources/resources-for-ccgs/auth/ccg-auth-facts/)

# PRINCIPLES OF APPROACH

## How to change

## What to change

## Where to look



Key:

PBMA – Programme budgeting marginal analysis<sup>2</sup>

SPOT – Spend and outcome tool<sup>3</sup>

BPE – Business process engineering

AICS – Accountable integrated care systems

'Domains' refer to NHS England's authorisation domains for CCGs.

### ***Five key ingredients***

The five key ingredients that ensure that the approach is successful (the tools and Right Care products are described later in this briefing) are outlined below using Warrington Clinical Commissioning Group as an example:

<sup>2</sup> Further details can be found through the 'References and Further Reading' section at the end of the briefing

<sup>3</sup> As (1) above

“First, we ensure clinical and corporate leadership of the reform agenda. Second, we use indicative data to identify where to look for opportunities to change for example, where we are an outlier- spending more than our peers or having lower quality and outcomes. Right Care’s Atlas of Variation and programme budgeting data are invaluable at this stage, as is the intelligence available from the Commissioning Support Unit.

Third, we ensure full clinical engagement across the sectors and in each identified project area. Fourth, we use evidential data, such as Right Care’s Health Investment Packs and work on areas such as Shared Decision Making, to identify what an optimal system would look like for our demographic.

Finally, we use the principles of robust Business Process Engineering to drive transformation through the decision-making process, all the way to delivery of the change on the frontline.

All the reform projects (within the CCG) have improved quality and outcomes while at the same time, we have successfully delivered a £15m turnaround programme, a £12m Quality, Innovation, Productivity and prevention (QIPP) programme and are moving towards financial sustainability across the health system.”

In summary, the five key ingredients necessary to make the sure the approach is effective are:

1. Clinical and corporate leadership
2. Indicative data
3. Clinical engagement
4. Evidential data
5. Robust business processing.

### **Where to Look**

Firstly, you need to decide where to look for reform and improvement, savings and value i.e. define what ‘problems’ you want to fix, or rather, where you want to improve. This depends on the health economy’s priorities in terms of quality, outcomes and financial sustainability (if you achieve high levels in all of these, you will have delivered ‘value’) and reference should be made to the Joint Health and Wellbeing Strategy<sup>4</sup>.

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<sup>4</sup> The Joint Health and Wellbeing Strategy sets out the issues requiring greatest attention by key commissioners (CCGs, local authorities and NHS England) and how they will work together to deliver the agreed priorities.

Quality and outcomes improvement will always be important criteria in deciding where to focus 'reform energy' and resource but, for example, if you are in turnaround, financial savings will also need to be a heavily weighted criterion. For most health economies, it is likely that all three are important and therefore focus should first be given to where improvement in all three areas can be delivered through the same reforms. In summary:

First determine what to change i.e. what is the tangible purpose of the changes you are seeking to make? For example:

- Increase quality and reduce spend
- Increase quality and improve outcomes
- Redistribute spend (move outliers towards best practice).

Once you know the above you can focus on looking for areas of opportunity where energy and effort will deliver what you are looking to achieve.

### ***Using indicative data to determine where to look***

Indicative data is used to identify health service areas that may have the most opportunities for improvement in a health economy. As such, it needs to be robust for this purpose only; it does not need to be robust for other purposes. In other words, indicative data does not need to prove that a particular reform is appropriate, that is the purpose of evidential data (see below). Rather it needs to prove that a service area has relatively more opportunities for reform than others and should therefore be prioritised when looking to deliver improvements.

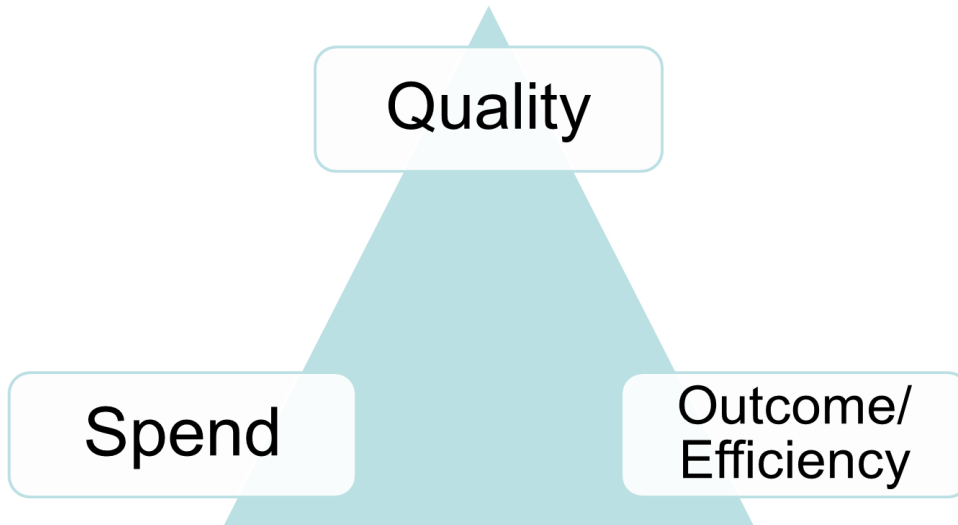
To this end, the triangulation of indicators is a useful approach. This is the process by which different indicators are looked at and where they all show that a service area is an outlier, it can be concluded that the area should be prioritised for improvement.

The Right Care approach uses the Atlas of Variation (maps that place health economies into quintiles of performance for individual outcome and efficiency measures), programme budget marginal analysis (financial data that show a health economy's relative spend by health service area) and the direction of travel, such as indicated within the spend and outcomes tool (a quadrant analysis that brings together expenditure and outcomes, relative to other health economies and to previous performance).

As there are many useful indicators available, the key is to use those that demonstrate where your health economy is an outlier against similar health economies. Therefore the use of programme budgeting at this stage is robust because the purpose is to identify whether or not the commissioner is an outlier, not to accurately pinpoint the exact sum by which this may be the case. By using the datasets described, the following metrics can be triangulated:

## Triangulation of Indicators

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This process can be illustrated by the following case study from Nottingham North and East CCG.



The CCG identified the following areas for improvement:

- Spend and quality: cancer; circulation; learning disabilities and muscular skeletal services
- Quality only: neonates and endocrine, nutritional and metabolic problems including diabetes
- Spend only: neurology and skin.

The CCG had already progressed a number of learning difficulty reforms since the data used in the triangulation was collected and so was able to prioritise the other three 'spend and quality' areas for improvement. Key points from the triangulation for circulation services were:

- Spend per primary care trust population was £12.7m over and above the demographic peers' average
- Atlas of Variation: unwarranted variation across 10 maps in which Nottingham North and East CCG scored:
  - Best 2 quintiles-4
  - Mid quintile-2
  - Worst 2 quintiles-4
- High spend and high mortality as compared to Office of National Statistics (ONS) data
- 'SPOT' tool: high level of spend for rate of health outcome.

Therefore Nottingham North and East CCG is looking to improve services, spend better and save money by embarking on a programme of reform in this and other service areas.

As in the Nottingham case study above, once you have determined where triangulated data suggests reform energies should be focused, it is important to determine what changes need to be made.

### ***What to change - Identifying the right reforms to make***

One of the benefits of using indicative outlier data is that it also highlights the health economies that are an outlier in the other direction. That is, it identifies health systems achieving better outcomes for the same or less expenditure. This is important in this next phase of achieving value as it highlights models that already deliver the objectives identified.

It may be that these models need to be adapted for use in the local health economy, such as to meet the needs of the particular demographics, but this is preferable and more efficient than beginning from scratch. It is also likely that the local health economy will be delivering a higher value system in other areas and will therefore be able to offer a quid pro quo when seeking to research and potentially adopt a peer's model.

### **Sense-checking indicative data**

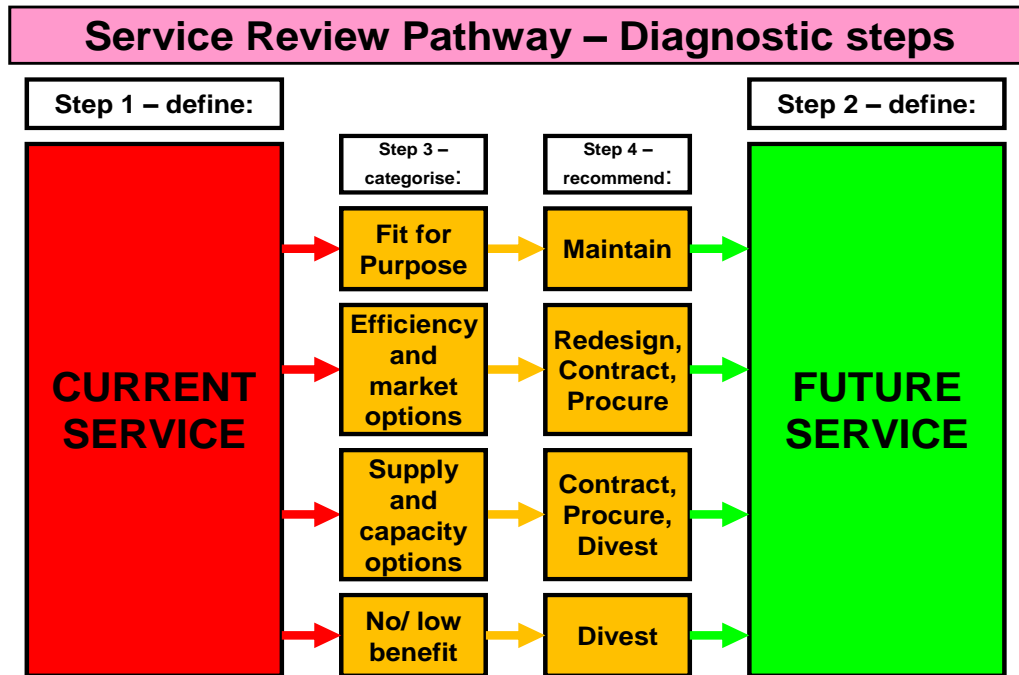
There is a time lag on all good comparative data by the nature of the collection, collation and analysis processes that turn them into useable and useful benchmarks. Therefore, the following need to be considered as part of determining the correct reforms to deliver within an area with opportunities for improvement:

- Has the health economy carried out an improvement since the indicative data was collected?
- If the health economy has not carried out an improvement, then it is safe to assume that at best, performance has not improved and it may have become worse, relative to others, if peer health economies have focused on that area. Either way it remains an opportunity for service improvement that can be built into plans and prioritised according to the criteria outlined earlier.

### **Service Reviews**

It is important to think of the process that delivers reform in the same way as the NHS thinks of clinical pathways for individual patients. That is, as a series of steps, each one adding value to the next, culminating in the desired outcome. One part of this reform pathway- that is vital if your health economy is truly to understand the range and extent of its opportunities for improvement, is an effective service review process.

The first phase of a service review is the diagnostic and assessment. A process map describing this is:



This is best tackled by a team containing all the relevant expertise (informatics, public health, clinicians, finance staff etc.) and covers three key steps:

1. Draw a picture of the current system in that service area
2. Draw a picture of the optimal future system for your patient demographic in that service area. This will be based on investigative work into what best practice looks like elsewhere, adapted as necessary for the local population's needs, local innovation regarding pathways and outcome delivery (that is, robust ideas that do not exist elsewhere, or have not been used in the same way)
3. Play 'spot the difference' (steps 3 and 4 of the process map).

Each difference identified will be a change that needs to be made to benefit patients and each change that needs to be made is an 'individual reform project'. Some will be small and quick; some will be large and complex. Together, the list will constitute the transformation programme for that service area resulting in an improved service for patients.

It is important to consider a programme as a set of individual projects within the same service area, often with overlaps and opportunities to integrate. Without this perspective of a series of deliverable projects, the programme will often be too vague to progress effectively and efficiently, and can be overwhelming when looked at as a whole. Once you know the changes that need to be made in a service area then good governance requires that the appropriate decisions need to be made by the appropriate decision-makers to ensure that the right people are assured of and approve the right decisions.

When Warrington CCG adopted this approach, it generated a number of specific improvements for patients as shown in the case study below.

Beginning in 2011, the use of indicative data enabled **Warrington CCG** to identify the service areas and pathways where its Office of National Statistics (ONS) cluster peers collectively delivered more efficient, effective and/or appropriate pathways for a similar demographic population. This initial benchmarking data was used to inform a full service review that determined the causes of this level of performance and the associated overspend.

The first wave of reviews focused on the following clinical services for which the triangulated data showed the CCG had significantly higher patient activity and expenditure than the norm: mental health; trauma and injury; respiratory and musculo-skeletal services.

Data was analysed from several sources in relation to quality, outcomes, activity and expenditure and were used to demonstrate the need for both service reform and the shape of those reforms. As part of this, a number of ONS cluster peers achieving better outcomes were contacted to share their pathways and learning.

The service reviews identified many opportunities for improvement and transformation, which have now been implemented. Clinical pathways have been re-designed in collaboration with stakeholders, to deliver high-quality and sustainable patient services for the future. The service reviews also highlighted several areas where improvements could be made with the application of National Institute for Health and Care Excellence (NICE) guidance and other improvement indicators.

For example, the following improvements were made to respiratory services:

- Revised and expanded bronchitis community support model
- Pro-active management via correct targeting of cohorts of patients to reduce the incidence of acute episodes of disease
- Maximised co-ordination with smoking cessation and IV therapy
- Increased core hours of community service
- The provision of a community-based alternative to short acute hospital stays (0-1 day)
- Single point of triage for community-based advice, intervention, sign-posting, support, access to pulmonary rehabilitation
- The implementation of a community drop-in clinic
- Extended pulmonary rehabilitation service with a chair/home based programme.

These reforms have also reduced spending on the respiratory service. The reform programme continues aiming to improve the service to an exemplary level.

## **Individual Reform Projects**

Service reviews can be a highly effective way of reforming services across a whole clinical area. They are particularly useful in areas where the triangulation of indicative outlier data has been used to identify multiple opportunities for improvement. However, there will also be a range of individual improvement opportunities that can benefit elements of a service area that is otherwise working well. For instance, a health economy may benchmark well in musculo-skeletal services but still benefit, in terms of quality of service and financially, from implementing Shared Decision Making to reduce the number of knee replacements to the optimal rate. In this instance, an individual reform project, and not a programme of change, is appropriate.

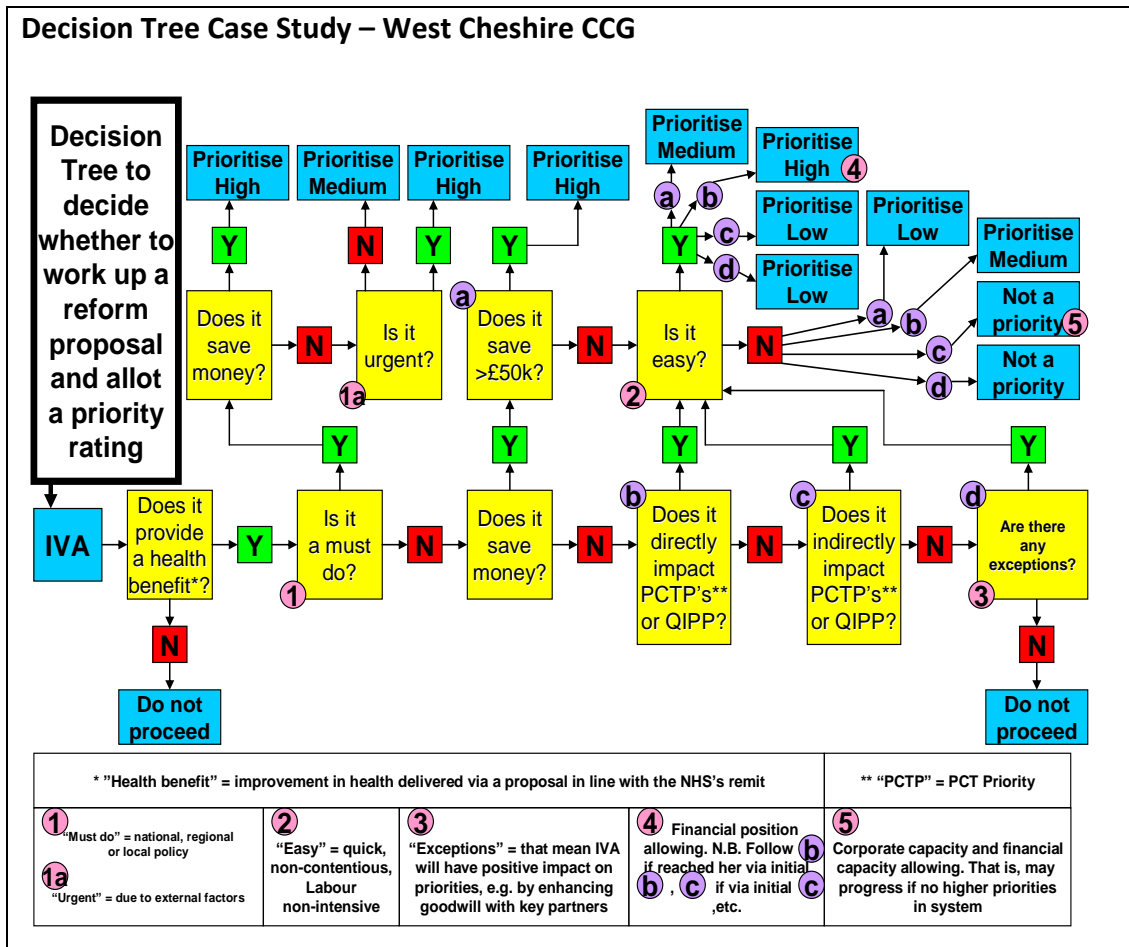
### ***Stakeholder involvement***

An optimal reform process should encourage individual ideas for improvement projects from all sources. It is also important to develop a robust means of deciding which ideas to progress through the business process. A number of CCGs have adopted the 'Ideas@' model for promoting and receiving ideas for service improvement. This is an email address ([ideas@ccqname.nhs.uk](mailto:ideas@ccqname.nhs.uk)) set up to receive ideas with an undertaking that the CCG will consider each one against set criteria in order to prioritise their development. If the idea meets the criteria, it is prioritised for delivery and, where the priority is 'high' or 'medium' it is progressed with immediate effect through the business process. This has the additional benefit of engaging the public, clinicians, stakeholders and partners in the reform agenda from the very beginning.

### ***Decision trees***

Decision trees are the most effective means of prioritising reform ideas. The following is an example used by West Cheshire CCG; a second example from Bolton CCG is available alongside this paper.

## Decision Tree Case Study – West Cheshire CCG



In order for an idea to be considered (at this stage the decision is whether to prioritise resources to develop the case for the reform), a short template, often known as an Initial Viability Assessment (IVA), must be completed. This contains the required contents to enable a decision. The number of criteria and maximum word-count is strictly set in order to ensure that everything needed for a decision is included within the proposal while also ensuring that no more effort than is necessary for that decision is expended. As some ideas will not be passed through the decision filter and some will be passed through but at a low priority (and so unlikely to receive urgent attention) only the work necessary for a decision to be made is needed at this stage, thus ensuring an efficient process.

When setting local criteria for a decision tree, CCGs need to ask themselves, *'If this criterion is not met, does it mean the reform should not be delivered?'* For example, a criterion such as 'can the current local provider deliver the reform?' is not a reason to discontinue a reform.

The basic steps to establishing local criteria are therefore to determine: what are the health economy's key criteria for reform projects? Examples of this include:

- The net impact on quality, outcomes or cost
- Attitude to risk regarding return on investment
- Population need.

The key steps to creating your own decision tree are:

1. Agree criteria
2. Categorise criteria in to 'deal-breakers' and 'prioritisers'\*
3. Place deal breakers at the front of the decision tree and prioritisers at the end.

*\*'Deal-breakers' must have a YES answer for a proposal to continue through the process for example, in an economy facing a deficit a deal-breaker might be 'does it save money?'. 'Prioritisers' determine how quickly the reform should progress through the process and how much resource to put into the project to support this. Examples of prioritisers include: the financial rate of return or the extent of the quality impact, particularly where quality is low.*

## **How to Change – Delivering the Improvement**

The third principle of this approach to the reform and improvement agenda examines how to change. Of the five key ingredients described at the beginning of the paper, clinical leadership, clinical engagement in the reform programmes and projects and the use of robust business process techniques support this principle. This final section summarises the business process.

### ***A robust business process***

Thus far, the approach has processed the generation and development of ideas for improvement, whether as part of a service review programme approach or via individual ideas for reform. The rest of the business process must take these ideas, add the evidence to and impact of the change and drive implementation of those proposals approved for delivery.

**Business process engineering** is a term used to describe the systems, techniques and tools employed to coordinate and direct the management structure of an organisation to deliver its core purpose. When designed and operated effectively, it ensures:

- A focus of management and supporting resources on the objectives of the organisation
- Delivery of prioritised outcomes, in an environment of expenditure reductions
- Development of proposals in a way that ensures appropriate decision-making
- Decisions at optimal points in the process to drive delivery
- Actual and timely implementation of decisions made
- Minimal use of resource activities that is not viable or capable of implementation.

The approach drives the use of the optimal lever to implement individual changes, for example contract management, clinical leadership, policy development or procurement.

The business process illustrated by the case studies throughout this briefing is often known as the **healthcare reform process** and takes reform, innovation and efficiency proposals from initiation, through case-for-change development to delivery. The key components of this particular system are:

- The service review process described above
- A policy development process to ensure the continuing sustainability of the health economy
- A programme approach to delivery
- The business delivery process itself.

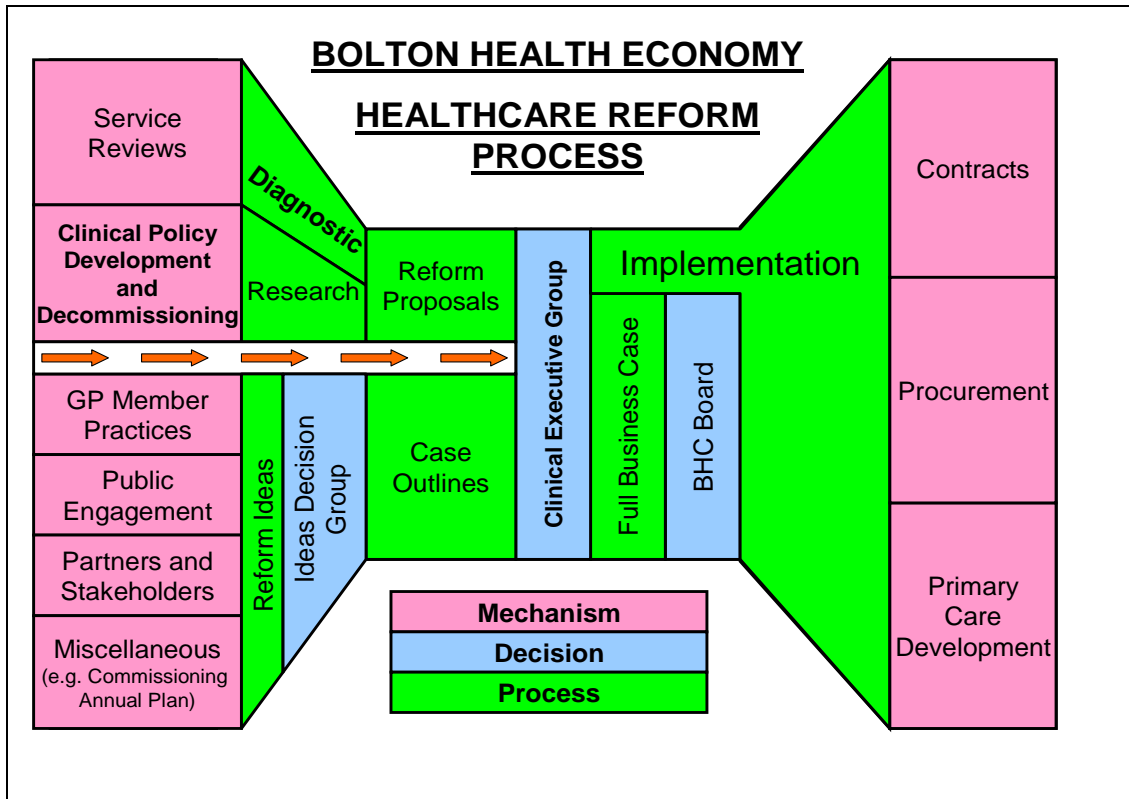
The **service review process** reviews all service areas currently provided within the health economy to determine their worth and the opportunities for efficiencies and improvements.

The clinically-led **policy development process** ensures the right level of appropriate treatments are provided within the economy, accounting for the benefit to patients and the wider population and for the level of available resource.

The **business delivery process** takes the findings from both of the above, plus innovative proposals for reform from other sources, adds detailed option appraisals, service specifications, costing models and impact assessments as appropriate, and processes them through clinical and corporate decision filters (such as a CCG's Delivery or Finance and Performance Committee). Implementation of approved proposals is then delivered by the contracts, procurement and primary care development functions, working closely with other stakeholders.

The following shows the generic healthcare reform process used by a number of the health economies following the Right Care approach, such as West Cheshire CCG, Warrington CCG, Bolton CCG (the example shown below) and Wigan Borough CCG. It is worth noting that the building blocks of the process – generation of ideas for improvement, initial assessment, building evidence, taking decisions to proceed at optimal moments and ensuring delivery post-approval – are the same whether the organisation is a commissioner or a provider.





## Quality and Innovation

It can be seen that business process engineering provides an approach that allows reform energy to deliver improvements in quality and outcomes in addition to cash savings. The use of service reviews in West Cheshire has delivered (and continues to deliver) the following overall improvements:

- A reduction in A&E attendances and subsequent admissions
- Reductions in elective and non-elective activity
- Reductions in both first and follow-up outpatient appointments
- Improvements in quality and outcomes.

Examples of some of the new, enhanced and/ or increased healthcare services that have been implemented include:

- Medicines administration training in care homes
- Personalised care planning improvements
- Community endoscopy and optometry pathways
- Intermediate ophthalmology services.

A key part of the process is the focus on allocative efficiency (are you spending on the right things) and not only technical efficiency (productivity). Allocative efficiency needs to be considered *within* a whole programme budget, to offset the tendency to compete for funding to be moved *between* programme budgets.

In 2012/13 South Sefton CCG and Southport and Formby CCG, using the triangulation of Right Care indicative data, highlighted respiratory services as an under spending outlier with underperforming outcomes. An initial reaction to this may be to spend more money on respiratory care, perhaps by reducing spend elsewhere. However, the joint management team at the CCGs considered that they may be spending the optimal amount over the whole programme budget but needed to improve their allocative efficiency. For example, the Atlas of Variation indicated that these CCGs were outliers for the rate of asthma and COPD<sup>5</sup> secondary care admissions - reform projects in these areas were likely to result in a net saving.

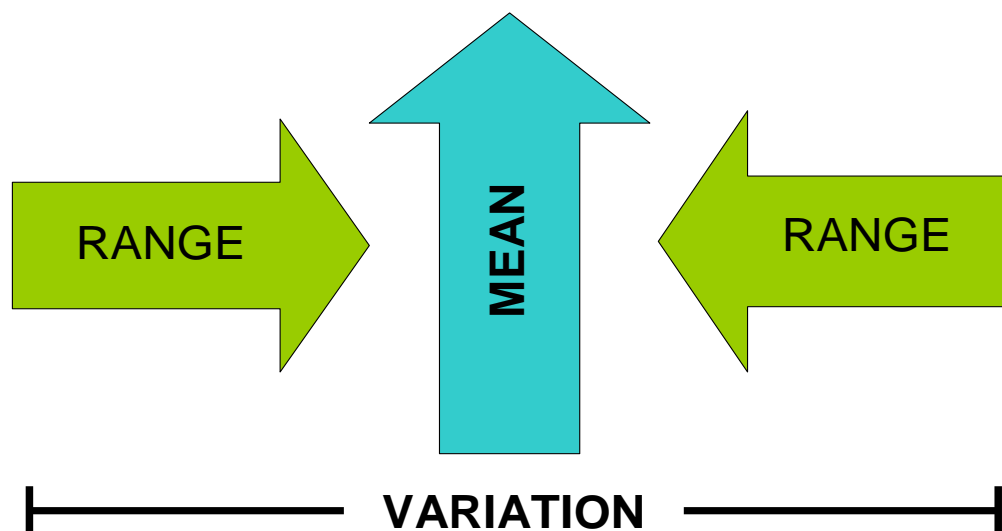
In other words, perhaps these CCGs were not spending too little. Perhaps they were spending the optimal amount but needed to improve their allocative efficiency. The CCGs are using Right Care, business process engineering and the service review process to 'drill down' and determine the right solution for this area of healthcare.

### What are we Seeking to Achieve?

The strategic success measures that are being delivered in the health economies via the above approach and processes are a reduction in the range of unwarranted variation and an increase in the average quality rate for particular service areas- shown diagrammatically below.

What are we trying to achieve?

Reduce the range of variation, Increase the mean



<sup>5</sup> Chronic obstructive pulmonary disease

By focussing on outlier areas identified via triangulation with financial data, health economies are also delivering savings within existing programmes and projects, supporting the delivery of financial sustainability.

## **Impact Assessment**

It is vital to understand the likely impact of a reform proposal, both to ensure the optimal effect of reforms and to determine in the first instance whether to implement that reform. At one level, you cannot know if the proposal is the best option to achieve an outcome unless its impact on the current pathway(s) has been considered (for example, enhanced and expanded asthma care planning and case management will reduce the number of A&E attendances, subsequent admissions and lengths of stay). On another level, a CCG cannot proactively manage the effect of the impact through contract management without fully understanding it. In the instance of the asthma care planning system, a reduction in A&E admissions would be anticipated. If a net reduction does not occur, an understanding of what has replaced these admissions will be needed (for example, has the provider adjusted its admissions threshold, consciously or not, due to the unused capacity caused by the asthma reform?).

On this point, reactive bed reductions will rarely occur and, without an evidence-based impact assessment, pro-active bed reductions are impossible. That is, if a health economy takes the approach that they will implement an asthma case management service to reduce the need for acute beds by 10 but only take the 10 beds out of the system once they have been empty, and gathering dust, for a month - do not plan for any bed reductions or the savings associated with these. It is unrealistic to expect a reform to eradicate pressure on beds and 'create space'. Rather a phased approach may be more effective: if 5 beds are closed on implementation of the case management pathway, and pressure on the bed system does not increase significantly, then the anticipated impact has occurred. The second 5 beds can then be closed and the level of pressure monitored again. Until health economies adopt an approach such as this, it will be difficult to ever deliver the full impact of a reform on the system.

## ***Robust impact assessment***

Risk assessment is an element of robust impact assessment in which all health economies are well versed. That is, focusing on what might happen if what is planned for doesn't occur – and how this can be mitigated. However, risk assessment is only one part of an impact assessment. The holistic assessment tells you what to expect in the wider system when the change goes as planned. This is key for an organisation to know if it is to make a robust business decision at the decision-to-approve stage of the business process. For example, clinical governance issues may be robust in a reform proposal, the organisation can afford the set up costs and the proposal delivers quality improvements as required. In short the proposal in front of decision-makers 'ticks all the boxes' but there remains a nagging doubt that the decision-makers don't know everything that they could know. That is, has the case considered the full impact and consequence of the proposed change to the system? For example, the reduction in demand for bed days caused by increasing the rate and quality of annual diabetic

reviews in primary care, or a reduction in A&E attendances and emergency admissions caused by an increase in the level of support for carers helping dementia sufferers.

The fundamental point is that, without a full impact assessment, you don't and can't possibly know everything you need to know to be sure of the effect of the decision you are proposing to make. With a full impact assessment in place, you understand all that you need to in order to be assured of your decision, and you know what to look for and expect from delivery and what to manage (contractually and financially) from the system, for instance, reduced secondary care activity and increased community activity (and the spend associated with these).

### ***Impact assessment models***

There are two methods of impact assessment: assumption-based and audit-based.

#### *Assumption-based impact assessment*

This method is used when it is known that there will be an impact but it is not possible to be certain of the exact types and levels of activity that will be impacted upon. Examples of when this method will be appropriate are reforms to do with active case management, increased community nurses, alcohol reforms and some dementia reforms. This can be demonstrated by the following case study.

An assumption-based impact assessment enabled the following technical statement to be made in the business proposal for an active case management scheme by **NHS Central Manchester**:

'The average number of admissions for the type of patient affected by this project is 2.16 per year, at a length of stay of 16.7 bed days per admission. The caseload for the new proposed advanced practitioners will be 700. With a projected 6% avoidance of admissions this leads to the forecast of 4 beds saved (2.16 admissions \* 16.7 bed days \* 700 caseloads \* 6% / 365 days = 4.2 beds).'

By describing the assumptions pathway below, it is possible to see the individual steps taken that lead to the above statement:

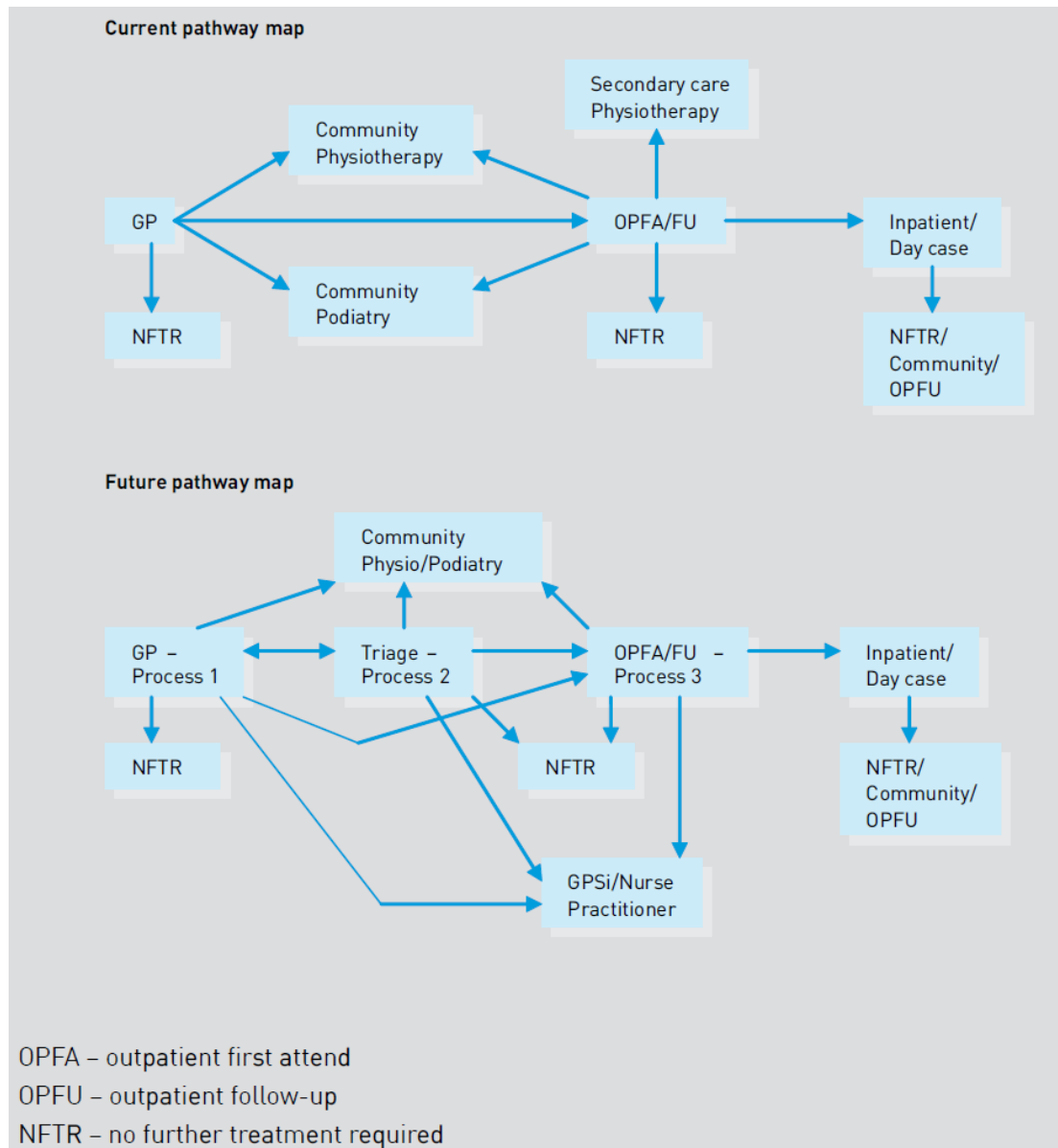
1. Clinical leads and commissioning managers carried out an audit of the potential case manage patient cohort. The admissions trend for these patients was then analysed. This highlighted that the average number of admissions per patient was 2.16 and that the average length of stay following each admission was 16.7 bed days
2. The likely caseload for the 14 proposed advanced practitioners was agreed (by staff already working in similar fields) to be 50 patients each resulting in an overall caseload of 700
3. Evidence from the USA and other areas where active case management already exists shows that 6% of relevant admissions are avoidable
4. Hence:  $2.16 * 16.7 * 700 * 0.06 = 1,515$
5.  $1,515 \text{ bed days} = 4 \text{ beds per annum } (1,515 / 365)$
6. Clinical leads from both the commissioner and the provider then agreed the types of spells that the caseload patients would likely be admitted to. This was informed by the actual spells from the audit of known relevant patients but was also supplemented by discussion between the primary and secondary care clinicians
7. The average cost of the identified spells, plus the cost of the required number of excess bed days to bring the total length of stay to the identified average of 16.7, was then calculated on this basis
8. The results supplied the provider with the necessary information to assess the costs it could reduce (spells avoided and beds no longer required) and the commissioner and the provider with the level of funds that would cease to flow
9. The commissioner was then able to set the assumed level of avoided expenditure against the projected costs of the new service to establish its net cost/ saving
10. This information was used to inform decision makers and allowed them to make a robust decision.

### *Audit-based impact assessments*

This method is most appropriate where it is possible to map historic activity and, alongside that, map 'what would have happened if the reform was already in place'. For example, an orthopaedic triage system, a single point of access model or new referrals policies (especially where these are aligned with new pathways and/ or capacity in alternative pathways).

The following pathway maps demonstrate pictorially how the patients in an audit-based impact assessment can be tracked. What actually happened can be mapped against the current pathway and a group of clinicians can then map what would have happened to each of those patients had the future pathway been in place. The cost of both journeys can then be calculated (both the cost to the provider and the price to the commissioner) and the financial impact determined.

## Orthopaedic Reform Pathway Maps



The options under the three processes in the future pathway, depicted by the arrows are:

### Process 1 – GP referral

The options available to GPs are:

- Treat in practice
- Refer to triage service
- Refer direct to secondary care (assumes some patient needs do not require triage assessment)
- Refer direct to community podiatry (assumes some patient needs do not require triage assessment)

- Refer direct to community physiotherapy (assumes some patient needs do not require triage assessment)
- Do not refer (includes no further treatment required (NFTR) and patient self-management).

### **Process 2 – Triage referral**

The options are:

- Refer to GP with an appropriate special interest (GPSI), potentially then refer on to other options
- Refer to secondary care
- Refer to podiatry
- Refer to physiotherapy
- Refer back to GP (with treatment advice)
- Discharge/do not refer (includes NFTR and patient self-management).

### **Process 3 – Outpatient referral**

The options are to assess or treat in outpatient environment (within agreed follow-up ratio) and then:

- Refer back to GPSI
- Refer to community podiatry
- Refer to community physiotherapy
- Refer on for inpatient procedure (this referral will include a planned discharge and discharge care package jointly approved by the GPSI and secondary care clinician)
- Discharge/do not refer (includes NFTR and patient self-management).

A summary of the ten steps needed to achieve this audit-based impact assessment is:

1. Model the current and future pathways
2. Draw up protocols for each referral stage in the future service
3. Carry out a clinical audit and map the actual pathways of the audited patient journeys, from GP referral to final pathway discharge
4. Map what will happen to the same cohort of patients under the new pathways and protocols
5. Use the results of (4) to determine the resources required within the new pathways
6. Cost the resources required within the new pathways
7. Use the variation between (3) and (4) to assess the physical resources and costs from the primary and community care services that are saved under the new pathways, or that can transfer to it
8. Use the variation between (3) and (4) to assess the physical resources and costs from the non-payment by results<sup>6</sup> elements of the secondary care service that are saved under the new pathway, or that can transfer to it

<sup>6</sup> Payment by results is the payment mechanism currently used to reimburse providers of NHS healthcare in England. The patient activity not covered by payment by results is often referred to as non-payment by results activity.



9. Use the variation between (3) and (4) to assess the cost of payment by results activity avoided
10. Collate the net costs of the new service.

The following case study demonstrates the results of a financial impact assessment as they appeared in a business case approved for implementation in the West Cheshire health economy. It shows the costs saved by implementing patient decision aids (part of the Right Care Shared Decision Making programme), along five pathways.

<b>West Cheshire Clinical Commissioning Group Shared Decision Making Business Case Financial Impact Summary</b>					
	<b>Knee Replacement</b>	<b>Hip Replacement</b>	<b>Prostat-ectomy</b>	<b>Transur-ethral resection prostate</b>	<b>Mastec-tomy</b>
Current procedures per annum	367	345	21	118	104
PbR Tariff (11/12) per procedure	£5,224	£5,227	£4,604	£2,030	£2,385
Total cost to commissioner	£1,917,208	£1,803,315	£96,684	£239,540	£248,040
Saving (5% reduction)	£95,860	£90,165	£4,834	£11,977	£12,402
Saving (10% reduction)	£191,720	£180,331	£9,668	£23,954	£24,804
Saving (15% reduction)	£287,581	£270,497	£14,502	£35,931	£37,206

### **Summary**

The approach described above has produced both quality improvements and cash releasing savings for re-investment in all of the health economies where it has been adopted. The evidence of its successful implementation by more than one CCG demonstrates that the process is reproducible and not dependant on key individuals or specific circumstances. This is illustrated in the case study below.

In West Cheshire, where its earliest developments began, the following has occurred in the time the Right Care approach has been used:

- In 2009/10, business process engineering was adopted mid-year and supported the delivery of in-year strategic recovery
- During the following year, business process engineering supported the delivery of a £15m QIPP and reform programme
- In 2011/12, the CCG was able to identify and begin its entire QIPP and reform programme in advance of the year starting and delivered its £15m QIPP requirement before the end of the year
- In 2012/13 taking into account the successes of previous years, the original projections for the size of the QIPP requirement were reduced, allowing an increased focus on quality and outcomes.

Each year the position of the health economy has improved over the previous year, both in terms of quality and outcomes and the financial position.

You can find out more about the Right Care *Commissioning for Value* programme, tools and casebooks on the Right Care website: [www.rightcare.nhs.uk](http://www.rightcare.nhs.uk).

### References and further reading

Health Investment Network: [www.networks.nhs.uk/nhs-networks/health-investment-network](http://www.networks.nhs.uk/nhs-networks/health-investment-network)

Programme budgeting:

[www.healthknowledge.org.uk/interactive-learning/pbma](http://www.healthknowledge.org.uk/interactive-learning/pbma)

[www.networks.nhs.uk/nhs-networks/health-investment-network/news/2011-12-programme-budgeting-data-now-available](http://www.networks.nhs.uk/nhs-networks/health-investment-network/news/2011-12-programme-budgeting-data-now-available)

The Atlases of Variation: [www.rightcare.nhs.uk/index.php/nhs-atlas/](http://www.rightcare.nhs.uk/index.php/nhs-atlas/)

The Spend and Outcome tool: [www.rightcare.nhs.uk/index.php/tools-resources/ccg-spend-and-outcomes-tool/](http://www.rightcare.nhs.uk/index.php/tools-resources/ccg-spend-and-outcomes-tool/)

A series of casebooks, giving real life stories of use of the approach:

[www.rightcare.nhs.uk/index.php/tools-resources/commissioning-for-value-best-practice-casebooks/](http://www.rightcare.nhs.uk/index.php/tools-resources/commissioning-for-value-best-practice-casebooks/)

**NHS Bolton CCG  
initial viability  
assessment  
decision tree  
to prioritise  
proposals**

Is the idea affordable and a priority by all of the following criteria?  
 1. Implementation costs are less than £xm  
 2. The proposed costs demonstrate value for money  
 3. It contributes to NHS Bolton CCG's priority areas  
 4. It has no adverse impact on health inequalities.

YES

NO

Do not proceed or prioritise.  
 However, if there is strong evidence that it will deliver an improvement in an area in which the health economy is an outlier, funding is available, and it will not have an adverse impact on inequalities, then continue through the process.

Does it meet any of the triple aim components: Better health; best care from both a clinical and patient perspective; and value for money?

YES

NO

Do not proceed

Net save

Cost neutral

Net cost

Rate of return now

Rate of return <2yrs

Rate of return >2yrs

Rate of return now

Rate of return <2yrs

Rate of return >2yrs

Cost < £0.1m

Cost < £0.5m

Cost > £0.5m

High priority

High priority

Medium priority

High priority

Medium priority

Low priority

Medium priority

Low priority

Do not proceed

Consider the following three questions, answering 'yes' or 'no':  
 1. Does the proposal have a positive impact on health inequalities?  
 2. Does the proposal deliver more than one of the triple aim components?  
 3. Can the proposal be implemented in less than x months?

1. Yes  
2. Yes  
3. Yes

1. Yes  
2. Yes  
3. No

1. Yes  
2. No  
3. Yes

1. No  
2. Yes  
3. Yes

1. Yes  
2. No  
3. No

1. No  
2. Yes  
3. No

1. No  
2. No  
3. Yes

1. No  
2. No  
3. No

Increase priority level by one

Maintain original priority level

Reduce priority level by one