Strategic Property and Asset Management Guidance for NHSScotland

Developing a Property and Asset Management Strategy (PAMS)

Health Facilities Scotland
Property and Capital Planning

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Contents

Introduction

In 2007/08, the NHS in Scotland held fixed assets worth nearly £5 billion. Most of this value was associated with the estate (land and buildings) which was worth £4 billion. Other significant physical assets are vehicles, medical equipment and Information Management and Technology (IM&T) equipment and infrastructure.

Capital investment in assets in the NHS has more than trebled in cash terms in recent years and this will continue to rise to £598 million by 2010/11.

These assets have huge potential to play a major role in facilitating change and performance improvement in the NHS as well as enhancing service user's experience.

Asset management is one of the five work streams in the Scottish Government's 'Efficient Management' agenda; it is a vitally important task. It should result in the best achievable performance from the present and future investment in physical assets over their available life.

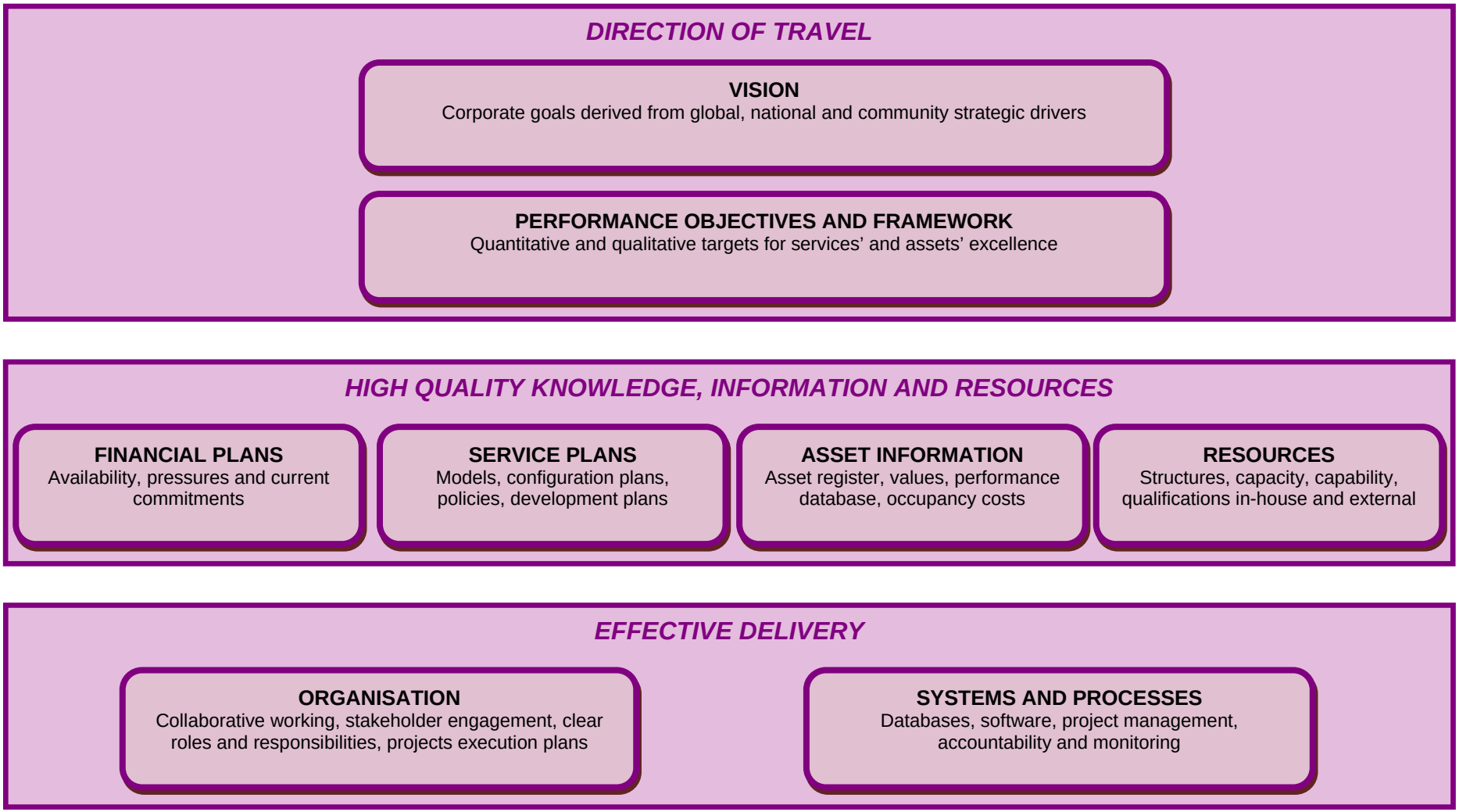
This guidance has been written to aid managers of NHSScotland with the strategic management of their property and asset base through the preparation of a corporate Property and Asset Management Strategy (PAMS).

Asset investment decisions have long lead times and long lasting consequences. Over such long periods of time there can be major change driven by shifts in peoples' expectations, advances in knowledge and technology, political ideas, new legislation and litigation and the economic situation. To be prepared for such change, those managing physical assets are required to think far ahead. The processes in this guidance encourage and facilitate this as an essential and integral part of investment decision making within an overall corporate planning framework.

This guidance takes its readers through the benefits of having a PAMS, describes the key issues that the strategy should address and provides guidance on how to write a PAMS in a stepwise, straightforward and structured way.

Decisions on investment in physical assets are some of the most important made within the NHS in Scotland. The legacy is everywhere to be seen – buildings, equipment, IT systems and vehicles that set the pattern of care and service delivery for years to come!

Organisations will be able to ensure that their assets achieve excellent performance in their role as enablers of overall organisational success when the building blocks for asset management illustrated below are in place (and only then).



Background

CEL35 (2010) provided a statement of the Scottish Government's policy on property and asset management in NHSScotland entitled 'A Policy for Property and Asset Management in NHSScotland'. This policy requires that all NHSScotland bodies must have a current Property and Asset Management Strategy (PAMS) which reflects the following policy aims:

- to ensure that NHSScotland assets are used efficiently, coherently and strategically to support Scottish Government's plans and priorities and identified clinical strategies and models of care;
- to provide, maintain and develop a high quality, sustainable asset base that supports and facilitates the provision of high quality health care and better health outcomes;
- to ensure that the operational performance of assets is appropriately recorded, monitored, reported and reviewed and, where appropriate improved;
- to ensure an effective asset management approach to risk management and service continuity;
- to support and facilitate joint asset planning and management with other public sector organisations.

In January 2009 NHSScotland received a report entitled '*Asset Management in the NHS in Scotland*' from the Auditor General for Scotland. The findings of this report have reinforced the need for a systematic approach to total asset management and not just property. The report confirms effective asset management can:

- improve care for people who use NHS services in Scotland;
- provide safe, secure and appropriate assets that support service requirements and contribute to achieving Scottish Government policies on health and sustainability;
- ensure that the NHS achieves value for money from its management of assets.

The report recommends that NHS bodies should:

- develop strategies for each type of asset and then develop a corporate asset management strategy and plan which links with their clinical strategies;
- ensure they assess estate condition, statutory compliance, functional suitability, and space utilisation on a regular basis;
- ensure all information is held electronically;
- review their performance management arrangements and, where required, develop performance measures and targets for assets;
- ensure that consideration of whole-life costing is a requirement for all investment decisions and that they budget for maintenance throughout the life of the asset.

"Assets which are in the right place at the right time, suitable for their purpose and well maintained will positively support service delivery and enhance service users' experiences."
Audit Scotland Report 'Asset management in the NHS in Scotland'

The structure of this guidance

The remainder of this guidance document is structured into three main parts and a series of appendices that provide a PAMS Checklist and more detailed guidance on specific issues:

Part 1: An introduction to developing a PAMS:

- the benefits of a PAMS;
- the scope of a PAMS;
- the PAMS planning process.

Part 2: Key issues in developing a PAMS:

- service redesign;
- towards a 'mutual NHS';
- asset performance appraisal;
- strategic option development;
- option appraisal;
- lifecycle costs;
- performance monitoring.

Part 3: Writing the PAMS

- the PAMS template;
- a section by section guide on writing the PAMS.

Organisations should interpret the guidance to meet their particular requirements, focussing effort on their own unique issues and problems associated with the ownership and use of physical assets.

The main aim is to develop a PAMS that has wide ownership throughout the organisation. It should provide the reader with an understanding of the context within which investment decisions relating to physical assets are made in the organisation. The document should be comprehensive but not overly long or unnecessarily complicated.

The effort put into developing a PAMS should always be rigorous but proportional in time and cost to the value of the asset set affected.

Part 1: An introduction to developing a PAMS

1.1 An introduction to developing a PAMS: The benefits

A good PAMS is one that leads to improvements and added value for NHSScotland's services. Developing a PAMS should provide the following benefits:

- acquisition and development of assets that support service/capacity requirements and national/local policies;
- the provision of safe, secure and high quality healthcare environments which can aid patient outcomes/satisfaction levels and staff retention/morale;
- a plan for change that enables progress towards goals to be measured;
- a clear commitment to complying with sustainable development and carbon reduction initiatives;
- a means of targeting investments to minimise the risks associated with asset ownership;
- an opportunity to optimise asset ownership costs;
- flexibility to respond to future service changes;
- an opportunity to dispose of surplus and/or poorly-used assets and reinvest the released resources.

It is important to approach the development of the PAMS with the aim of optimising the influence that assets can have on the overall achievement of NHSScotland's national and local policy goals and objectives. The acquisition and ownership of assets themselves is not an objective for the NHS, they are only a means to an end. Therefore, the PAMS must focus on demonstrating the influence that assets can have on objectives such as those in '*Better Health, Better Care*: *Action Plan'* i.e. making a significant step towards a 'Healthier Scotland' and its three main components of health improvement, tackling health inequality and improving the quality of healthcare.

> ***"Help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to healthcare."***
>
> ***'Better Health, Better Care: Action Plan'***

1.2 An introduction to developing a PAMS: Document scope

The PAMS should be:

- comprehensive – covering all the assets in the categories of land, buildings, equipment, IM&T hardware and vehicles;
- cover a period of 5 to 10 years for all assets;
- credible – accepted throughout the organisation as a basis for asset planning and management decision making.

Generally the management of assets owned or leased by providers of contracted services should remain the responsibility of the contractor concerned. The main exceptions to this would normally be:

- the premises of general medical practitioners due to the nature of the relationship created between healthcare organisations and general practices by the new General Medical Services (nGMS) Contract;
- any assets that are part of or connected to the building services of the organisation's premises and used by one or more contractors under a lease or other tenancy arrangement. These should be included because of the impact that the organisation's PAMS could have on the function performed by the contractor(s).

The PAMS should span the following four key elements of asset management:

- **planning** – what assets are required and when?
- **acquisition and disposal –** the life cycle replacement of assets;
- **operation and maintenance** – ensuring assets are maintained and fully operational;
- **performance management and monitoring** – collecting and managing data to inform asset management.

"NHS bodies should develop strategies for each type of asset and then develop a corporate asset management strategy and plan which links with their clinical strategies."

Audit Scotland Report: '*Asset Management in the NHS in Scotland*'

1.3 An introduction to developing a PAMS: The process

There are three fundamental questions that need to be addressed in the development of a PAMS:

1. **Where are we now? -** Healthcare organisations should establish a baseline position that identifies their current assets and how well these are contributing to supporting service delivery. For example, the physical condition of the assets and their suitability for current usage. A thorough analysis of the baseline position will identify key issues to be addressed by the PAMS in terms of asset condition and performance.
2. **Where do we want to be? -** What are the organisation's plans for healthcare in the future and what assets are needed to support current and future service needs? This question seeks to develop an understanding of the impact of future service changes on the need for assets. It also aims to set targets for improving the condition and performance of assets so that they closely match service need for the foreseeable future.
3. **How do we get there? -** How will the organisation move from its current position to a future position where assets are closely matched to service need? Answering this question will require the prioritisation of future investment in assets. It will require a rigorous approach to the evaluation of options and choices in order to ensure that the PAMS will maximise the benefits for service users, provide value of money, be affordable to the organisation and have an acceptable level of risk.

Having answered these three questions, the organisation should have a clear idea of its strategy for physical assets. In order to complete the PAMS it must then address the issues associated with implementing the strategy. This will require thought to be given to:

- the allocation of roles and responsibilities for managing the implementation of the PAMS. There is little point in developing a PAMS unless there is a clear commitment to resources to implement it;
- arrangements for monitoring the implementation of the PAMS to ensure that the required benefits and improvements in performance are actually delivered.

Appendix A of this guidance provides a checklist that can be used to ensure that all the key requirements for a good PAMS are addressed.

Physical assets are of little value to NHSScotland unless they support, enable and facilitate the work of the people that deliver frontline healthcare services.

Part 2: Key issues in PAMS Planning

2.1 Key issues in PAMS Planning: Service redesign

It is a critical time for healthcare in Scotland. Changes are taking place both within the local health economies and across the country to make sure that NHSScotland is in the best possible shape to meet future health needs and improve people's well-being.

How assets are managed in the NHS is ultimately driven by health policy. All NHS organisations have plans to redesign their services to achieve the aims of the Scottish Government's key policies as set out in '*Better Health, Better Care – Action Plan*'. This service redesign will require significant changes in the way that assets are managed and used in the NHS. For example, many of the services currently provided in hospital outpatient departments, such as rehabilitation, will increasingly be provided in GP surgeries or community hospitals. These local health facilities may need additional space, buildings, equipment, IT systems and vehicles to delivery these services.

The development of the PAMS will require a thorough review of the organisation's corporate and service strategies and plans for change. These documents should answer key questions such as:

- what services will the organisation provide in the future?
- how will they differ from those services currently provided?
- where will they be located in relation to the areas they serve?
- who will provide them and how?
- when will these changes take place?

The PAMS must then interpret the proposed service changes in terms of their impact on the need for physical assets. It should demonstrate how the current supply of physical assets will need to change through investment, acquisition or disposal to meet future service needs.

This review of the organisation's current strategies and plans for change is fundamental to the identification of the gap between the organisation's vision and the adequacy and ability of its existing asset base to support that vision.

For healthcare organisations it is crucially important to recognise that the PAMS is not developed in isolation. Rather it is an integral part of service planning and is a long term plan that should identify service led changes to the asset base.

2.2 Key issues in PAMS Planning: Towards a "Mutual NHS"

In '*Better Health, Better Care: Action Plan'* the Scottish Government confirmed its commitment to greater public involvement and set out its vision for a 'mutual NHS'. That vision is based on a shift from the current position where the NHS sees people as 'patients' or 'service users' to a new ethos where patients, carers and the public are partners with real involvement in service design and delivery.

The challenge for those managing the development of a PAMS is to ensure that the process harnesses people's knowledge and enthusiasm in the decision making about the shape and structure of physical assets that support NHS services across Scotland.

Third Sector organisations have well established networks and connections across communities and can play a vital role as partners in ensuring that people are engaged in major decisions on the PAMS. However, this needs to be extended to improve the way in which the NHS engages with some of the seldom heard groups such as children, young people and the people who care for them as well as some of the most vulnerable people in our communities. NHSScotland is a public service, a service that is used for, and paid for, by the public. The '*Better Health, Better Care'* discussion process demonstrated both the willingness of patients and the general public to get involved in the design and delivery of health services, and the value that can be added by such participation.

In order to fully benefit from this participation, organisations will need to re-think the way in which they present information, choices and the processes that they use in the development of the PAMS.

Examples of stakeholders who should be involved in the development of a PAMS are:

- the people of Scotland;
- key decision makers;
- heads of policy and operating units and operational staff;
- Local Authorities and other Government Departments;
- voluntary and independent sector service providers.

"The people of Scotland and the staff of the NHS are partners, or co-owners in the NHS. I want us to move to a more mutual NHS where partners have real involvement, representation and a voice that is heard."

Nicola Sturgeon, MSP
Taken from *'Better Health, Better Care – Action Plan'*

2.3 Key issues in PAMS Planning: Asset performance appraisal

Understanding what assets the organisation owns and uses and how these are performing in support of service delivery is an essential prerequisite to developing a PAMS.

The importance of establishing a clear statement of current condition and performance of all assets cannot be over emphasised. It may well be very influential in terms of developing the PAMS since it will inform decisions on the retention or disposal of assets as well as informing the development of future capital and revenue investment programmes.

Best practice asset management will maintain accurate and up to date information for all physical assets covering:

- general description of the asset - age, size, volume, value and outputs etc;
- physical condition – backlog maintenance, expected remaining life, risk assessment etc;
- compliance with statutory and non-statutory standards – Fire, Health and Safety, Disability Discrimination Act (DDA), Healthcare Associated Infection (HAI) etc;
- functional suitability for its current use and adaptability for future changed use;
- utilisation – fully used, not used etc;
- quality – patient and staff experience;
- environmental management – carbon footprint, energy performance etc.

All NHSScotland bodies must utilise the NHSScotland Asset Management System as a means of holding property and asset management data in a readily updateable and consistent form. This will enable the production of local and aggregated management reports and statistics as required by both holding bodies and Scottish Government Health Directorates (SGHD) at national level.

A rigorous analysis of the appraisal results is essential if the raw survey data is to be transformed into useful information that can inform the PAMS and underpin asset investment decisions. The analysis of the data should enable reports and key information to be produced in graphical and spreadsheet form that are meaningful and can be included in the PAMS document.

Appendix B provides more detail on a methodology for undertaking an appraisal of asset condition and performance and is generally applicable, with some adaption, to all the physical asset groups.

It is essential that the condition and performance of all assets is assessed to ensure that they are fit for purpose and safe for patients and staff to use.

2.4 Key issues in PAMS Planning: Strategic option development

The review of the organisation's corporate and service strategies and the appraisal of current asset condition and performance will enable the development of strategic asset options. These options should aim to deliver the future needs of the service in terms of asset capacity, quality and performance. This stage of conceiving options should:

- be focussed on delivering policy, service and organisational objectives – not just improving assets;
- be imaginative and include radical and minimal options as well as the 'Do nothing' option;
- include some 'thinking out of the box';
- challenge assumed standards and constraints;
- aim to be comprehensive in addressing all the issues identified in the appraisal of the current situation;
- not be fixed by what seems feasible and viable;
- avoid trying to determine the detail of options – keep it strategic!

Scenario Planning is a technique that aims to stretch thinking about the future and can help to widen the range of options considered. It involves thinking about not one but a number of plausible futures.

A long list of options should be developed and each option should be briefly described in terms of what it will entail and the service requirements that it will meet. It is important to be able to document the full list of options which was considered as part of the decision making process that led to the PAMS.

Although the cost of the long list of options will not have been explicitly identified at this stage, it should be possible to reduce the long list to a smaller number that provides real choice but is manageable. This can be done by eliminating options that are clearly not affordable or can be identified as inferior. Inferiority is defined as delivering lower benefits at equal or higher cost or the same level of benefits at higher cost.

Assets play an important role as enablers of strategic action. They should provide the tools and environment that enable innovation to flourish and the organisations goals to be achieved.

2.5 Key issues in PAMS Planning: Option appraisal

Developing any strategy or plan involves making decisions on the choices for the future and these decisions can be difficult due to:

- complexity of issues;
- uncertainty about the future;
- the tradeoffs – benefits/costs/risks;
- people having different perspectives which can lead to different conclusions.

It is important that decision makers think hard and systematically about strategic options and adopt a process that aims to decompose a complicated problem into smaller chunks that can be analysed and understood by all those with an interest in the outcome of the decision making.

Option appraisal is a key tool for achieving value for money and satisfying public accountability requirements. It is a systematic process for examining alternative uses of resources, focusing on assessment of needs, objectives, options, costs, benefits, risks, funding, affordability and other factors relevant to decisions.

Good appraisal leads to better decisions and value for money (VFM). It facilitates good project management and project evaluation. Appraisal is not optional; it is an essential part of good financial management, and it is vital to decision making and accountability.

Option appraisal is:

- designed to assist in defining problems and finding solutions that offer the best VFM;
- a way of thinking expenditure proposals through, right from the emergence of the need for a policy, programme or project, until its implementation.

The option appraisal process can also provide a good vehicle for engaging the public, stakeholders, service users and staff in the decision making i.e. moving towards a 'mutual NHS'.

The '*Scottish Capital Investment Manual (SCIM) – Option Appraisal Guide'* provides a detail methodology for carrying out an option appraisal and is mandatory for all NHSScotland healthcare bodies taking forward asset investment proposals.

A systematic and structured decision making process will help to compensate for the biases that are often embedded in people's thinking.

2.6 Key issues in PAMS Planning: Life cycle costs

All investments in physical assets have long-term revenue funding implications for NHS bodies. These are known as Life Cycle Costs (also called Whole Life Costs) and include capital charges, maintenance and utilities. In the case of large assets such as buildings and engineering systems there is also the need for capital funding at regular intervals throughout the asset's life to replace elements or components. Examples being the need to replace windows in a building or pumps in an engineering installation.

It is essential that life cycle costs are taken into account when developing a PAMS since these costs must be included in the organisations budgeting if assets are to remain functional and fully operational over their life.

In addition to these asset related life cycle costs, there can often be other revenue implications arising from asset procurement and ownership such as staff costs. For example, investing in a new piece of equipment may automate a task previously done manually. Similarly, when an old building is replaced by a new one, which is purpose designed, then this may reduce the number of staff needed to deliver the service.

Life cycle costing is a technique that can be used to assist decision making on asset procurement and to establish the total cost of ownership. It is a structured approach that addresses all the elements of cost and can be used to produce a spend profile over the anticipated life-span of the asset.

The technique is particularly useful for:

- **Option Evaluation -** it allows evaluation of competing proposals on the basis of whole life costs which leads to improved investment decision making;
- **Improved Awareness -** provides the organisation with an improved awareness of the revenue implications arising from asset purchase and ownership. This ensures that decisions on asset management are affordable and that the real cost of ownership can be included in future budgets.

Life cycle costing is a well established technique and guidance on it can be found in the Scottish Capital Investment Manual, HM Treasury 'Green Book' and ISO 14040:2006.

The initial capital cost of a physical asset may be less than 10% of the total cost of ownership over the life of the asset.

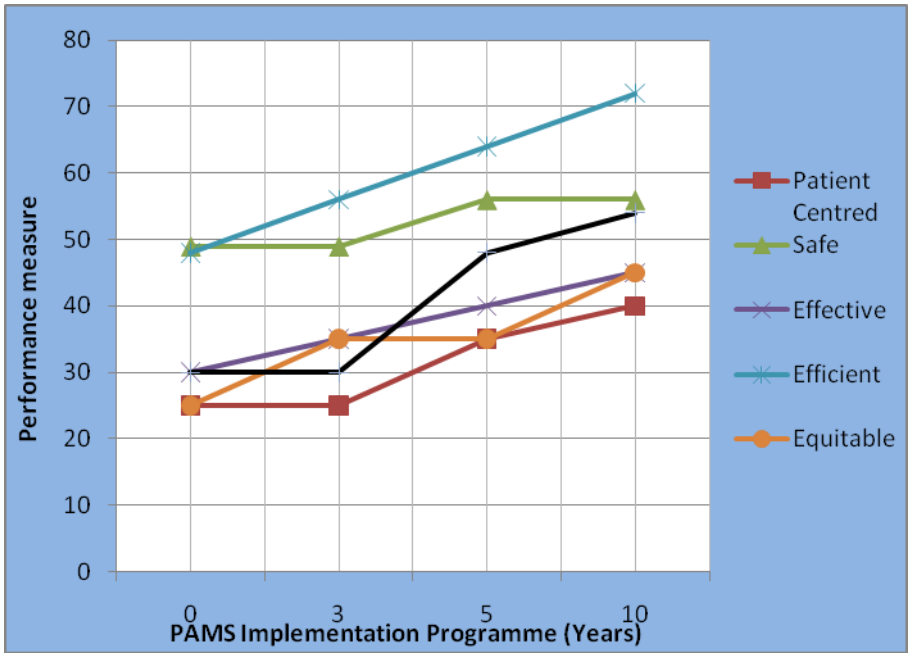
2.7 Key issues in PAMS Planning: Performance monitoring

A PAMS should be developed so that it can be implemented and fuel continuous improvement within healthcare organisations.

For this to be the case, performance monitoring must be an explicit and integral part of the PAMS and subsequent accountability reviews should show how asset performance is improving over time. This should include changes in the key performance indicators identified in the asset performance appraisal (Section 2.3) covering asset condition, quality, statutory compliance, utilisation, functionality and environmental management. It should also include comparisons with asset performance of similar organisations where this is available.

Whilst acknowledging that these well recognised measures of asset performance remain important, modern best practice also seeks to monitor the impact of assets on the success of the overall organisation as a partner in the delivery of health and social care services in their area. '*Better Health, Bettter Care: Action Plan'* sets out actions for ensuring better, local and faster access to healthcare using six dimensions of quality that should enable the NHS to be far better at meeting patient needs. Therefore, healthcare organisations should aim to show the impact of the PAMS on these dimensions.

The table opposite shows the results of a new methodology for monitoring the impact of the PAMS on these dimensions of quality and Appendix C provides more detail on this approach.



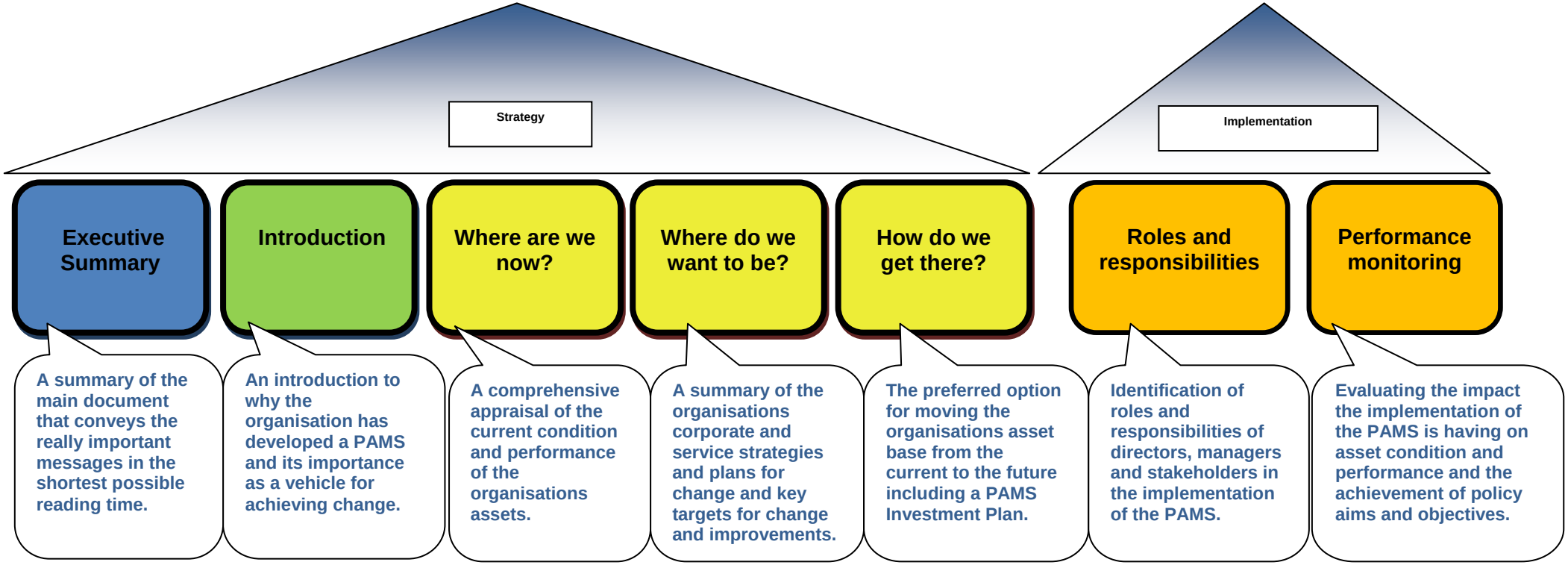
The ultimate measure of a successful Property and Asset Management Strategy is the influence that it has on the overall performance of the NHS organisation.

Part 3: Writing the Property and Asset Management Strategy

3.1 Writing the PAMS: The PAMS template

The PAMS template illustrated below is based on the Leeds University Report *'Improving Property Asset Management in the Central Civil Government Estate'*, as refined by government and private sector expertise. The process is designed, among other things, to bring together asset strategic planning and effective implementation.

All sections of the strategy should be developed in parallel to ensure that existing programmes are realigned and measures of success are revised each time the strategy is revised. Whilst parts of the strategy covering different asset groups may be presented in different documents, the sections of the strategy are interrelated and should be developed together.



3.2 Writing the PAMS: The Executive Summary

The Executive Summary is the most important part of the PAMS document. As such, it should be the best-written and most polished piece of the document. This is because many readers may only look at the Executive Summary. In short, you may expect that an Executive Summary will be read more frequently and by more people than will the entire document. Key decision making groups in the NHS, such as NHS Boards, invariably receive many reports and have very busy agendas at their meetings. Therefore, it is vitally important that the Executive Summary is capable of conveying the really important messages from the main report in the shortest possible reading time. Brevity and conciseness are the keys to a well-written Executive Summary.

Key questions to answer	Answers…
What is the purpose of the Executive Summary?	It should enable the reader to become acquainted with the full document without reading it and must be accurate and representative of the full document. It should not be misleading; readers should be given the same impression as if they had read the entire document.
What information should be included in it?	It should include the main issues, the key facts, and the necessary background to understand the problem, the alternatives, and the major conclusions.
How should it be structured?	It should be structured in the same order as the main document.
When should it be written?	It should be written after completion of the main document.
Is it likely that some people who read only the Executive Summary will not have the technical background of the writer or final reader?	It should be written with the technical information and vocabulary kept to a minimum because those that only read the Executive Summary may well be people who do not have a technical background.
How long should it be?	It should be no more than 1/10 the length of the main report.

3.3 Writing the PAMS: The Introduction

The Introduction to the PAMS should be short (no longer than two pages) and it should briefly describe why the organisation needs a PAMS and the process adopted for developing it.

Key questions to answer	The answers will provide the reader with...
Why has the organisation developed a PAMS?	A statement of the importance of the PAMS in terms of the organisation's overall performance and how it is a key strategy that supports the delivery of the clinical and corporate strategies.
What are the aims and objectives of the PAMS?	A clear statement of the aims and objectives of the strategy linked to the overall national and local policy aims and objectives.
What assets does it cover?	A description of key asset groups that the PAMS covers including buildings and land, medical equipment, vehicles, IM&T hardware and infrastructure.
What period of time does the PAMS cover?	The period which the PAMS covers, usually 5 to 10 years for all assets.
What are the benefits of the PAMS?	A clear statement of the expected benefits from implementing the strategy which should include how the investment and planned changes in assets are expected to impact on the organisation's overall performance.
What process was used to develop the PAMS?	A short description of the process adopted for developing the strategy, who was involved and how key decisions were made.
How is the rest of the PAMS document structured?	A brief description of the structure of the PAMS document.

3.4 Writing the PAMS: The 'Where are we now?' section

This section of the strategy sets the scene for the reader by addressing the question 'where are we now?' It is likely to contain a lot of information which will need to be summarised using charts, tables and diagrams. Where necessary the backup detail can be put into an appendix.

Key questions to answer	The answers will provide the reader with...
What assets does the organisation own and use?	A breakdown of assets by area (sq.m); ownership (owned, leased, PPP/PFI); usage (care groups, functions - hospitals, health centres etc, divisions); age; value (existing use). Easily understood summary tables should be used.
Where are these assets located?	Maps showing where assets are located geographically and in relation to populations, major road networks, public transport routes etc.
What is the condition and performance of these assets?	Summarised results from the appraisal of condition and performance covering physical condition, compliance with standards, functional suitability, utilisation, environmental management, quality etc.
Is there a backlog maintenance expenditure requirement?	A summary of the backlog maintenance expenditure requirement categorised by risk – high, significant, moderate and low.
How much do we spend supporting our asset base?	A breakdown of asset ownership cost including capital charges, utilities, maintenance, rent and rates, cleaning, insurance etc.
What is the background to our current asset base?	A short history of major events in the development/acquisition of the assets i.e. organisational mergers that resulted in transfer of assets etc.
Are there major constraints on changing/developing the assets?	A summary of constraints such as listed buildings, gifted equipment etc.

3.5 Writing the PAMS: The 'Where do we want to be?' section

The aim of the PAMS is to demonstrate how the organisation's asset base will need to change to enable and facilitate the delivery of the organisation's clinical and corporate objectives. Hence, this section of the strategy will need to be informed by what plans the organisation has for providing healthcare in the future. Prior to writing this section, there must be a thorough review of national and local policies and the organisation's corporate and clinical strategies.

Key questions to answer	The answers will provide the reader with...
What impact will national and local policies and strategies have on the organisation's need for assets?	A short summary of the key national and local strategies and policies which will influence the future need for assets.
Are there planned changes in the way in which healthcare and support services will be provided by the organisation over the next decade?	A summary of the planned changes to services, new delivery models, new ways of working, uptake of new technology etc. with links to the relevance of these to the asset base.
What were the main issues arising from the analysis of current asset condition and performance that will need to be addressed by the PAMS?	A summary of the targets for improving the condition and performance of assets including the prioritisation of expenditure to address high and significant risk issues. This should also include a timeline for achieving the improvements.
How does the PAMS relate to other corporate strategies within the healthcare organisation?	A clear description of how the PAMS links with other corporate strategies such as the Clinical Strategy, Local Delivery Plan, Workforce Planning, IM&T, Corporate Risk Register etc.
How have the various parts of the organisation been involved in the development of the PAMS?	An assurance that operating divisions have processes in place to assess their asset and equipment needs and agree priorities and investment programmes based on realistic forward planning and that these have been an influential input to the strategy.

3.6 Writing the PAMS: The 'How do we get there?' section

This section of the PAMS will bring together the changes and investment (capital and revenue) that are needed to implement the preferred option for the corporate PAMS.

Key questions to answer	The answers will provide the reader with...
What options does the organisation have for ensuring that its assets closely match its future service and organisational needs?	A description of all the options that were developed and considered for each asset group. This must include 'Do nothing', 'Do minimum' and 'Radically different' options.
How did the organisation make decisions in relation to the PAMS?	This is a crucially important part of the document since it will need to fully explain the rationale for decisions; who was involved in the decision making process; how the preferred option was identified and the key factors responsible for its superiority. It should include results from non-financial benefits appraisals, risk analysis, economic (value for money) and financial (affordability) appraisals.
What key changes will take place as a result of implementing the PAMS?	A description of the major changes in assets. This should include a table comparing the current situation and the situation on completion of the PAMS i.e. changes in number of buildings, floor areas, number of vehicles, equipment etc. Where there is gradual change over time i.e. development of a hospital site over a number of years, then interim changes should be described. Where changes are complicated such as different services moving out of a site and a different service moving in, then 'flow diagrams' may help the reader to understand the change that is planned.
How much will the PAMS cost to implement?	A fully costed PAMS showing in detail the capital and revenue implications for each year of implementing the strategy including the timing of all acquisitions, disposals, upgrading and refurbishments.
Can the organisation afford the PAMS?	The PAMS Investment Plan should show a 'year on year' cash flow profile that demonstrates how the investment is funded and the sources of funding.
What are the risks associated with implementing the PAMS?	A risk analysis and risk management plan showing the links to the Corporate Risk Register.

3.7 Writing the PAMS: The Implementation Plan

This section of the PAMS takes a step back from the asset base itself and describes the management and decision making arrangements for implementing the PAMS.

Key questions to answer	The answers will provide the reader with...
Who is ultimately responsible for developing and delivering the PAMS?	A categorical statement of who is responsible for the PAMS at NHS Board/Community Health Partnership Committee level i.e. the 'Asset Management Champion' in the organisation.
What organisational structure is in place to deliver the PAMS?	A clear description of the structure and resources available for delivering the strategy on a 'day to day' basis with roles and responsibilities clearly defined. The delegation of responsibilities for implementing the changes proposed in the strategy should also be very clearly defined.
How are the various parts of the organisation involved in the implementation of the PAMS?	The extent of the responsibility for implementing the strategy within departments and service groups (defined unambiguously). The working relationship between these managers and the board level director should also be defined without ambiguity or overlap.
How are stakeholders involved in the implementation of the PAMS?	Assurance that the decision making processes for the future use and change in the use of assets will include stakeholders, within and out with the organisation, that are likely to be affected by these decisions.
What processes are in place to ensure good governance for the implementation of the PAMS?	A clear accountability framework for the PAMS implementation including mechanisms for raising issues, identifying and reporting deviations from the strategy and monitoring and control arrangements.
Is there a 'next step action plan'?	A clear and detailed set of actions that need to be taken following approval of the PAMS that will ensure that the short, medium and long terms goals are met.

3.8 Writing the PAMS: Performance monitoring

The PAMS is developed so that it can be implemented and fuel continuous improvement within healthcare organisations. For this to be the case performance management must be an explicit and integral part of the PAMS and subsequent accountability and reviews should show how asset performance is improving over time and should include comparisons with asset performance of similar organisations. Most importantly this should include monitoring the impact of the PAMS on the success of the organisation as a partner in the delivery of health and social care services in their area.

Key questions to answer	The answers will provide the reader with...
What key indicators (KPIs) does the healthcare organisation use to performance manage its asset base?	An assurance that the organisation is using a properly formulated set of KPIs that are meaningful and do measure outputs rather than simply inputs. These KPIs should not be only about assets but about the influence of assets on the overall performance of the organisation.
How is the organisation currently performing in terms of these indicators, what is the current trend in performance and what difference is the PAMS expected to make to this?	A description of past and current performance in terms of these KPIs and an understanding of where the organisation needs to look in order to improve performance. Presentation of performance change is important and should include easy-to-understand tables, charts, graphs and 'traffic lights' systems.
What systems and processes will the healthcare organisation put in place to hold managers accountable (within and outwith the organisation) for achieving the actions required to implement the PAMS and the performance changes expected from it?	A clear statement of action that the organisation needs to take to deliver the improvements in performance including the timing of improvements and who is responsible for each of the actions required.
How will the organisation collect and use stakeholder opinions about progress and achievements in relation to the PAMS?	A clear commitment that the organisation is embedding the principles of a 'mutual NHS' in its performance monitoring of the implementation of the PAMS.

Appendices

Appendix A: The PAMS Checklist

Where are we now?	Yes/No
Is there an accurate statement of the size and value of the principal assets broken down by category/type/value/site/building/land value/ownership/usage by division/care group?	
Are there maps showing the location of properties across the Board/CHP area and do these maps show the centres of population, road networks, public transport routes etc?	
Has a comprehensive appraisal of the condition and performance of all physical assets been undertaken covering:	
Physical condition	
Environmental management	
Compliance with Fire, Health and Safety, DDA and other relevant statutory standards	
Utilisation	
Environmental management	
Quality	
Have the appraisal results been captured in the NHSScotland Asset Management System?	
Have the results from the appraisals been thoroughly analysed and summarised to identify 'black spots', investment priorities and opportunities for rationalisation and better utilisation of the asset base?	
Is there an up to date and accurate assessment of the backlog costs?	
Is there a risk profile for the backlog costs?	
Is there an up to date and accurate assessment of asset ownership costs - hard and soft FM, capital charges, rates, maintenance etc.	
Has there been a series of structured interviews with clinicians and managers with the aim of developing an understanding of current service and operational issues/problems which are likely to drive changes and investment in the assets in the future and/or to identify 'pressure points' in terms of the asset need?	
Has the funding envelope for the organisation been established including capital and revenue availability, borrowing and other income over the period of the strategy?	

Where do we want to be?	Yes/No
Are there approved corporate and clinical strategies that provide a clear statement of service needs and the direction of service change required to reflect national and local health policy such as *'Better Health, Better Care: Action Plan'*?	
Have these strategies been reviewed to ascertain the impact of them on the need for physical asset?	
Has the impact of non-clinical strategies been examined i.e. IM&T, Workforce Planning, FM Services, Organisation Structures etc?	
Has there been a trawl of other public sector organisations' service and asset plans i.e. Education, Housing, Forestry Commission etc to identify potential for links and partnership working?	
Are the services and asset management plans of the Independent Sector known i.e. New nursing home developments, private dental practices etc.	
Has the impact of Local Authorities (LA) Structure and Local Plans on the PAMS been examined?	
Has the Local Authority and other major local public bodies been engaged in the development of the service plans?	
Has a scenario planning exercise been undertaken to examine a plausible and realistic range of future scenarios which the organisation may face over the next 10+ years?	
Has all the above been summarised into a clear statement of the main strategic changes that the PAMS must respond to?	
Is there a clear set of targets for change in terms of key asset performance indicators and are these linked to the organisation's overall performance measurements such as HEAT targets?	
How do we get there?	
Has the outcomes from the 'Where are we now?' and 'Where do we want to be' stages been used to develop strategic asset configuration options?	
Do these strategic options include challenging and radical options as well as the 'Do nothing', 'Do minimum' options?	
Does the range of options all deliver the expected changes in service strategies over the next 10+ years?	
Has there been a comprehensive and detailed option appraisal exercise completed covering benefits, costs and risks?	
Did the criteria used in the option appraisal fully reflect the priorities in current policy?	
Has the option appraisal taken into account the range of scenarios developed in the scenario planning exercise?	
Has the result from the option appraisal exercise been subjected to a sensitivity analysis to confirm that the choice of a preferred option is robust and will not change when underlying assumptions change within a reasonable range?	
How does the preferred option change as a result of the different future scenarios and is it sufficiently flexible to cope with these different futures?	
Has the preferred strategic option been further developed as specific proposals for asset investment which include feasibility studies, outline technical/ performance specifications and where appropriate site development control plans?	

How do we get there? (Cont'd)	Yes/No
Has the preferred option been developed into a Capital Investment Programme with phases/stages/investments/disinvestments prioritised to achieve optimum delivery of benefits?	
Have the capital and revenue costs of the asset investments in the Capital Programme been developed to a reasonable level of accuracy taking into account outline specifications for the schemes and incorporating optimism bias?	
Is there a year on year investment programme that shows the timing of investments required to implement the PAMS?	
Is there a summary of disposals and expected incomes over the period of the Capital Investment Programme?	
Is the PAMS Investment Plan affordable within the funding envelope identified earlier taking into account income from disposals etc?	
Implementing the PAMS	
Is there a PAMS Implementation Plan that clearly shows a next steps required, overall programme for implementation, resources required, project management arrangements, roles and responsibilities?	
Have performance measures been identified that will enable the organisation to monitor progress on an annual basis and do these include links to the overall performance of the organisation in terms of the six dimensions of quality in *'Better Health Better Care'*?	
Has a risk register been established clearly showing how the risk can be mitigated?	
Have the risks from implementing the PAMS been included in and linked to the Corporate Risk Register?	
The PAMS document	
Does the document use the PAMS Template provided in the Guidance?	
Is there a well written, brief and concise Executive Summary?	
Is the document not overly long?	
Is the document not overly technical and without excessive use of jargon?	
Has good use been made of charts, tables and drawing where appropriate?	
Overall, does the document make a convincing case for investment and change in the asset base?	

Appendix B: Asset performance appraisal

NHSScotland organisations cannot manage their physical assets without knowing what they have, where it is, what its condition is, and what function it performs for the organisation.

A comprehensive appraisal of physical assets is the foundation upon which the PAMS is built. There are a number of fundamental questions that need to be answered, irrespective of which asset group is being considered:

- what physical assets does the organisation own, lease and use (including those assets that are used but may be owned by other organisations)?
- what are the key characteristics of these assets – age, size, location, value, function etc?
- what is the condition and performance of these assets?
- what is the cost of owning these assets – capital charges, fuel/energy, repairs and maintenance, cleaning, making safe, replacement etc?
- what risks are there arising from the current condition and usage of the assets and are these risks understood both corporately and by people using the assets?

Most organisations will have asset registers. However, these are often drawn up and maintained by Finance Departments and as such are primarily focussed on the need to satisfy accounting procedures and to format balance sheet statements for fixed assets. Hence, they may only contain basic information such as size, value and occupying department.

Developments in IT hardware and software over the last decade or so now enable organisations to easily maintain and keep up to date comprehensive records of their physical assets. Importantly, these systems can now enable powerful analysis of condition and performance to inform the development of a PAMS as well as monitoring the implementation of it.

Before starting the collection of data on physical assets, careful thought should be given to:

- how the information can be aggregated to provide summaries by user group, directorate, care group, location building etc;
- how condition and performance will be measured for the asset group;
- what key performance indicators will be used for the asset group;
- what performance analysis will be required for the asset group.

A separate guidance document entitled '*A risk based approach to property appraisal'* obtainable from Health Facilities Scotland, gives best practice advice on undertaking a detailed appraisal of property assets. It also provides advice on establishing backlog and introduces a model for measuring risk in relation to sub-standard assets so that investment can be prioritised. Much of the advice and the approach given in that document can be adapted for use with the other physical assets such as equipment, vehicles and IM&T infrastructure. Therefore, it is recommended that a common and consistent approach and methodology is used for all asset groups wherever possible. The remainder of this Appendix provides examples of how the property appraisal methodology can be adopted for equipment, vehicles and IM&T infrastructure assets.

A simple categorisation and 'traffic light' system can be used across all asset groups similar to that shown in the table below. Definitions will need to be adapted/adjusted for different facets of performance and to suit particular asset groups.

Category	Performance
A	As new /Very good performance
B	Satisfactory/good performance
C	Operational but less than satisfactory performance
D	Unacceptable/Replacement is required

Figure 1: The 'traffic light' system for categorisation of performance

This enables simple but informative analysis to be undertaken such as that shown in Figure 2 for patient transport vehicles. This analysis and presentation of results can easily be adapted for other asset groups such as laptop computers, x-ray machines, kitchen equipment, operating theatre tables etc.

Analysis of the Patient Transport Vehicles Performance					
	Category and Definition	A Very satisfactory	B Satisfactory	C Not satisfactory	D Unacceptable
Physical Condition	Number of vehicles	2	12	4	2
	Percentage of the total	10%	60%	20%	10%
Compliance with Health and Safety and DDA Requirements	Number of vehicles	2	7	4	2
	Percentage of the total	10%	60%	20%	10%
Functional Suitability	Number of vehicles	4	7	2	2
	Percentage of the total	20%	60%	10%	10%
Quality	Number of vehicles	2	7	4	2
	Percentage of the total	10%	60%	20%	10%
Environmental Management - emissions and fuel consumption	Number of vehicles	2	7	4	2
	Percentage of the total	10%	60%	20%	10%
Utilisation	Category and Definition	E Not used	U Under used	F Fully used	O Over use
	Number of vehicles	0	2	18	0
	Percentage of the total	0%	10%	90%	0%

Figure 2: Analysis of patient transport vehicles condition and performance

All asset information should be held in a software database that allows interrogation and analysis. Modern software systems can perform powerful statistical functions which can greatly enhance the analysis of asset condition and performance data. This can be very informative in terms of planning future investment in physical assets. Figure 3 provides an example of this in relation to the age of Desktop PCs in the organisation.

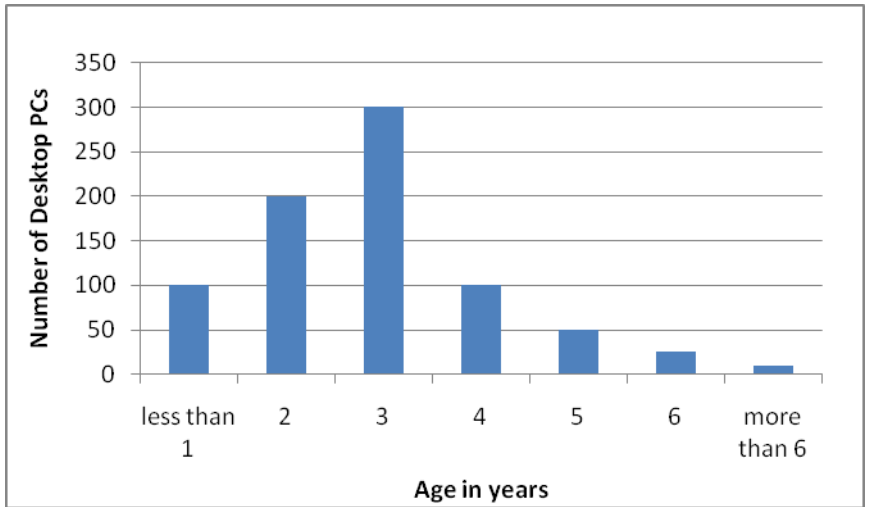


Figure 3: Number/Age of Desktop PCs

A similar analysis of run times for individual patient vacuum pumps could be provided, see Figure 4. Again, this could inform the investment programme for replacing these pumps since those with high run times will be approaching the end of their operational life and will have increasing risk of failure.

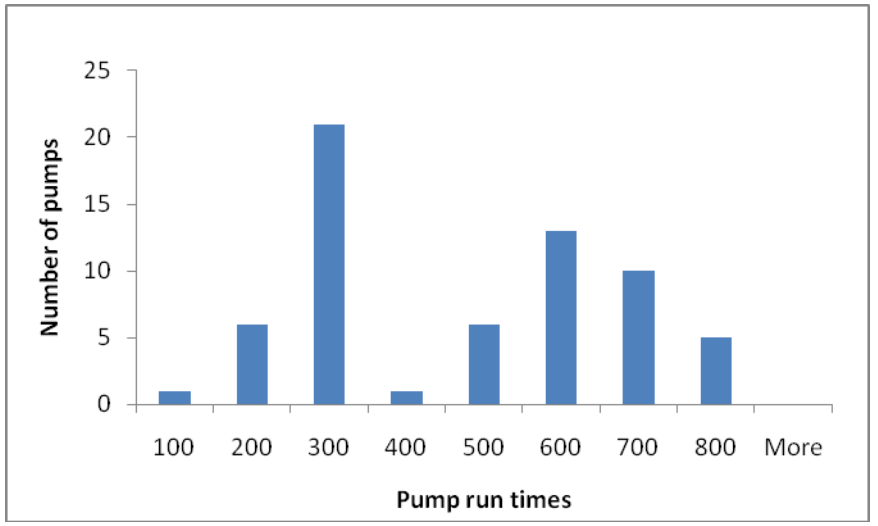


Figure 4: Number/Run times of Pumps

Figure 5 below shows an analysis of annual maintenance expenditure on patient trolleys procured from a range of manufacturers. Again, this could inform asset replacement decisions since it is desirable to minimise asset ownership costs.

	£/annum
Average maintenance expenditure	2,093
Upper quartile maintenance expenditure	2,175
Lower quartile maintenance expenditure	2,006

Figure 5: Maintenance Cost Analysis

These types of analysis are very easy to undertake once a database of asset information has been developed.

Figure 6 provides an example of the improvements in key performance indicators that are expected over the ten year period over which the PAMS will be implemented. The targets for improvement in future years should not be 'aspirational guesses'. They should arise from modelling of the impact of investment on change that are included in the PAMS. This can be done by performing 'what if' analysis on the data held in the computerised asset database. For instance, if a particular asset is currently in poor physical condition and the PAMS includes for its replacement in 2015 then the database can be used to provide an analysis of performance in 2015 with this particular asset changed in the database from 'unacceptable' condition to 'acceptable' condition.

	Percentage of the assets in acceptable condition/satisfactory performance		
Facet	**Current 2010**	**Target for 2015**	**Target for 2020**
Physical Condition	40%	64%	85%
Compliance with Fire and HandS	81%	85%	95%
Functional Suitability	53%	66%	85%
Space utilisation (% fully utilised)	74%	84%	90%
Space utilisation (% overcrowded)	13%	11%	0%
Quality	55%	67%	85%
Environmental Management	36%	49%	75%
Backlog £millions	120	90	50

Figure 6: Performance targets

Having established these key performance indicators it is a relatively simple matter to monitor performance against them using the computerised asset database. As the PAMS is implemented, the database can be updated to reflect the fact that a particular asset has been replaced, refurbished, upgraded or taken out of use and an analysis can be performed to produce the revised KPIs.

Asset performance appraisal information can be used at a number of different levels to inform decision making. Figure 7 below attempts to depict this hierarchy of performance information usage.

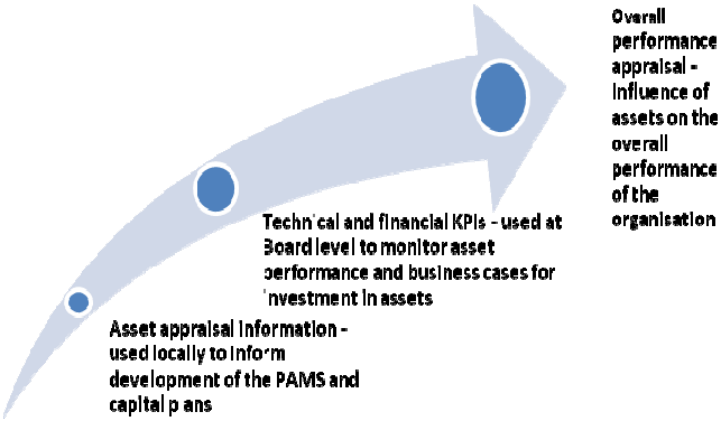


Figure 7: Hierarchy of performance information usage

Appendix C: Performance Monitoring of PAMS Implementation

A PAMS should be developed so that when it is implemented it will fuel continuous improvements and add value to NHSScotland's services. Hence, it is crucially important to monitor performance during the implementation of the PAMS to ensure that the expected benefits are actually delivered.

Generally, the PAMS will propose significant change and investment in the organisation's physical assets. This investment will be expected to:

- enhance the whole patient experience of healthcare;
- improve productivity through assets that are purpose designed for modern, effective and efficient service delivery models;
- increase efficient use of overall assets i.e. 'sweating the assets', greater throughput, more activity per asset etc;
- improve underlying asset characteristics improving condition, functionality, environmental sustainability and reduced backlog.

Whilst some of these benefits can be measured through the analysis of the results from the appraisals of condition and performance, these do not generally provide a measure of the impact that assets have on the success of the overall organisation as a partner in the delivery of health and social care services in their area. This guidance addresses this issue through the introduction of a new performance monitoring methodology that aims to inform the organisation of how well its assets are supporting the overall performance of the organisation. This new methodology is based on the actions set out in '*Better Health, Better Care: Action Plan'* for ensuring better, local and faster access to healthcare. It uses the six dimensions of quality that should enable the NHS to be far better at meeting patient needs. These six dimensions of quality are shown in Figure 8 below.

Quality Dimension	Definition
Patient centred	Providing care that is responsive to individual patient preferences, needs and values and assuring that patient values guide all clinical decisions.
Safe	Avoiding injuries to patients from care that is intended to help them.
Effective	Providing services based on scientific knowledge.
Efficient	Avoiding waste, including waste of equipment, supplies, ideas, and energy.
Equitable	Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socio-economic status.
Timely	Reducing waits and sometimes harmful delays for both those who receive care and those who give care.

Figure 8: Six dimensions of quality

The performance monitoring of the implementation of a PAMS against the six dimensions of quality requires an understanding of (i) how assets influence each quality dimension and (ii) how that influence can be measured. Figures 9 and 10 overleaf provide answers to both of these questions and can be further developed to meet an organisation's particular circumstances and needs.

Quality Dimension	Definition	The asset influences this quality dimension through…
Patient centred	Providing care that is responsibe to individual patient preferences, needs and values and assuring that patient values guide all clinical decisions.	Quality of built environment – Patient experience – visual, aural and thermal.
		Standards of privacy and dignity achieved in the premises.
		Provision of single rooms with en-suite WCs.
		Accessible way finding and layout.
Safe	Avoiding injuries to patients from care that is intended to help them.	Facilities and equipment that minimise HAI.
		Provision of safe and fully operational engineering systems and equipment.
		Provision and maintenance of fully operational and safe equipment.
		Fire.
		Health and Safety.
Effective	Providing services based on scientific knowledge.	Provision of assets that are functionally suitable for their purpose.
		Achieving excellence in facilities and engineering systems design.
		Meeting SGHD standards for single sex accommodation.
		Providing good departmental relationships.
		Provision of flexible accommodation that can be changed to meet changing needs.
Efficient	Avoiding waste, including wastes of equipment, supplies, ideas and energy.	Maximising income through ‘sweating of assets’.
		Space utilisation.
		Energy performance.
		Maintenance costs.
		The amount of backlog.
		Occupancy costs.
Equitable	Providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location or socio-economic status.	Accessibility for disabled patients, staff and visitors.
		Assets that are suitable for specific minority groups, children etc.
		Provision of assets that closely matches service strategies.
		Location of facilities that are easily accessible by public and private transport.
Timely	Reducing waits and sometimes harmfull delays for both those who receive care and those who give care.	Provision of asset capacity compatible with demand.
		Provision of assets that support effective and efficient patient pathways.
		Provision of assets that can be operated out of hours.
		Providing capacity of diagnostics services to support In-Patient (IP) and Out-Patient (OP) services.

Figure 9: Asset Influence

Quality Dimension	The asset influences this quality dimension through…	Measures of asset influence are…
Patient centred	Quality of built environment – Patient experience – visual, aural and thermal.	Patient surveys, interviews, focus groups, Asset appraisals information.
	Standards of privacy and dignity achieved in the premises.	Design layout of facilities – achievement of visual and aural privacy.
	Provision of single rooms with en-suite WCs.	Number of single rooms with ensuite WCs as % of total area.
	Accessible way finding and layout.	Patient surveys, interviews, focus groups etc.
Safe	Facilities that minimise HAI.	Number of infections.
	Provision of safe buildings and operational engineering systems.	Number of accidents/injuries reported relating to premises.
	Provision and maintenance of fully operational and safe equipment.	Number of failures.
	Fire.	Firecode compliance and number of enforcement actions in the fire certificate.
	Health and Safety.	Number of incidents reported relating to assets. SCART scores.
Effective	Provision of facilities that are functionally suitable for their purpose.	Functional suitability category from estate appraisals.
	Achieving excellence in facilities and engineering systems design.	AEDET evaluation, compliance with SHBNs, SHTMs etc.
	Meeting SGHD standards for single sex accommodation.	Compliance with SGHD standards.
	Providing good departmental relationships.	Compliance with national/international standards – SHBNs, SHTMs etc.
	Provision of flexible accommodation that can be changed to meet changing needs.	Adaptability of accommodation - partition walls, modular services etc.
Efficient	Maximising income through ‘sweating of assets’.	KPI – income to asset value ratio.
	Space utilisation.	Estate appraisals space utilisation survey category, KPIs on space use.
	Energy performance.	KPI – GJ/100 cu.m.
	Maintenance costs.	KPI - £/sq.m.
	The amount of backlog.	Total backlog expenditure and critical backlog as % of total.
	Occupancy costs.	KPI - £/sq.m.
Equitable	Accessibility for disabled patients, staff and visitors.	DDA compliance.
	Accommodation that is suitable for specific minority groups, children etc.	Availability of facilities, information and equipment to suit general and specific service users.
	Provision of an estate that closely matches service strategies.	The availability, comprehensiveness and quality of the organisation’s PAMS.
	Location of facilities that are easily accessible by public and private transport.	Internal/external journey times, travel distances, car parking provision.
Timely	Provision of asset capacity compatible with demand.	Availability and capacity of facilities that can cope with demand.
	Provision of facilities that support effective and efficient patient pathways.	Functional suitability and design excellence.
	Provision of facilities that can be operated out of hours.	Flexibility and availability of assets for out of hours use.
	Providing capacity of diagnostics services to support IP and OP services.	Availability of equipment to support capacity requirements.

Figure 10: Measure of asset influence

The measures of asset influence shown in Figure 10 can be gathered together for each quality dimension and this will form the evidence base upon which a judgement can be made on the impact that the implementation of the PAMS is having on improving the organisation's performance in terms of the six dimensions of quality.

The process for arriving at these judgements is similar to that adopted in the NHS for the appraisal of non-financial benefits in an option apraisal.

The value judgements are best made at a workshop attended by a range of stakeholders, managers, staff and public representatives where negotiaton and compromise can take place. It is the number of people involved in the process and their expertise that lends credibility to the value judgements.

The workshop process has three stages:

1. A review of the measures of asset influence for each quality dimension and an assessement of the 'performance' of the organisation in achieving the targets set in the PAMS. Examples of this might be:
   a. The percentage of the estate in satisfactory physical condition has increased from 60% to 70% in year 3 of the PAMS implementation;
   b. High and significant risk backlog items have been eliminated by year 2 of the PAMS implementation.
2. An assessment of the impact of the improved performance on the overall achievement of the quality dimension.
3. The calculation of the product of the 'Performance' score and the 'Impact' score to provide an 'Overall PAMS Performance Score' for each of the quality dimensions at each key stage in the implementation of the PAMS.

A simple 0 to 10 scoring system can be used as shown in Figure 11 below and workshop delegates will aim to reach a consensus score for each quality dimension.

Score	Performance	Impact
0	Failed to meet most of the PAMS targets for asset performance improvement. Major slippage in the PAMS investment programme.	Very little, if any, impact on the organisation's overall performance on the quality dimension.
5	Only 50% of PAMS targets met and significant delays on the PAMS investment programme.	The organisation's overall performance against the quality dimension has been proportional to the asset performance i.e. 50% of the expected impact.
10	100% of PAMS targets met and investment programme delivered to time and quality.	The improved performance on assets has had a major impact on the organisation's overall performance on the quality dimension.

Figure 11: Example of scoring system

It should be noted that the 'performance' and 'impact' scores are assessed independently. This is important since it will ensure that the overall PAMS performance score reflects not just 'inputs' but real 'ouputs' of the PAMS. For instance, it may identify that whilst the targets for asset performance improvement has been achieved this has not had the expected

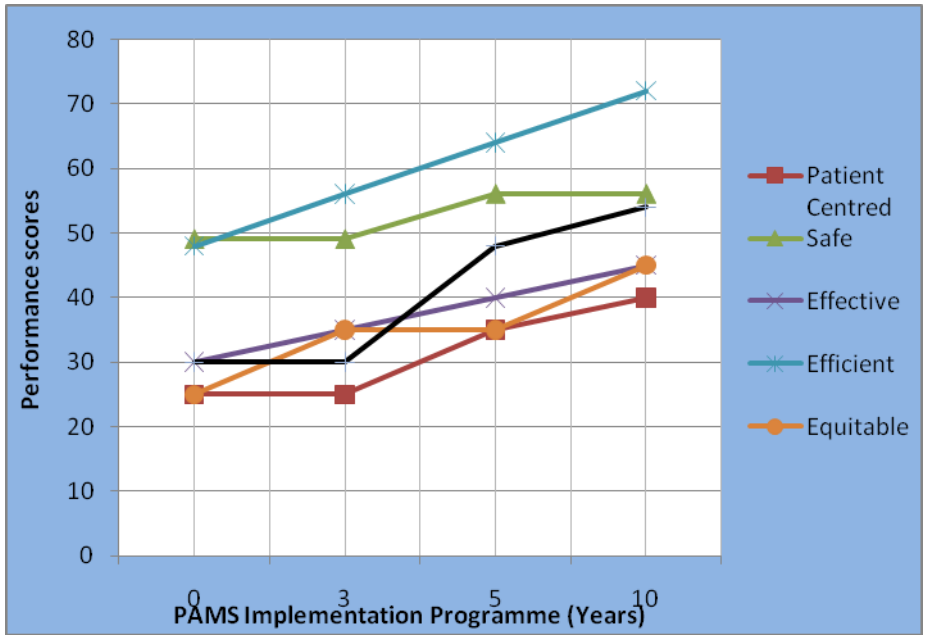
impact on the organisation's performance against the quality dimensions. Hence, high overall performance scores will only be achieved by ensuring good performance on measures that actually have a significant impact on the quality dimension.

This methodology can be used at both the stage of developing the PAMS as well as throughout its implementation. At the PAMS development stage, it should help the organisation to focus change and investment on the projects that can both improve asset performance and have significant influence on overall performance in terms of the six dimensions of quality. During implementation of the PAMS it can be used to compare actual performance against planned in terms of the six quality dimensions. Ideally, the methodology should be used as part of an annual review and update of the PAMS. Retaining a core of regular workshop group members will help to ensure consistency of judgement and scoring over time.

An example of a suitable scoring spreadsheet that can be used to gather the workshop scores is shown overleaf.

	Overall PAMS Performance Score											
	Current			1 to 3 years			5 Years			10 years		
Quality Dimension	**Performance Score (0 to 10)**	**Impact Score (0 to 10)**	**Overall Score**	**Performance Score (0 to 10)**	**Impact Score (0 to 10)**	**Overall Score**	**Performance Score (0 to 10)**	**Impact Score (0 to 10)**	**Overall Score**	**Performance Score (0 to 10)**	**Impact Score (0 to 10)**	**Overall Score**
Patient centred	5	5	**25**	5	5	**25**	5	7	**35**	5	8	**40**
Safe	7	7	**49**	7	7	**49**	7	8	**56**	7	8	**56**
Effective	5	6	**30**	5	7	**35**	5	8	**40**	5	9	**45**
Efficient	8	6	**48**	8	7	**56**	8	8	**64**	8	9	**72**
Equitable	5	5	**25**	5	7	**35**	5	7	**35**	5	9	**45**
Timely	6	5	**30**	6	5	**30**	6	8	**48**	6	9	**54**

The results from the above can be effectively shown in graphical format as shown overleaf.



The chart shows a desirable outcome from implementing the PAMS since there has been continuous improvement across the six dimensions of quality over the period of implementation. However, it also shows that on some dimensions the overall impact of improved asset performance has been high e.g. 'efficiency' with an overall score of 72, whereas on other dimensions the combination of asset performance and impact has been significantly less i.e. 'patient centred' which has an overall score of only 40. The latter score suggesting significant scope for further improvement. In this case the organisation would need to examine both its performance and the impact scores to better understand how it can improve its overall performance score on 'patient centred' through investment and use of assets.

This new methodology is compatible with the recently published "The Healthcare Quality Strategy for NHSScotland" which is also based on the six dimensions of quality and develops the concept of "three quality ambitions". There is a need to ensure that there is a shared understanding of the types of measures involved in the development of the PAMS, and how they relate to the achievement of the Quality Strategy's Ambitions and provide a line of sight to the National Outcomes and the National Performance Framework. The Quality Measurement Framework provides a structure for understanding and aligning the wide range of measurement that goes on across the NHS in Scotland for different purposes. Some measures used in developing and monitoring the performance of a PAMS are likely to require development over the longer term to ensure that all of the measurement, performance and reporting systems converge and align. It is intended that this will include the National Performance Framework, Single Outcome Agreements, HEAT and national data systems (held by ISD), as well as systems which Boards use in their own local areas (e.g. local governance, improvement and performance indicators).