

Transparency and accountability

Using better data to drive performance in the NHS



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1 Executive summary

The NHS is undergoing a major organisational reform with the introduction of Foundation Trusts, the promotion of plurality and competition, an increasing focus on pan-organisation pathways and a change to its regulatory arrangements. Added to that it faces the challenge of lower levels of financial growth than it has seen in recent years and with increasing public expectations, the importance of performance management and improved efficiency has never been higher.

Against that background, CIMA has produced this report considering the interrelated initiatives of service line reporting (SLR), service line management (SLM) and the use of patient-level information and costing systems (PLICS).

This report includes a review of ten key issues that Trusts will wish to consider prior to implementing an improved performance management and information system, and offers prompts for additional considerations during implementation.

This report is intended for chief executives, finance directors and their teams, but is also relevant to budget managers, non executive directors and other stakeholders, to stimulate debate and to help them make an informed decision about the most appropriate solution to meet their individual needs.

Opinion is divided as to the merits of taking SLR to the level of PLICS particularly in relation to the investment required to acquire PLICS related systems. This report reflects these opinions by addressing issues that are common to both, although these may vary in degrees.

Some of the debate revolves around what can be achieved with a basic SLR, what constitutes a more sophisticated or robust SLR and what extra value might be gained from a PLICS based solution.

The Department of Health's proposals to strengthen and improve the tariff setting process and to put more emphasis on the use of quality assured patient-level costing will also provide an additional incentive for providers to undertake this more detailed approach to costing its services.

The ten key issues considered in this report are:

- 1 What is the purpose and the intended outcome of implementation?
- 2 What frequency of reporting is appropriate?
- 3 Using finance as a business/decision support.
- 4 What measures are appropriate?
- 5 What is the basis of costing?
- 6 How good are the feeder systems?
- 7 How good is data quality?
- 8 What are the resource implications?
- 9 Is the organisation structure appropriate?
- 10 What are the opportunities to include incentives and achieve buy in?

The report concludes that these costing initiatives provide a useful performance management tool to enable Trusts to achieve increased efficiency and enhanced financial control that aids decision making. However, with increasing levels of sophistication potentially comes additional complexity. The ability of finance staff to analyse this data and provide a value added service will be paramount to success. The key success factors are careful preparation to ensure that a solution is implemented that suits the needs of the organisation, not only in the short term but which will be fit for purpose in the future.

2 Introduction

Whilst SLR meets regulatory information requirements for Foundation Trusts (FT), the NHS will only really get to grips with financial performance through the rigorous implementation and use of PLICS – or is the choice so stark?

With Monitor developing, promoting and assisting organisations to implement both SLR and SLM as best practice, and with the Department of Health, championing PLICS, it is essential that NHS Trusts consider these initiatives thoroughly. The recent announcement from the Department of Health that over time it intends to move the basis of tariff from the previously used reference costs information to a new system where it is based on quality assured, patient-level costed information, may provide an additional incentive, or even imperative, to develop patient-level costing at the Trust level.

This report aims to give finance professionals an overview of these initiatives. How they interlink, the benefits they may offer and more importantly the key issues to be considered before deciding whether to implement these initiatives. The report will also highlight the practical planning and operational issues that may be faced.

Working with consultants from Deloitte, CIMA's insights in this report have been drawn from CIMA's NHS Working Group, consultation with key experts in the field, case studies with Trusts using SLR, SLM or PLICS and CIMA staff.

Implementation of PLICS

A snap shot survey by the Department of Health¹ of 130 Trusts, indicates that implementation of PLICS is more common in FTs than non FTs. More than half of the FTs with an interest in PLICS had already implemented it, with the remainder planning to do so by 2009/10. Whereas among the non FT organisations only one third of those who had indicated an interest had already done so, with the remaining two thirds aiming for implementation by 2009/10.

CIMA survey

To compliment this discussion paper, CIMA is conducting a survey among NHS Trusts to ascertain the level of uptake of SLR and PLICS. The survey will also establish if the costing methods met the needs of the users.

The results will be published in Spring 2009.

¹ The Department of Health survey was a voluntary survey and includes responses from a selection of Trusts (130 Foundation and Non Foundation Trusts). The survey was conducted for internal use to ascertain the usage, development and implementation levels of PLICS within the NHS.

3 Overview of SLR/ SLM and PLICS

'SLR / PLICS is the 'glue' that stitches together a lot of disparate information within Trusts under a common currency, which of course is money. Trusts should see this as an investment just as they would with say PACS (Picture Archiving and Communication Systems) or PAS (Patient Administration System) etc. and not just see this in the light of expenditure on historic costing systems.'

Tony Whitfield, Finance Director and Deputy CEO of Salford Royal NHS Foundation Trust

3.1 Service line reporting (SLR)

Good SLR should provide a real insight into cost drivers and the dynamics to help inform decision making and target improvement initiatives. SLR is the reporting of income and costs by individual service lines, for example cardiology, general surgery or obstetrics in order to understand the contribution that is made by each service line to the overall performance of the Trust. To achieve this, the SLR must bring together both financial and operational data, recognising the interdependencies between them.

Good SLR must go beyond simply identifying where decisions are required, which is what a pure contribution report will inform, and make available information to aid decision making. The level of information and insight provided will depend on the sophistication and maturity of the approach to the SLR, and should be expected to evolve over time.

'Service line reporting is fundamental to the overall effectiveness of any NHS organisation. Without robust, reliable, pertinent data – financial, operational, clinical – Trusts simply cannot make knowing choices about any aspect of their performance.'

Professor Robert Harris,
Policy Director, Monitor

What constitutes a service line is determined by the individual Trust and should reflect its own specific business circumstances and needs. However, the factors to be taken into account will be broadly similar across Trusts. Service lines may be partly identified by considering how the cost base may be disaggregated and analysed, but perhaps more importantly by how a Trust's customers see its services, how a Trust plans to promote its services and how the Trust intends to align its organisation and management with the services it provides.

It is worth noting that the customer perspective often aligns with either current or future revenue drivers and even contracts. In practice this often means that it will be a speciality, or a group of specialities, although some organisations are electing to take this to sub speciality level. The increasing focus on managing care pathways, providing a more patient centric view of services should also be given serious consideration.

Trusts will also wish to consider the potential impact that their decision, with regards to how they define and therefore report service lines, could have for segmental reporting under the implementation of International Financial Reporting Standards (IFRS). However, private sector examples suggest that a very broad interpretation is taken to segmental reporting under IFRS.

Much of the discussion in this report refers to the degree of sophistication of SLR. The following table highlights distinctions that may be helpful in identifying different characteristics of a basic SLR, as compared to a more sophisticated solution. The more sophisticated solution may or may not be supported by PLICS.

Figure 1 Basic and advanced SLR

Basic SLR	Advanced SLR
Simple cost allocation methodology	Uses cost drivers reflecting causality (why costs are incurred)
No modelling of cost drivers	Uses robust operational data as a basis for cost drivers
Single dimensional view of services	Potentially multi-dimensional allowing analysis from different perspectives
Little or no insight into why costs are incurred, and total amounts	Provides real insight into macro level drivers of cost
May be based on analysis of reference costs	Costing based on how services consume resources through activities
Income calculated based on costs, not reflecting the true drivers	Income based on, tariffs, contract terms or market rates reflecting commercial reality of decisions made
Reporting may be a manual process with a lower frequency of production	Largely automated production allows more frequent production
	May use a service hierarchy to provide greater granularity and drill down
	May allow modelling by flexing activity levels, cost drivers etc

3.2 Service line management (SLM)

Whilst the analysis of costs and income against service lines delivered by SLR undoubtedly provides valuable information for a Trust, significantly increased value accrues from the move to SLM. Provided the service lines defined can be aligned with the organisational and management structure, financial performance management can be devolved and embedded into the whole organisation, with clear accountabilities and enhanced financial awareness at the point at which operational decisions are made.

It is this deep embedding of aligned operational and financial management that is referred to as SLM, and ultimately it can change the way an organisation thinks and behaves, ensuring that both planning and decision making take full account of operational and financial considerations.

SLM typically follows the introduction of SLR, ensuring first that the Trust establishes a reliable information base before introducing devolved responsibility and accountability. The success of SLM is dependent on far more than the adequacy and integrity of SLR. Devolving financial management responsibility to those making operational decisions requires that the necessary skills are developed, that buy in is secured and that there is the correct balance of responsibility for outcomes, the authority to act and accountability for decisions. The introduction of SLM can fundamentally change the role of the finance function and the demands placed on it. It is therefore not only the operational business that will change and develop, but also the finance function.

'Once organisations can produce data that is trusted by clinicians and managers alike, then the real benefit of the service line programme can be enjoyed. Decision rights can be devolved, allowing far greater autonomy to clinicians and managers who run business units; organisational structures can be redefined to reflect patient needs and optimal use of resources.'

Professor Robert Harris, Policy Director, Monitor

Monitor is using the service line programme to promote best practice across the whole of an organisation's activities, not just finance. For example, Monitor's latest SLM development work is helping pilot Trusts using SLM techniques to improve the quality of clinical output and more explicitly patient satisfaction and experience. In this respect SLM is a whole Trust improvement approach. In the purely financial context however, Monitor is very quick to acknowledge that both SLM and PLICS are extremely compatible and add to the knowledge and understanding within NHS organisations.

3.3 Patient-level information and costing systems (PLICS)

PLICS in common with SLR is a change to traditional NHS costing methodology from top down to a bottom up approach. It captures costs at the level of individual patient activities. The aim is to understand all the activities, and the associated costs, related to the care provided to an individual patient through the duration of the care episode. This will inevitably reflect the complexities of individual cases, and provide a very granular level of analysis.

The very nature of PLICS means that simply due to the volume of data to be considered, gaining meaningful insight into costs may be more complex. That is not to say that this is not a worthwhile aim, only that careful consideration must be given to how the data collected will be used. In simple terms, how it will be analysed and converted into useful information to inform decision making.

One approach that secures favour is to roll up PLICS into an SLR, either through a simple hierarchy or through more complex multi-dimensional analyses. Just as with SLR, where the definition of the service lines is critical to success, so with PLICS its success is dependent on careful planning and design.

If implemented well, individual patient-level information offers flexibility by allowing users to

3.4 How these costing methods interlink

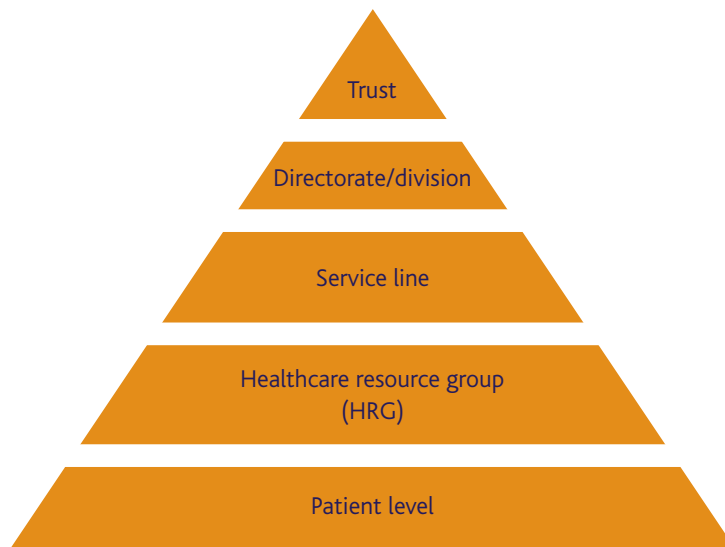
consolidate costs in different ways to suit the reporting and management needs of the organisation.

Some believe that working at patient-level opens opportunities to have clinician engagement in the debate about operating information. This is based on among other things the view that the 'patient' is a currency that is understood by clinicians and that the use of this language is more likely to engage clinical staff.

SLR, SLM and PLICS are not mutually exclusive, but neither are they entirely dependant. It is perfectly possible to have SLR or PLICS independently of one another. Figure 2 illustrates the increasing levels of detail.

Opinion is divided as to the merits of taking SLR to the level of PLICS and this report considers the issues that are common to both, although these may vary in degrees.

Figure 2 Relationship between PLICS and SLR/SLM



Source: Monitor

4 Ten key issues to consider before implementation

4.1 What is the purpose

It is important that the Trust is clear about its motivations for embarking upon the project. This requires an understanding of what they intend to achieve as well as a view on what might be the minimum acceptable outcome. Some organisations have embarked on PLICS in response to being financially challenged, intending that it should help explain where services are uneconomic. Others have used it when considering expansion or reconfiguration of services. In other cases Trusts may be looking for improved reporting and management tools.

It is important to strike the right balance between levels of detail, complexity and effort required, and the degrees of transparency and therefore understanding of profitability that might be achieved. The most important factor should be the organisation's needs and wants. The organisation should understand the benefits, and possible changes, that the method they are considering will bring.

Determining the value that is added by increasing the level of detail and how much that improves understanding of profitability, are key. Other factors such as the ability for increasing devolved accountability and responsibility may also help the organisation to determine how it wants to proceed.

4.2 What is the right frequency?

In determining the appropriate frequency for analysis and reporting the organisation will need to consider what frequency is likely to be necessary to meet the intended objectives, as well as how much resource and effort will be required to deliver a solution – be it a monthly, quarterly or even real time output. Some organisations have found that the demands of reporting are such that they are initially implementing a quarterly reporting regime.

Most of the work to prepare for reporting is done at the beginning of the implementation phase, but the ongoing workload of producing costs at patient-level might be greater than for a less detailed solution.

A balance needs to be struck between frequency and usefulness. It may be that a desktop real time output sounds like the 'Nirvana' solution, but this may not add any real value and could be potentially too much data.

4.3 Using finance as a business/decision support function

As a factor in deciding how often to produce reporting information, it is important to decide who will be using the information and what decisions or management actions it will be used to inform.

Information can be split into three categories: operational information, information for management and strategic information (the latter might be produced on a more ad hoc basis). Information for operational purposes will require top line data, usually in real time. But data used by management will need to be more detailed and transparent. Users of management information might want to know, for example, how many hours it took to provide care for a certain number of patients, or how many tests clinicians commissioned for a particular condition. This information feeds into benchmarking and comparisons, and in turn helps to identify inefficiencies and performance gaps, as well as opportunities and best practice. However, because of the additional level of analysis required, these reports will be less frequent.

Using the management accountant as a business support function is crucial, as they can convert data into business intelligence which can inform management decisions.

For more information on how finance and accounting personnel can help improve decision making see CIMA's work in this area – *Improving decision making*
www.cimaglobal.com/decisionmaking

4.4 Determining what to measure

This factor is equally applicable whether SLR/SLM or PLICS is being considered.

It is important to consider carefully what you are going to measure. Will it be full costs and profit, or variable costs and contribution? There is, however, an argument that both types of costing information should be available.

It is important to consider how tariff works among different providers. Specialist providers for example sometimes get as little as 40% of their income through tariff, whilst non acute sectors can also have significant amounts of non tariff income. Additionally, many service line agreements and contracts make a provision for marginal cost recovery where activity levels go above agreed activity thresholds.

Furthermore, revenue and costs are two separate parts of the financial dynamics of Trusts. To properly understand the impact of decisions, Trusts need to understand how costs behave. Even if funding continues at full rates, costs may only increase marginally. When making critical decisions regarding capacity, activity levels or care models, it is important to understand how your costs will change and what this means for the overall financial performance of the service line, specialty and Trust.

4.5 What is the basis of costing?

Whilst the aim of SLR and PLICS is to analyse, report and provide insight into the behaviours of actual costs and service contributions of a Trust, there may be a case for using a service line analysis to determine standard costs. These can then be combined with activity levels/usage to report service line costs.

This may initially sound attractive as an introduction to SLR, but with this approach comes a number of additional requirements. In particular variance analysis will be required to understand the difference between actual costs incurred and standard costing calculated costs. This will mean regularly reanalysing the basis on which standard costs have been calculated.

Perhaps of more interest is how internal services are costed. This does not only include services such as HR and finance, but also operational services such as radiology that provide a service to multiple specialties. The challenge here is to determine who carries the risk and reward of performance, and what this means for behaviours and driving performance improvement.

- If actual costs and activity are used to cost services then the internal function is protected (all costs will be passed on) and the customer facing service carries the risk.
- Alternatively, if standard costs are used then the internal function is exposed to the impact of the customer facing service reducing activity levels.

How the benefits of improved performance, and the impact of under performance, are absorbed is critical. These issues must be considered in the context of delegated responsibility and accountability – people must be able to control or at least influence the result for which they will be held accountable.

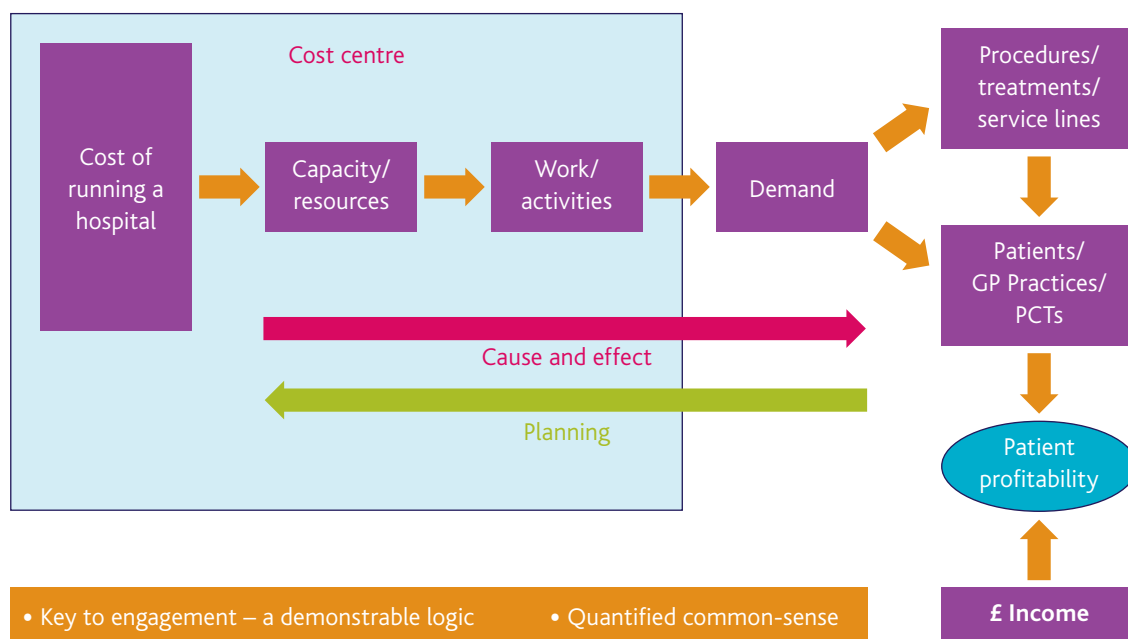
At this point it is important to remember that the aim is to help the Trust as a whole understand and improve financial performance. And it is here that the potential challenges and complexities of moving to SLM become apparent.

SLR using PLICS based on Activity Based Costing

Trusts such as the Liverpool Heart and Chest Hospital NHS Trust, Salford Royal NHS Foundation Trust, the Royal Surrey County Hospital NHS Trust and many others have all implemented service line reporting using patient-level costing based on true Activity Based Costing principles as this approach is seen as getting the greatest degree of clinician engagement.

Activity Based Costing explains the 'cause and effect' of not just what a cost is, but why, (as is illustrated in the following diagram) and this is what engages the active interest of clinicians and managers.

The logic flow of ABC that explains what is really driving costs and profitability in a Trust



This clinician engagement was reflected in a comment from Elaine Griffiths, Consultant Cardiothoracic Surgeon at the Liverpool Heart and Chest Hospital NHS Trust who commented: 'this is a very flexible system and the clinicians will like this.'

4.6 How good are the feeder systems?

Every intervention carried out is recorded in a system of some sort but these may range from integrated computerised systems through to manual records.

Whichever are in place the challenges will be to consolidate the potentially vast quantities of data into useful information. This will possibly be easier for those with good feeder systems. It is also important to ensure that good information management staff with the requisite skills are fully involved with the project.

It is crucial to be realistic when considering the practicalities of, and effort that will be required in collecting data. The level of granularity that is adopted as well as the frequency of reporting that will be provided may be influenced by these factors.

A PLICS based solution potentially requires much higher volumes of more granular data than a less advanced SLR.

4.7 How good is the data quality?

There are a number of aspects to data quality. These range from the data input and the systems used through to how this is collated and analysed. The main question to be asked is what data do you have and how trusted is it?

Other points to consider are:

- Is clinical coding adequate and are there training implications?
- It is crucial that data quality be considered from the clinician perspective and not just from the NHS standard data dictionary perspective.
- Are good methodologies in place for allocating costs to service lines/patients?
- What is in place for overhead recovery?

A shortfall in any of these has the potential to compromise the resulting output.

Alternatively there is a view that until you start to use data in this way you will not discover its shortcomings. Does the organisation have the appetite to have its data quality exposed and challenged? Does the lack of robustness of available data generate credibility issues? Would it be preferable to develop this to an agreed level prior to implementation? Or is it an accepted part of the implementation that this is an evolving process?

It may be that lower levels of confidence in the data available will steer an organisation towards a more basic SLR product in the first instance, although there are those who argue that using less reliable data and recognising its weakness can help to drive a demand for improved data, thereby bringing additional benefits to the Trust.

Another data quality aspect might be that it is possible to build upon the existing reference costs work to develop a form of SLR, although reference costs are not considered by some to be very robust and do not necessarily cover all services or costs.

'Winners are grinners and losers normally blame the data. That's why it's important that clinicians validate the clinical data used in PLICS.'

Peter Donnelly, Head of Payment by Results,
Department of Health

4.8 What are the resource implications?

The key factors to be addressed when considering the resource implications are:

- If you're going to do it, do you go for the minimum necessary, or can you get a lot more out of it with very little extra effort/expense?
- What will you need, rather than what do you need? Look to the future.
- What do you already have? Can you build on it or do you need something completely new?
- How much resource (people or money) can you invest and over what period? Do you have capacity?

Implementation of any degree of SLR will have resource implications both from an IT hardware and a staff-time perspective. The large volumes of data being used will mean that some form of technology will be required to pull together this data. There will also be time required to implement and maintain the systems. Whichever method is implemented, there will be demands on staff from many disciplines – not only in finance but also at clinician level where input is crucial to gain buy in and also to achieve credibility.

The likelihood is that the resource implications to implement, as well as to maintain, a PLICS based solution will be greater than for a SLR product without PLICS. Additionally it is important to consider the cost of training for either method.

'Can Trusts afford not to invest?'

Tony Whitfield, Finance Director and Deputy CEO of Salford Royal NHS Foundation Trust

4.9 Consider the organisational structure

Does the organisational structure lend itself to reporting at a particular level or will the structure need to be reorganised along service lines? Trusts should consider not only their current arrangement but also how they plan to manage the business in future, and this must be informed by an outward facing perspective as much as an internal one. How will the trust engage with its commissioners, other providers, patients, the public and other interest groups? How will ongoing moves towards pathway oriented care impact this?

Often there is a hierarchical service line structure, reflecting the existence of different dimensions such as specialty and geography. There is clearly a two way relationship between this and determining the appropriate organisational and management arrangements.

4.10 How to offer incentives and achieve buy in

The organisation will need to determine how much scope there is to build incentives into the system. Will there be potential to do this and how? Will high performing areas see some benefit? In particular, once both costs and revenues are properly modelled and driven to service lines, then the impact of over and under performance against planned activity will be apparent.

Often the contractual provisions for under and over performance relate to aggregate activity, rather than each individual tariff item. This creates an added complication when reporting service line contributions. For example, if a Trust actively decides to over perform in one area and under perform in another, such that the overall impact is a net gain, which service line benefits? In answering this Trusts will have to give consideration not only to the behaviours this drives within a service line, but also across the trust. There is a significant risk that a silo mentality will develop, with individual service areas making decisions that are good for them but not for the Trust as a whole.

Again this factor applies equally to whichever method is adopted.

'Monitor has worked with more than 25 organisations over extended periods to implement SLM. At the heart of the passion and commitment shown by clinicians towards the service line programme, is the knowledge that by improving performance they can retain agreed levels of profit – a huge motivator. Across the pilot trusts this retained profit is variously being invested in new kit, more people or team bonus payments as the business unit leaders see fit.'

Professor Robert Harris, Policy Director, Monitor

One way of providing incentives may be to have differential cost improvement or efficiency targets, to recognise rather than penalise, the higher performing areas. For this to be achieved it is imperative for adequate data to be available to drive SLR. The detailed level of understanding needed to achieve this is unlikely to be available from a basic SLR product (as defined in Figure 1). The additional ability to drill down that is available in a more advanced SLR or by using PLICS, would make these preferable options if a key imperative is to be able to consider differential cost improvements.

5 Issues to consider during implementation of SLR/SLM/PLICS

Once the implementation strategy has been determined and the project has commenced there are a number of factors that can help to ensure a successful implementation.

- Keep focused on the agreed objectives – as people have new ideas do not allow the programme to wander too widely.
- Don't try to run before you can walk – build capability and understanding, plan to develop and enhance. Develop a roadmap for the journey ahead, and understand what you will have at key stages in the future – typically SLR will be implemented before moving to SLM.
- It's not a finance initiative – it may be coordinated, or even initially led by finance, but must engage and build ownership in the wider business from the outset.
- Be realistic about the data you have available – both what you have and its quality. Experience indicates that if people don't have confidence in the underlying data they will not only disregard the outputs but also dismiss the initiative itself.
- Keep the level of detail appropriate to your needs – too many service line contribution projects fail because the solution becomes too complex and loses transparency. If people can't understand the costs assigned to service lines then they won't have confidence in them and are unlikely to make decisions based on them.
- Use the outputs – too often projects focus on implementing the solution but not on the analysis and application of the outputs – what does it tell you? What is the Trust going to do as a result?

6 What do you get from SLR/SLM?

What you get from SLR/SLM may depend on the other key aspects, particularly issues around data systems and quality. A basic SLR will enable the organisation to take a view on which services are profitable. This is usually expressed in terms of earnings before interest, taxation, depreciation and amortisation (EBITDA). It provides an indication of which services they may wish to develop or make disinvestment decisions about, and those where improvements are needed. A top down approach might use existing data, such as reference costs to provide the information, rather than a bottom up costing.

More sophisticated SLR implementations make use of operational cost drivers, and provide real insight into the behaviour of costs – why they are incurred and why they are at the level they are. This helps focus improvement initiatives on the causes of cost, rather than simply the largest type of cost (payroll) or the biggest departments, as is often the case at present.

Case study

Birmingham and Solihull Mental Health NHS Foundation Trust

Why SLR?

As a provider of a wide range of services, ranging from community based care through to specialist regional services, across different geographic areas, the Trust felt it required an improved economic understanding of the services provided. This was seen as particularly important as an increasing proportion of the Trust's income is generated through cost and volume contracts, with different contractual arrangements with different commissioners. SLR was selected to support the Trust in meeting this objective.

SLR was seen as a key strategic enabler, giving managers and clinicians high quality financial information to enable them to understand the financial performance of their patient services and the financial implications of operational decisions. It was also felt that this approach would allow the Trust to make better strategic decisions, and improve their financial efficiency from team level through to service division.

Challenges and making SLR work

Reporting granularity: before developing SLR the Trust first had to define a service line hierarchy, considering not only the current management arrangements but also how the Trust planned to manage operations in future. They also had to consider how its services were viewed externally for example by commissioners.

Methodology and systems: the Trust's information and finance systems were not sufficiently integrated to run detailed SLR reports. As a result, whilst work had already been undertaken in relation to costing, which was considered to be adequate in the short term, income could not be reported by service line. The Trust therefore initially focused on income analysis, developing a methodology and systems to allow income to be allocated to individual teams and departments based on actual patient activity, the underlying principle being that income should relate to patients seen.

Birmingham and Solihull Mental Health NHS Foundation Trust continued

Complex cost behaviours: in addition to the core cost and income analyses, detailed consideration was necessary around certain cost items, such as estates costs, to ensure service lines were treated equitably and that financial reporting reflected the reality of commercial contracts and SLAs.

Support and buy in: in parallel with methodology and system development the Trust organised a series of workshops and seminars to communicate with all staff what SLR was and why it was being used. This was seen as crucial to the success of SLR at the Trust. Improvements could only be made if staff members were able to understand and use the new reports.

Benefits

Combining costing and income analysis at a team level, provided the ability to report on the actual financial position of service lines, identifying contribution and surpluses. Key benefits initially included:

- identification of service contribution and profitability to inform improvement initiatives and strategic planning
- improved understanding of the dynamics of patient activity, income generation and cost, both within finance and service divisions
- integration of activity and finance systems, bringing together financial and operational data to provide real insight into operational performance.

It is understood that SLR is only the start of a journey to improved performance. It enables a greater understanding of how income is earned and how it is used, but does not provide a complete framework to manage service line performance. The Trust is looking to build on the work to date to develop SLM, which aims to devolve decision making to front line services wherever possible through the development of business units.

7 What more would you get from PLICS?

The advantage of costing at this most granular of levels, is that the user then has the ability to report it in a number of ways, for example consolidating individual patient-level costs and reporting by service line, by HRG or even at individual consultant level. Although, the potential challenges in aggregating patient costs in this way should not be underestimated (complex cases may involve multiple HRGs or service lines).

Another key factor with PLICS is the importance of the 'I' – information – without which the value of the costings may be limited. Peter Donnelly, Head of Payments by Results, Department of Health, believes that **'it is very difficult to manage a service to its optimum financial and clinical performance without the detailed information you get from PLICS.'** It is by having a real understanding of what was done and why, to the patient that the Trust can start to gain a real insight into the drivers of cost. It also offers the opportunity to start having a dialogue about why the cost and time of treating the same condition can vary significantly. For example, why does one clinician request the full range of pathology tests while another may be more selective while treating the same patient? What is the optimum patient pathway for a particular diagnosis?

Whilst it is true, as some suggest, that these variations in pathway could be identified without associating them with cost data, linking them to their financial impact enables these variations to be quantified and therefore, assists in targeting which areas might yield more significant efficiency improvements.

Some early adopters of PLICS have found that it has refocused their attentions on areas of costs that had previously not been considered to be major cost drivers and it has also diverted attention from the areas that traditionally and probably anecdotally had been believed to be the areas of potential cost improvement.

PLICS also offers the opportunity to have more informed cost improvement programmes instead of blanket cost improvements that never seemed fair and equitable and probably did not work once employed.

Some believe that this insight can be gained through robust SLR, ensuring that the drivers of costs are properly understood. For example, a single type of treatment may be costed differently for 'standard' and 'complex' cases. PLICS will undoubtedly provide greater detail, but is reliant on capturing and analysing much greater quantities of data.

'Greater transparency enhances performance. Internal benchmarking between individuals and divisions which are measured on a consistent basis can help to identify best practice and raise standards.'

CIMA's Improving decision making in organisations – unlocking business intelligence, September 2008.

Salford Royal NHS Foundation Trust

Why PLICS ?

Salford were driven to be an early implementer of patient-level costing because of a desire to produce costing information that was going to be of real value in managing the business. Rather than as had previously been the case in producing reams of information to standard templates that added little value to the organisation locally and were more concerned with meeting central data requirements. The 'light bulb moment' came as a result of the realisation that in the commercial world costing was seen as an opportunity to engage front line staff in identifying opportunities to cut costs and avoid waste, whilst still delivering a high quality safe product.

The amount of resource needed should not be underestimated and whilst some are initially concerned about the cost of the right software solution, experience at Salford suggests that the cost of the software is relatively low compared to the other resources that have to be committed. Salford initially spent six months looking at systems and costing principles as part of what it envisaged to be a two year project, during which time the project has needed input from senior managers and clinicians as well as finance staff.

In reality after tendering, the first cut was implemented after just 14 weeks, but is now subject to ongoing refinement. Others might be hesitant as they are concerned that there may be a better solution around the corner, but the Salford view is that the right time is sooner rather than later, not least because the potential to make significant efficiencies is taken advantage of earlier.

Benefits

An immediate benefit that was identified was the increased accuracy of cost and activity allocations and an improvement in data quality, which in turn potentially supports improved decision making.

Costing at this level of granularity results in costs that can be reported in a variety of ways so it supports the SLR or reporting by HRG or many other opportunities.

Challenges

Data quality and systems may be seen as an obvious challenge and at Salford there was certainly an anticipation that this might be one of the major challenges. However, the team were pleasantly surprised to find that this was not the major hurdle that it might have appeared. Some systems were already at the patient-level, such as radiology and pathology whilst others such as staffing required a work around. Another area that required a solution that has since been developed, was in prosthetics. An area that provided some challenge was income due to issues such as amounts of block income not linked to per patient as well as sums outside of tariff.

Key lessons learnt

Salford was a very early implementer and at times it felt like feeling your way in the dark.

The first key lesson was not to stick slavishly to the NHS costing manual, but to develop a process that worked locally. Also important was using the right tools and it soon became apparent that the vast quantities of data did not lend themselves to an MS Excel solution, so database skills needed improving. The project should not be seen as simply a finance initiative, it needs buy in at the very top level and commitment of adequate and appropriate resource throughout.

8 Does PLICS improve the patient experience?

It could be argued that any system that improves NHS efficiency releases resources that could be invested in patient care, thereby improving the patient experience, however opinion is divided.

PLICS is one way of underpinning a robust SLR/SLM but it is not the only way and it is argued that a sophisticated or robust SLR has similar potential to impact on the patient experience.

It is clear that any information used to inform decision making has the ability to impact on the patient experience, but this may not, or may not necessarily need to, result in improving the patient experience.

Until recently measuring quality has been a somewhat subjective area, although with the quality aspects of the Darzi review² and proposed elements of quality payments this area may become more objective.

A prime consideration should be what an acceptable or optimum level of quality is. This potentially is a debate that can be stimulated at the clinician level supported by the transparency afforded by PLICS. What PLICS is able to do is to highlight the cost difference of treatment practices for the same condition, but again it is argued that a robust SLR offers similar benefits.

One objective of implementing an SLR solution with or without PLICS, should be to improve the patient experience. However, it is conceivable that a Trust faced with a need to reduce costs in an unprofitable service may take the sound economic decision to either reduce quality or services. Whilst such decisions would be taken with the intention of holistically serving the best interests all around, they may potentially be seen as detrimental to some.

Another view is that by helping Trusts to understand and identify differences in the patient care pathway, changes to pathways may be adopted that are to the benefit of the patient experience.

Another related way in which PLICS has the potential to influence the patient experience is by the role that it plays in influencing tariff. A significant change recently proposed by the Department of Health is to move from using reference costs to inform tariff, to a system where only good quality patient-level information from a limited number of Trusts is used to inform tariff. This is an approach used by a number of countries including Germany, Canada and Australia.

The rationale for this is that the basis for tariff moves from using reference costs, which are of variable quality to using a more formally quality accredited sample base to inform tariff. The impact of this will be that tariff will be constructed around accredited costing methods and this will result in incentives for providers to adopt more standard (and clinically evidenced) care pathways. It could be further argued that this is closer to payment by results than the current system which is effectively payment for activity.

Another view expressed is that patient-level is the 'currency of the clinician', and that the way to engage consultants in the process (which is key to its success) is to translate costs into a language that they use. There is a view that suggests that this can be achieved with advanced SLR.

From a more commercial standpoint a key factor of the FT regime is financial viability. Put simply, provider organisations need to be able to remain financially viable if they are to be able to continue future healthcare provision.

The financial viability argument might be seen as more related to whether or not the patient is able to have a healthcare experience rather than at what quality level. Nevertheless, plurality of provision and patient choice are seen as quality factors and so the future viability does affect the patient experience.

² Also known as *NHS Next Stage: Final Review* published by the Department of Health

Countess of Chester NHS Foundation Trust

Countess of Chester Hospital NHS Foundation Trust is an example where SLR and SLM, based on PLICS has been introduced with positive results, in terms of its ability to improve patient services.

Already a successful first wave Foundation Trust producing a surplus and achieving its core duties, the primary objective that led to the decision to implement SLR was not solely financial. The motivation was driven by the recognition that the Trust needed to focus on improving patient quality.

The issues that led the Trust to this view were as wide ranging as: recognising that its management structures were disparate, a realisation that it had previously had a tendency to focus primarily on its expenditure position, its performance reporting had tended to focus on the NHS operating framework, and particularly important, the fact that patient survey feedback told the Trust that there was room for improvement.

The Trust decided that a SLR solution based on a detailed level of bottom up costing was the right solution for them as it offered the important additional benefit of engagement and buy in from clinical staff.

The resource implications of implementing such a system should not be underestimated. At Countess of Chester the implementation took 12 months and the resources dedicated to it included a full time SLM project lead, appointed from within with a finance background, as well as support from existing staff and dedicated sessions from the Trust's medical director. Additionally management support to the service lines was enhanced by the creation of a new surgical service line and investment in assistant service managers.

Another key lesson the Trust learnt was the importance of recognising risk as well as reward. Drawing on one example of a service development proposal that was unsuccessful the key issues identified were unrealistic assumptions around implementation timetables and capital costs, highlighting the need to ensure both that a contingency is included, but also that both upside and downside risk modelling is carried out.

An integral part of the revised management arrangement was to introduce clarity about both risk and profit sharing, which had previously been centrally managed. Another important factor was the introduction of service line derived KPIs which further supported the devolved accountability and responsibility ethos.

By using SLM in this way the Trust has been able to underpin a culture shift where responsibility and accountability are devolved to service lines and create an environment where service leaders become the drivers for change.

The Trust believes that implemented in this way SLM offers the opportunity to deliver real improvements in patient care and quality. With the right KPIs that support devolved responsibilities and enhanced accountability in place it can engender ownership and therefore motivate staff.

Another benefit identified is a streamlining of the approval process for service developments. With an agreed template and clear parameters, decision taking was devolved to an appropriate level and the timescale for approval was reduced from a worst case (under the previous arrangements) of up to 15 months, meaning that it was potentially in excess of two years to achieve implementation, to a realistic estimate of between two and five months for approval with a possible implementation of ten months from inception of proposal.

9 Conclusion

The initiatives discussed in this paper offer clear opportunities for NHS Trusts to implement an improved methodology for reporting and managing of services, which is a key factor in improving efficiency and financial stability in the NHS.

There are clearly a number of issues for Trusts to consider before implementing PLICS, and to a lesser degree SLR. Many of these issues apply whichever method is adopted, with the degree of sophistication being the factor which impacts most on the resource implications of implementation. The greater the degree of sophistication that is aimed for, the more resource the solution is likely to demand, with a more sophisticated SLR usually being more resource intensive both during implementation and in ongoing maintenance.

From a purist point of view, CIMA believes that PLICS, as an activity based costing method, has sound foundations and its benefits are hard to argue against. It is also consistent with many of the key principles identified in the IFAC (International Federation of Accountants) and PAIB (Professional Accountants in Business) good practice in costing guidance.

Management accounting standards do not exist in the same way as they do in other fields of accountancy with more regulated frameworks. Instead it is a principles based methodology with an emphasis on ensuring appropriate methods are applied.

Therefore and equally important from a pragmatic point of view is the importance of selecting a solution that meets the needs of an organisation taking into account factors such as:

- What do they want? Do they have a clear vision of the outcome that is intended?
- What resource is available? What is the organisation willing and able to commit?
- Thinking long term – the solution that is implemented should be fit for purpose in the future.

Important factors in a successful implementation are clarity of intended outcomes together with a realistic assessment both of the Trust's capacity and motivation to undertake an implementation, as well as its appetite for implementing either a fully developed or an evolving solution.

Another significant factor that Trusts should use to determine its preferred solution will be an assessment of the added value that it believes will accrue from going for a more advanced solution.

Where next?

As the debate continues, the next stage of this research is to conduct a survey among NHS Trusts to ascertain the level of adoption of SLR/SLM and PLICS and to establish why such systems are adopted, how successful implementation has been, and if in practice these methods deliver the benefits they claim.

10 References and further reading

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CIMA's report explores the potential of BI to inform decision making and it could also free up management accountants to input even further to their organisation's strategic direction.

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