

Dear Colleague

A POLICY ON DESIGN QUALITY FOR NHSSCOTLAND: 2010 REVISION

Summary

1. This letter provides colleagues of a revised statement of the Scottish Government's Policy on Design Quality for NHSScotland ([Annex A](#)). This policy articulates the Scottish Government Health Directorates ambition for NHSScotland's asset base and to embed the need for well-designed, sustainable healthcare environments as an integral part of high quality service delivery.
2. The Policy also sets out the principles which a NHSScotland Body's strategic Design Action Plan and the supporting project-specific Design Statement should address ([Annex B](#)). Two further annexes provide reference to relevant Scottish Government Health Directorates asset-related policies and supporting guidance ([Annex C](#)) and, useful references and web links ([Annex D](#)).
3. This CEL and the attached policy statement supersedes NHS HDL(2006)58. This CEL also provides information on Design Assessment within the SGHD CIG Business Case process.

Action

4. **Addressees should ensure that a copy of this CEL with Annexes is cascaded to all appropriate staff within their area of responsibility.**
5. **The revised Policy on Design Quality for NHSScotland and associated Mandatory Requirements take immediate effect.**

Background

6. HDL(2006)58, issued in 2006, announced the first publication of a Policy on Design Quality for NHSScotland which provided a policy framework to implement the aims of the then Scottish Executive Health Department, supported by a 3-year Framework Agreement with Architecture and Design Scotland. This Framework Agreement has now ended and therefore a revised policy statement is required to ensure that

CEL 19 (2010)

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Addresses

For action

Chief Executives, NHS
Boards.
Chief Executives, Special
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For information

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the outcomes of development projects meet the Scottish Government's objectives and expectations for public investment. Support for the implementation of the design agenda will be provided by means of a coordinated, tripartite working arrangement between Scottish Government Health Directorates (SGHD), Health Facilities Scotland (HFS) and Architecture and Design Scotland (A+DS) to facilitate the procurement of well-designed, sustainable, healing environments which support the policies and objectives of NHS Boards and the Scottish Government Health Directorates.

7. The attached policy statement reflects consultation with stakeholders in the Scottish Government, Architecture and Design Scotland and Health Facilities Scotland. It provides a concise definition of policy along with details of Mandatory Requirements which must be complied with by NHSScotland Bodies. For those Special Health Boards (and Operating Divisions within) which are not actively engaged in the procurement of new healthcare premises and refurbishment of existing health care premises for the purpose of service provision, the general principles of the attached policy should be applied, such as when considering premises for lease or occupation.
8. The principle upon which this policy is founded builds upon the core principle of the 2006 policy statement - to ensure that all NHSScotland bodies fully integrate design quality and sustainable development principles throughout all stages of the healthcare building procurement process as an integral part of the commitment to deliver a high quality, safe, sustainable environment for patient care.

Implementation

9. SGHD, A+DS and HFS have developed a range of initiatives to assist NHSScotland in addressing design quality issues in the procurement of healthcare building projects, the summary objectives of which are to:
 - raise the level of design quality achieved through infrastructure investment;
 - increase the capacity of health boards and central agencies in respect of the above; and
 - assist in sharing good practices.
10. In order to meet the above objectives, A+DS will deliver 3 main activities on behalf of SGHD.

Activity 1

Engaging with partner organisations and central procurement agencies in order to assist them in their work and in raising design awareness of 'external' parties involved in delivery.

Activity 2

Providing, in partnership with HFS, a co-ordinated assessment of the potential quality of proposed projects to support those responsible for decision making within the business case process.

This will involve contributing particular expertise on the aspects of design relating to Government policy on design and place making to a process administered and led by HFS who will, in addition to the administrative elements, provide particular expertise

on the aspects of design relating to functionality, particularly technical and sustainability standards developed by HFS and the Department of Health in England.

Activity 3

Assisting in building a body of knowledge and evidence of good practice in both process and product across NHSScotland.

A strand of this activity is the development and management of a website, '**Healthier Places**', which has been designed to house information on good healthcare design to assist NHS Boards in the development of the project brief and to raise awareness of the good practice being developed and delivered across NHSScotland and elsewhere. In addition to providing guidance on the development of 'Design Statements' and, articles on healthcare design topics, the website holds a project resource - '**Pulse**' - a database of projects and examples of good practice.

<http://www.healthierplaces.org/>

Design Assessment and the Business Case process

11. An assessment of design quality is now part of the SGHD Business Case process. All projects submitted to the SGHD Capital Investment Group for approval are now subject to an assessment of design quality and functionality, including technical and sustainability standards. This Design Assessment will take place at the Initial Agreement, Outline Business Case and Full Business Case stages of approval.
12. The Scottish Government Health Directorates' purpose in developing and implementing this process is to ensure that the outcomes of development projects meet the Government's objectives and expectations for public investment. The aim of mapping design into the Business Case process is to support the implementation of this Policy by improving the level of design quality achieved across NHSScotland and, ultimately, the outcomes achieved by doing so.
13. To assist NHS Boards in utilising good design to achieve the best outcomes from their development projects, Boards are required to develop and produce a Design Statement prior to the submission of their Initial Agreement. The Design Statement is the first control document produced for a project and should be consistent with the Board's overall vision contained within the strategic Design Action Plan.
14. Additional guidance on Design Assessment and the Business Case process has been added to the [Scottish Capital Investment Manual](#). The guidance also includes advice on the preparation of the Design Statement.

Yours sincerely,



Mike Baxter

Deputy Director, Capital Planning and Asset Management

A Policy on Design Quality for NHSScotland



Scottish Government
Health Finance Directorate
Capital Planning and Asset Management

2010

A POLICY ON DESIGN QUALITY FOR NHSSCOTLAND

Purpose

The purpose of this document is to provide NHSScotland Bodies¹ with a clear statement of policy on design quality. It also provides guidance on how NHSScotland Bodies can ensure that design quality is embedded within the healthcare building procurement process.

Context

In recent years the value of good design has been increasingly recognised and a wealth of evidence based findings has demonstrated that good design adds value, not only from an economic perspective but also in terms of a range of social and environmental benefits. This capacity to add value is particularly important for healthcare environments, where the physical and psychological well-being of patients, staff and visitors is of paramount consideration.

In October 2000, the Prime Minister established a UK-wide 'Better Public Buildings' initiative to achieve a step change in the design quality of publicly procured buildings. Over the last decade, Scottish Ministers have in parallel, through their policies, sought to achieve a culture of quality in the procurement of publicly-funded buildings that embraces good design as a means of achieving value for money and sustainable development.

The Scottish Government has five strategic objectives; it is committed to creating a Scotland that is:

- wealthier and fairer;
- stronger and safer;
- healthier;
- greener; and
- smarter.

It is clear that the design quality of our built environment must, by necessity, play a vital part in our ability to meet all of these strategic objectives. Government, thus, continues to promote and to encourage investment in well-designed buildings and places in both the public and private sectors.

This document responds to Government's quality objectives within guidance and initiatives particular to NHSScotland.

Design quality is especially important in the context of healthcare building, where well-designed health buildings can help patients recover their spirits and their health and have a positive effect on staff performance and retention, as well as improving the efficiency of operational relationships and providing better value for money in the context of whole-life costs. The Scottish Government therefore recognises the importance of good building design as the physical means of delivery for a range of wider policy objectives.

The Scottish Government's Architecture and Place Division which was established to implement policy commitments, can offer advice on design and acts as the sponsor body for [Architecture and Design Scotland](#), an Executive Non Departmental Public Body established as the national champion for good architecture, design and planning in the built environment.

Health buildings can often be the places in which we may feel at our most vulnerable, whether as a patient, relative or friend. The quality of the building environment that we experience can provide us with calming reassurance or, conversely, it can accentuate our feeling of stress and unease.

Many factors can contribute to engendering a sense of ease, for instance: the first impression of the facility from the public realm, the entrance experience, the degree of natural light, brightness and airiness, colour and texture, an easily understood layout with clearly defined focal points, uncluttered signage and a clear distinction between the realms of public and private space, maintaining patient dignity.

In most health buildings, external public spaces are vitally important in that they can also provide the opportunity for positive respite for patients, visitors and staff in periods of stress. Sensitive landscaping and well-defined public space in a healthcare environment can provide far more than simply an attractive setting. Through careful design social or intimate, tranquil spaces can be created, providing an environment where people might want to sit or meet, even spaces for physical therapy and play and which further contribute to the healing process.

Scottish Ministers believe that a concern for the quality of Scotland's architecture must go far beyond the design of individual buildings. Distinctive, high quality places as well as high quality buildings are vitally important to the social, environmental and economic success of our cities, towns and rural communities.

The Scottish Government's National Outcomes set out what Scottish Ministers aim to achieve in the next ten years, and a key objective for the built environment is that "we live in well-designed, sustainable places where we are able to access the amenities and services we need".

A sustainable community is one which not only makes a positive contribution to mitigating the effects of climate change; a sustainable community is a place which is successful in the way that it continues to flourish socially and economically over time. The quality of healthcare facilities along with other public buildings and places can be a significant factor in making communities successful, because they can offer a great deal to the creation of a wider, attractive environment which people would wish to inhabit.

The overarching Purpose of the Scottish Government is to increase sustainable economic growth, and good place-making supports this Purpose in the following ways:

Good place-making can influence the economy of an area by making it an appealing place to live, to work, and to visit - It can provide environments and infrastructure which function well; link well with surrounding settlements; which attract business; and in which business can flourish;

- Good place-making can provide communities with an important cultural context, a sense of pride and belonging and, a sense of local and national identity;
- Through good design, safe, welcoming places can be created to which people would wish to return frequently, and which would have a greater chance of longevity;

- Good place-making can promote active, healthy, inclusive lifestyles by providing attractive and accessible green spaces, and through layouts which discourage car usage and which provide the right facilities within reasonable walking and cycling distance;
- Good place-making can embed community facilities into our communities in ways which are accessible and which provide a richness of opportunity for social interaction; and
- Good place-making can have a profound effect on the sustainability of our lifestyles, in respect of the impact that we have on the land and other scarce resources; how much energy we use; and, again, through reductions in car usage.

The Planning etc. (Scotland) Act 2006 requires Local Authorities to develop dynamic plans which describe a vision for the local community; establishing 'what goes where and why' in order to develop a community structure that supports strategic objectives. Health Boards are encouraged to be active participants in the development of these local development plans in order to:

- embed the principles of healthy urban development into the plan – those aspects needed to support local health promotion and help people make healthier lifestyle choices;
- embed the principle needs for the physical infrastructure needed to deliver on 'shifting the balance of care' such as the potential location of new healthcare facilities;
- establish major infrastructure strategies needed to support the delivery of the Single Outcome Agreement; and
- link the board's strategic asset management plan into the local development plan to consider both the beneficial use of public land assets and the transport implications of major changes in estate strategy.

The creation of a new or refurbished facility can bring with it the opportunity to show a positive civic presence, and the development of a high quality public building can do much to help the creation or regeneration of communities. It is thus also a matter of considerable importance that health buildings respond to the urban or rural contexts in which they sit. This includes considerations such as how they fit within historic contexts, how the approach and entrance act to welcome concerned families and friends, and how they contribute to the quality of their neighbourhoods, both in terms of the buildings themselves and the places they create around them. In considering the provision of healthcare facilities, it is important to also give careful thought to the opportunities for good 'place-making'.

Healthcare buildings play a significant part in the environment and, increasingly, patients are becoming "empowered" to demand better environments in which they receive healthcare. It is appropriate that we embrace such matters and introduce appropriate policies and initiatives in Scotland.

At the heart of this policy is the recognition that strong client commitment is required to deliver facilities that provide the high quality and sustainable caring environments we desire. We now expect NHSScotland bodies to develop their individual visions for the kind of places in which patients, staff and visitors would wish care to be provided:

- for patients - a welcoming, healing and reassuring place that supports life;
- for staff – a place that supports staff in their work and that will not constrain future work;

- for visitors – a place to meet and discuss, a place that I can leave loved ones.

These environments must be able to support the high quality healthcare services which are to be delivered within.

This aligns with the aims of the **Scottish Healthcare Quality Strategy**. The Strategy reflects the shared ambitions of everyone in Scotland whether a patient, a carer, or whether working for NHSScotland in a community, primary or acute care setting, to create high quality person-centred, clinically effective and safe healthcare services and to be recognised as being world-leading in our approach.

The aim is for everyone in Scotland to work together to ensure better health and higher quality healthcare services which are flexible and reactive to each individual circumstance. These principles are consistent with the aims of this policy, to embed the need for well designed, sustainable and safe healthcare environments as an integral part of service delivery.

The term ‘good design’ is not merely a question of style or taste but describes what arises from the intelligent and creative synthesis of many interrelated factors such as: strategic planning of healthcare provision; social and physical regeneration; the local urban (or rural) context and forms; links to infrastructure and transport; sustainability agendas; the building’s sense of welcome; intelligibility of layout; security; unobtrusive supervision; ease of use and maintenance; efficiency; and, promotion of human dignity. It covers the way in which buildings sit within and, contribute to, their community as well as how they work and look. Successful healthcare design resolves a wide range of functional requirements efficiently whilst, at the same time, exploring the opportunities to provide an uplifting environment for patients, visitors and staff.

Design, therefore, is just as much about process of change management as it is about what the final product looks like. Design is present in all projects - first you imagine what you are looking to achieve and test that this is possible. You then move on to sketching a limited number of possible worlds that, to varying degrees, will house and support your needs. By analysing these and making choices you narrow the options down to the world that you will build. You get the best result by using skill and a spark of creativity to make every element work hard to deliver more than one part of your vision. Therefore good design need not cost more and the difference between achieving good or poor quality outcomes is more often the result of having the right knowledge or advice, understanding, care and commitment.

Good Design is the intelligent application of a scarce resource

Good design can therefore be seen as largely objective. A design proposal can be evaluated through the use of appropriate tools such as Design Quality Indicators (DQIs) to assess whether the proposed building will function efficiently and effectively; whether there is clear evidence of thoughtful, imaginative and even inspirational proposals that will not only work, but will help the people within them to work and feel better; whether the proposed building will integrate with its surroundings in an appropriate manner and create a sense of place and; whether the materials, construction methods and the proposed layout will enhance long-term value for money. Indeed, Scotland’s Infrastructure Investment Plan 2008 establishes that good design is key to achieving best value from all public sector investment.

“In developing Scotland’s infrastructure, the Scottish Government recognises that good building design should be responsive to its social, environmental and physical context. It should add value and reduce whole life costs. Good building design should be flexible, durable, easy to maintain, sustainable, attractive and

healthy for users and the public; and it should provide functional efficient adaptable spaces ... Equally important to the design of individual buildings is the design of sustainable places. Well-designed buildings and places can revitalise neighbourhoods and cities; reduce crime, illness and truancy; and help public services perform better”.

Design evaluation, in particular Post Project Evaluation and Post Occupancy Evaluation, can contribute to the emerging field of “evidence-based design” which is proving a valuable tool in the design process towards both reducing costs and improving outcomes. Research has shown that evidence-based design methods, introduced early in the process of facility programming and design can improve the experience of patients who will be treated within the healthcare facility and assist in health recovery which results in improving medical outcomes, shorter bed stays, greater throughput and a reduction in patient and staff stress.

The Way Forward

The Scottish Government has set out an ambitious agenda to modernise NHSScotland and its infrastructure. This agenda challenges NHSScotland Bodies to modernise the way in which healthcare is delivered to patients and challenges them to ensure that the infrastructure developed, deployed and maintained is capable of supporting high quality, modern patient care.

The NHS in Scotland has a vision for:

‘an estate designed with “a level of care and thought that conveys respect”;
buildings that grow from the local history and landscape, that are developed in
partnership with the local community. A work of joint learning and joint
responsibility that is particular to that community and that place; “not off-the-
shelf show boxes”.’^A

The **Better Health, Better Care Action Plan**, published in 2007, affirms the Scottish Government’s commitment to improving the physical and mental wellbeing of the people of Scotland through supporting the provision of well designed, sustainable places. The Action Plan also articulates the Scottish Government’s vision of a mutual National Health Service, a shift to a new ethos for health in Scotland that sees the Scottish people and the staff of the NHS as partners, or co-owners, in the NHS.

These policy changes place health and wellbeing and the over-arching issue of sustainability at the centre of the lives of the people of Scotland as the NHS strives to become more accountable and patient-focused. If the commitment to create a healthier, wealthier, fairer, safer and stronger Scotland is to be realised, NHS Boards must ensure that in the context of designing new facilities, they deliver not only high quality solutions but also realise benefits for community development and the wider environment.

(Ref ^A: From an interview with Dr Harry Burns, Chief Medical Officer - *A Vision of Health: NHSScotland’s agenda for realising value in the developing healthcare estate*, Architecture and Design Scotland 2009)

Frameworks Scotland

Evidence exists that the traditional approach to construction procurement fails to satisfy clients and does not generate the efficiency improvements delivered in most other industries. With regard to NHSScotland, this means available capital and revenue resources must be used more effectively, to deliver better outcomes and make the best use of ‘client-side’ skills and capacity.

Health Facilities Scotland has, on behalf of the Scottish Government and NHSScotland, led the development of a collaborative construction procurement initiative. **Frameworks Scotland – Excellence in Healthcare Construction** is a strategic and flexible partnering approach to the procurement of publicly funded construction work and complements other procurement initiatives for the delivery of health facilities in Scotland.

This partnering approach reduces the adversarial attitudes which can make it more difficult to deliver successful project outcomes. Partnering arrangements reduce waste in both the process and product streams, promote quality and also facilitate the sharing of best practice and lessons learned from one project to another.

It should be recognised by anyone involved in planning, designing and delivering NHSScotland's healthcare estate that there is currently an unprecedented opportunity and a need both to ensure and to demand well-designed, sustainable healthcare buildings. Framework Scotland therefore is and, should be, one of the primary vehicles for delivering sustainability in the construction, management and maintenance of the healthcare estate. Delivering design quality and sustainability through the Framework will require a consistent approach with the Scottish Capital Investment Manual guidance, alongside the application of and, proper attention to, AEDET and BREEAM Healthcare requirements at the appropriate stages of a project.

Further information on the Frameworks Scotland initiative can be found on the [Health Facilities Scotland](#) website.

The 'hub' Programme

The '**hub**' Initiative is a major programme of the Scottish Futures Trust.

'hub' is a procurement vehicle supporting a long term programme of investment in community infrastructure for local authorities, NHS Boards and other public sector bodies across Scotland. It will provide a mechanism for delivering assets more effectively through a single partner, with continuous improvement leading to better value for money. The opportunity for a private sector delivery partner is to be part of a systemic approach to infrastructure planning and delivery in a territory over an extended time period.

'hub' will deliver projects from a core identified scope and, in future, from wider service development business cases, in particular those projects that promote joint working amongst community planning partners. Projects will focus on new build but could also include the refurbishment and asset management services of existing infrastructure.

The overarching objective of 'hub' is to improve the efficiency of community infrastructure delivery – with a particular emphasis on supporting the provision of more joint services across local authorities, health boards and other community partners. In Scotland there are good examples of joint premises development, but these tend to be one-offs and do not offer a model for the long term strategic planning of joint premises development and joint services delivery. 'hub' should provide a systematic approach to service delivery, from a model predicated on continuous improvement in both cost and quality. This can be achieved by the public sector by working in close partnership with a private sector partner, where both the public and private sector stakeholders have a financial interest in a successful outcome.

The first two Pathfinder Territories are the South East and North. More details can be found at <http://www.hubscotland.org.uk/>

It is critical that design issues are addressed regardless of the procurement method used to deliver healthcare buildings and, that the outcomes specified for these buildings in terms of the care environment are reflected in their design. However, the implementation of design quality and the procurement route used have a particular relationship and therefore the procurement method used can have a significant bearing on the development of design quality during the process. Although it can be argued that good design is independent of cost, its relationship with design management and procurement in practice needs careful examination. The National Audit Office report "[Improving Public Services Through Better Construction](#)" (March 2005) supports this view and advocates that all key stakeholders should be involved and all proposals subjected to independent challenge before key design decisions are made and that design and decision-making be based on "whole-life value".

The concept of 'evidence-based design' has already been mentioned in the context of Post Project Evaluations. There has been a historical assumption that each healthcare building has to be unique in order to fulfil the vision and aspirations of the brief which can, unfortunately, result in the repetition of mistakes, albeit perhaps unintentionally. The starting point for any new healthcare building should, logically, be the successes of one or a number of existing buildings based on a careful analysis of what constitutes the 'good' and what constitutes the 'bad'.

Also of importance is the emerging field of 'supportive healthcare design'^B. Traditionally, there has been an assumption that the main requirement placed upon a healthcare facility should be the mitigation of infection or the risk of exposure to disease. Additionally, through decades of advances in medical science and technology, many healthcare designers and technicians have been conditioned to create buildings that are successful delivery platforms for new technology. By concentrating on the need for functional efficiency and the pathogenic concept of disease and health, healthcare facilities have been procured which contain environments which can be considered stark, institutional, stressful to their occupants and thus detrimental to the quality of care they are intended to provide. In spite of evidence of the major stress caused by illness and the subsequent traumatic experience of hospitalisation, there has, historically, been comparatively little emphasis on the creation of surroundings which can calm patients, reinforce their ability to cope in such environments and generally address their social and psychological needs.

The process of 'supportive design' begins by eliminating the environmental characteristics which are known to contribute to stress or can have negative impacts on outcomes and, importantly, continues by emphasising the inclusion of characteristics in the healthcare environment which research has indicated have the ability to calm patients, reduce stress and strengthen their ability to cope and promote healthy, healing processes.

(Ref ^B: Ulrich R S, 2000 - 'Effects of Healthcare Environmental Design on Medical Outcomes'
Ulrich R S, 2000 - 'Evidence based environmental design for improving medical outcomes. Proceedings of the conference: *Healing By Design: Building for Healthcare in the 21st Century*', McGill University Health Centre, Montreal)

Due to the length of time that healthcare buildings may be in use, there is potential to constrain changes in delivery practices. It is therefore vitally important that design processes are an integral part of a robust procurement mechanism in order to ensure that buildings are not only functional when constructed but are flexible and adaptable over their entire lifetime.



SGHD will continue to play its part in supporting and implementing wider Scottish Government procurement strategies and policies by setting these within a healthcare-specific context.

Policy Aims

- The purpose of this policy is to articulate the Scottish Government Health Directorates ambition for NHSScotland's asset base and to embed the need for well-designed, sustainable healthcare environments as an integral part of high quality service delivery. It also provides guiding principles which a NHSScotland Body's strategic Design Action Plan and the supporting project-specific Design Statement should address ([Annex B](#)) and two further annexes providing reference to relevant Scottish Government Health Directorates asset-related policies and supporting guidance ([Annex C](#)) and, useful references and web links ([Annex D](#)).
- The Scottish Government is committed through its stated Purpose to encouraging sustainability by the development of infrastructure and place: "providing sustainable, integrated and cost-effective public transport alternatives to the car as well as a planning and development regime which is joined up and geared towards achieving sustainable places and sustainable economic growth". The Government recognises that the Scottish planning and building standards mechanisms have a role in the delivery of a high quality, sustainable physical infrastructure. However, the Government also recognises that everyone connected with the delivery of this infrastructure has a role to play in driving up standards for the planning, design and maintenance of the built and natural environment. The Scottish Government Health Directorates believe that improving the quality of our caring environments is crucial to delivering this commitment and to achieving the Government's National Outcome of ensuring that 'we live in well-designed sustainable places where we are able to access the amenities and services we need'. Improved caring environments also act in support of the 'Healthier' Strategic Objective to help people to sustain and improve their health, especially in disadvantaged communities, ensuring better, local and faster access to health care.
- **Therefore this policy statement requires that all NHSScotland Bodies, as an integral part of the commitment to deliver the highest quality of environment for patient care, ensure that design quality is fully integrated into the healthcare building procurement process and is apportioned appropriate emphasis throughout all stages of this process.**

Scope

This policy must be considered alongside other Scottish Government Health Directorates policies and supporting guidance bearing upon NHSScotland assets including those for capital procurement, asset management, sustainable development, environmental management, fire safety, and, property transactions. Such central policy statements and supporting guidance are intended to inform the formulation and updating of an NHSScotland Body's operational policies and of supporting guidance. Such operational policies and asset strategies are important corporate expressions of a NHSScotland Body's intentions and as such should be a manifestation of integrated service planning and the appropriate involvement of all relevant interests.

This policy must also be considered alongside other relevant Health Directorates, Scottish Government and UK Government policies and commitments.

Policy Statements

Statement 1 All NHSScotland Bodies¹, as clients, must commit to the integration of design quality in the procurement of healthcare building throughout all stages of the process, regardless of procurement route used.

Statement 2 All NHSScotland Bodies must have a strategy for design quality – a Design Action Plan - consistent with and supportive of the Health Directorates and wider Scottish Government asset-related policy and supporting guidance (listed at Annex C) and, with the policy guidance contained within Annex B of this document.

Statement 3 The SGHD must provide guidance on compliance with those aspects of statutory and mandatory requirements which are particular to the procurement, design and delivery of healthcare buildings and guidance on best practice. This will be effected through the support to be provided by Health Facilities Scotland and Architecture and Design Scotland under the tripartite working partnership with SGHD.

Mandatory Requirements

1. Each NHSScotland Board must have a clear, articulated vision for its estate and strategy for using good design to deliver that vision – a Design Action Plan – consistent with Health Directorates and wider Scottish Government policy. The Design Action Plan must be appended to a Board's Property and Asset Management Strategy (PAMS) and reviewed annually as part of the PAMS review process.
2. Each NHSScotland Board must appoint a member of the NHS Board to act as Design Champion at a strategic level to assist in articulating and promoting the Board's design vision and, where not impractical, also a Senior Officer to act as supporting Design Champion at a technical level with knowledge and experience in capital investment procedures and expertise in technical matters.
3. All NHSScotland Bodies engaged in the procurement of both new build and refurbishment of healthcare buildings must do so in compliance with EU, UK and Scottish Government procurement policy and guidance.
4. All NHSScotland Bodies engaged in the procurement of both new-build and refurbishment of healthcare buildings must, prior to the submission to SGHD of the Initial Agreement, develop a Design Statement for each project as a means of establishing the design standards for which the project and how these will be assessed by the Board within the Business Case approvals process. The Design Statement must be consistent with the strategic Design Action Plan.
5. All NHSScotland Bodies, as clients, must ensure the development of a clear project brief which should not only describe the physical requirements of the building but should also articulate the Board's vision and aspiration consistent with the strategic Design Action Plan. The 'Design Statement' may be used or developed for to this purpose, and should be included in briefing and in the HLIP issued to prospective PSCPs
6. All NHSScotland Bodies engaged in the procurement of both new-build and refurbishment of healthcare buildings must carry out independent environmental accreditation for projects. The Scottish Capital Investment Manual requires that all new builds above £2m obtain a BREEAM Healthcare (or equivalent) 'Excellent' rating and all

refurbishments above £2m obtain a 'Very Good' rating. If the capital costs are less than £2m, projects should undertake a BREEAM pre-assessment to establish whether BREEAM Healthcare is a viable option.

7. All NHSScotland Bodies engaged in the procurement of both new-build and refurbishment of healthcare buildings must use and properly utilise the English Department of Health's Activity DataBase (ADB) as an appropriate tool for briefing, design and commissioning.

[If deemed inappropriate for a particular project and an alternative tool or approach is used, the responsibility is placed upon the NHSScotland Body to demonstrate that the alternative is of equal quality and value in its application.]

8. All NHSScotland Bodies must use Design Quality Indicator (DQI) tools as appropriate to manage their design requirements through the life of a project. The English Department of Health's Achieving Excellence in Design Evaluation Toolkit (AEDET Evolution) and associated supplementary tools such as ASPECT are recognised as the exemplars towards achieving the appropriate level of project design management.

Monitoring

9. SGHD will monitor the integration of design quality into healthcare building procurement through the Business Case approvals process which will be facilitated through a coordinated assessment of the potential quality of proposed projects to support those responsible for decision making within the Business Case process.

This assessment will involve the contribution of particular expertise on the aspects of design relating to government policy on design and place-making from Architecture and Design Scotland and, of particular expertise on the aspects of design relating to functionality, particularly technical and sustainability standards, from Health Facilities Scotland.

10. All NHSScotland Bodies engaged in the procurement of both new-build and refurbishment of healthcare buildings must conduct thorough and, independent, Post Project Evaluations (PPEs) and Post-Occupancy Evaluations (POEs) and make available to SGHD any resulting evaluation data which will be used in the formulation of generic reports to inform future policy and disseminate nationally the lessons learned.

The planning of Post Project Evaluations and Post Occupancy Evaluations is a mandatory requirement of the Scottish Capital Investment Manual for all projects in excess of £1.5 million and should be considered best practice for all projects.

For projects between £1.5m and £5m, the NHSScotland body's internal governance arrangements should ensure the production and reporting of PPEs and POEs. An annual summary report in respect of such projects should be submitted to the Scottish Government Capital Planning and Asset Management Division.

For projects in excess of £5m, PPE and POE Reports must be submitted to the Scottish Government Capital Planning and Asset Management Division. Timescales for the production and delivery of such reports will be monitored by SGHD in common with other key milestones in the project lifecycle.

Full Business Cases for capital projects will not be approved unless Post Project Evaluation and Post Occupancy Evaluation has been properly planned in advance and suitably incorporated into the Full Business Case.

Support

11. Support for the implementation of the design agenda will be provided by means of a coordinated, tripartite working arrangement between SGHD, [Health Facilities Scotland](#) and [Architecture and Design Scotland](#) to facilitate the procurement of well-designed, sustainable, healing environments which support the policies and objectives of NHS Boards and the Scottish Government Health Directorates.

¹ NHSScotland Bodies in the context of this document means all Health Boards, Special Health Boards and the Common Services Agency performing functions on behalf of Scottish Ministers

Policy Guidance

A NHSScotland Body's **Design Action Plan** and supporting project-specific **Design Statement** should be consistent with and supportive of the guidance contained within this Annex and the policy and guidance documents listed at [Annex C](#).

[The following guidance aligns in part with the Scottish Government "Construction Procurement Manual: Section 6 – Design quality in building procurement" but with appropriate additions and amendments in order to apply to the healthcare context.]

Contents:

Design quality

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Design Quality

Establishing and evaluating design quality

General

Boards are required to establish design quality criteria (non-negotiable project aims and benchmarks) for all development projects in the form of a project 'design statement'. As we use buildings, for the most part, to house and support human activity, these criteria are to be built around the needs of the people who the facility will directly impact upon and further expanded to include the elements needed to deliver on the broader responsibilities of using public money – that of addressing local and national needs. The Design Statement then includes the board's proposals for self assessment of the project as it progresses, describing the key stages at which the decisions will be checked against the established design quality criteria, how this will be done and what skills and information will be needed.

Assessing design quality is not a wholly subjective activity. Many other design issues can be assessed objectively - whether a building will function efficiently and effectively; whether there is clear evidence of thoughtful, imaginative and even inspirational proposals that will not only work, but support people to feel and work better; whether it responds positively to its surroundings; whether it provides well-defined and meaningful public spaces for patients and the community; and whether the materials, construction methods and the proposed layout will enhance long-term value for money. The Scottish Government [Construction Procurement Manual: Section 6 – Design quality in building procurement](#) lists a number of key issues to be considered in evaluating a design.

General guidance on achieving value for money (VFM) in works procurement, based on seeking to achieve an optimum combination of whole life cost and quality, is set out in [Section 2 of the Scottish Executive Construction Procurement Manual](#). Evaluating and achieving consensus on quality can be facilitated through the use of formal techniques and there are a number of tools which can help. The Construction Industry Council (CIC), for example, has developed its Design Quality Indicator (DQI) to evaluate the design quality of buildings throughout the development and life cycle of a project.

Healthier Places Website

This website has been designed to house information on good healthcare design to assist boards in brief development and to raise awareness of the good practice being developed and delivered across NHSScotland and elsewhere. In addition to providing guidance on the development of 'design statements' and, articles on healthcare design topics, the website holds a project resource - '[Pulse](#)' - a database of projects and examples of good practice that can be used in two main ways:

- **Search by project type** : to find out about recent and current developments in NHSScotland, and elsewhere, that are of a similar type to the one being considered by the client team. This will provide basic details on the project, the key team members involved and images where available. Key design documents, such as the 'Design Statement' and Post Occupancy Evaluations will be included once they are in the public realm to allow greater learning from what has gone before. It is envisaged client teams will use this search primarily at the outset of a project to
 - Establish similar works by colleagues in other boards
 - Facilitate contact to allow shared learning

- Establish possible visit lists for the client team and key stakeholders to raise awareness and understanding.
- **Search by area** : to find photographs of different areas of the healthcare estate (such as entrance areas and consulting rooms) to raise awareness of what has been achieved elsewhere. It is envisaged client teams will use this search primarily to assist benchmarking within the 'design statement' being developed for projects.

The '**Pulse**' resource will be maintained by A+DS using project information submitted to the NHSScotland Design Assessment Process (once the Business Case is in the public realm), case studies of completed developments, and supplemented by images submitted by users of the site. NHS Boards are encouraged to upload photographs taken during visits to inspirational developments (especially those outwith Scotland) to assist knowledge transfer between project teams.

Achieving Excellence Design Evaluation Toolkit (AEDET Evolution)

However, healthcare building design frequently involves complex concepts which are more difficult to measure and evaluate. In order to address these specifics in a DQI context the Department of Health (England) Estates and Facilities Directorate has developed the **Achieving Excellence Design Evaluation Toolkit (AEDET Evolution)**, the latest version of which is AEDET Evolution and is a tool specifically directed towards achieving excellence in design rather than ensuring compliance with legislation, regulation and guidance. High scores in AEDET do not therefore necessarily guarantee compliance with statute.

The AEDET Evolution toolkit assists NHS Bodies in managing their design requirements from initial proposals through to post-project evaluation. It is a benchmarking tool and forms part of the guidance for PPP, joint ventures including "hub" and, conventionally funded schemes. AEDET Evolution contains evaluation criteria which ensure that design takes place within a common, industry wide framework. The toolkit enables the user to evaluate a healthcare building design in a non-technical way that covers the three key areas of **impact, build quality and functionality**. AEDET Evolution tool is complemented by A Staff and Patient Environment Calibration Tool (ASPECT).

Unpublished research into the use of AEDET Evolution and ASPECT suggests these tools are reliable, presenting high correlations between different judges using them to evaluate healthcare design. More recent independent, unpublished research into the experience of collaboration between designers and clinicians using AEDET Evolution indicates that the tool facilitates improved design quality. It achieves this by further facilitating a recursive discovery and a mutual utilisation of the considerable skills and factual knowledge of the designers and clinicians thus serving to improve their skilled performance.

AEDET Evolution uses ten key criteria that have evolved from sources including the Commission for Architecture and the Built Environment (CABE) and the Construction Industry Council (CIC) to establish an industry-wide framework for assessing design. The ten key criteria are:

Uses

Service philosophy, functional requirements and relationships, workflow, logistics, layout, human dignity, flexibility, adaptability and security.

Access

Vehicles, parking, pedestrians, disabled people, wayfinding, fire and security.

Spaces

Space standards, guidance and efficient floor layouts.

Character and innovation

Excellence, vision, stimulation, innovation, quality and value.

Citizen satisfaction

External materials, colour, texture, composition, scale, proportion, harmony and, aesthetic qualities.

Internal environment

Patient environment, light, views, social spaces, internal layout and wayfinding.

Urban and social integration

Sense of place, siting, neighbourliness, town planning, community integration and landscaping.

Performance

Daylight, heating, ventilation, air conditioning, acoustics, passive thermal comfort.

Engineering

Emergency systems, fire safety, engineering standardisation and prefabrication.

Construction

Maintenance, robustness, integration, standardisation, prefabrication, health and safety.

Using AEDET Evolution

AEDET Evolution is a tool for evaluating the quality of design in healthcare buildings. It delivers a profile that indicates the strengths and weaknesses of a design or an existing building. It is not meant to produce a simplistic single overall score. Because of the nature of design, which inevitably involves trade-offs, it may not be possible to produce a building which would have the maximum score for all the sections. Indeed it may quite often be the case that a high score for one statement reflects a design which inevitably may be scored low on another statement. A single overall score would thus be misleading and uninformative.

AEDET Evolution can either be used by individuals or in workshops by groups. In the latter case it is probably desirable that an independent experienced user of AEDET Evolution should facilitate the group to avoid excessively lengthy debate. AEDET Evolution can be a helpful tool in enabling a group to come to a common understanding with the help of a facilitator who can moderate group discussions.

AEDET Evolution can be used at different 'scales' in evaluating the design of a healthcare building, e.g. at a building scale, a department scale or a complete site scale. The level of detailed information available may dictate the scale of the evaluation.

AEDET Evolution is designed to be used by those involved in the commissioning, production and use of healthcare buildings. In particular public and private sector commissioning clients, developers, design teams, project managers, estates/facilities managers and design champions may find AEDET Evolution a helpful and useful tool. User clients such as patient representatives and members of the general public should also be able to use AEDET albeit within a workshop environment alongside other more experienced professionals.

When to use AEDET Evolution

AEDET Evolution can be used to evaluate existing buildings in order to compare them or understand their strengths and weaknesses.

AEDET Evolution can be used on the plans for new buildings in order to evaluate and compare designs.

AEDET Evolution can be used on “imaginary” buildings in order to set standards for preparation of a brief.

AEDET can be used at various stages during the design of healthcare buildings – as the level of detail of the information available increases it should be possible to respond to more of the statements in the tool.

A Staff and Patient Environment Calibration Tool (ASPECT)

To complement AEDET Evolution, the Department of Health (England) Estates and Facilities Directorate has developed the [ASPECT toolkit](#). ASPECT stands for A Staff and Patient Environment Calibration Tool and is based on a database of over 600 pieces of research. That research deals with the way the healthcare environment can impact on the levels of satisfaction shown by staff and patients and on the health outcomes of patients and the performance of staff.

This research and the ASPECT toolkit itself are set out under 8 headings. ASPECT can be used as a stand alone tool, or it can be used to support AEDET Evolution to provide a more comprehensive evaluation of the design of healthcare environments.

When used to support AEDET Evolution it enables the user to score the Staff and Patient Environment Heading of AEDET Evolution in a more detailed, accurate way.

The toolkit has 3 layers which allow users to create a design evaluation profile:

- the SCORING layer on which you score;
- the GUIDANCE layer that gives more detailed help;
- the EVIDENCE layer that points to available research evidence.

Inspiring Design Excellence and Achievements

[Inspiring Design Excellence and Achievements](#) (IDEAs) is another useful design tool published by Department of Health (England) Estates and Facilities Directorate to assist in the generation of design briefs, proposals and schemes

IDEAs was conceived and developed by the University of Sheffield as a way of utilising the latest research evidence. IDEAs starts the design of healthcare places with people – patients, staff and visitors – and responds to the emotional and functional requirements of healthcare delivery.

IDEAs deals with activities rather than individual spaces or rooms. Examples of activities that occur in healthcare places include:

- arrival
- bathing

- bed / rest
- circulating
- consulting
- shopping
- sanctuary
- socialising
- waiting

IDEAs can be used either as a standalone tool within a workshop context or as a web-enabled integrated tool by individuals.

Role of Health Facilities Scotland

Health Facilities Scotland (HFS) is a division of National Services Scotland and provides operational guidance to NHSScotland Bodies on non-clinical topics such as:

- estates engineering;
- building and architecture;
- procurement;
- fire safety;
- environment;
- energy;
- property management;
- clinical waste management;
- decontamination
- legionella and other estates related pathogenics;
- hazards and safety action notices.

This assists NHSScotland in meeting the Government's policy and strategic aims and the establishment of professional/technical standards and best practices, including the promotion of new initiatives in the field of healthcare practice and management. Clearly HFS can have a pivotal role to play in generally supporting the implementation of this Policy, through the provision of supporting guidance and through their Continuous Professional Development (CPD) programme which provides essential training to NHSScotland personnel on operational issues as impacted by national policies and objectives.

With particular regard to the objectives of this Policy, HFS will lead the agenda through the central operation of Frameworks Scotland and through the administration of the Design Assessment process now mapped into the Business Case process. HFS will provide technical expertise including those aspects of design which relate to functionality and, particularly, technical and sustainability standards. This will underpin the strands of work identified to support the design agenda in NHSScotland through the coordinated tripartite working relationship between HFS, SGHD and A+DS and with NHSScotland stakeholders.

Role of Architecture and Design Scotland (A+DS)

Architecture and Design Scotland has been established by Scottish Ministers as the National Champion for Good Architecture, Design and Planning in the built environment. Its aim is to operate within the Scottish Government's policy framework on architecture and design, as well as in partnership with a range of bodies in the private and public sector to help turn the aspirations of policy into reality.

The aim is to raise the quality of new development, so that high standards of layout and design are the rule, not the exception. Overall, the development of well designed and

attractive cities, towns and villages will support the Scottish Government's National Outcomes for the built environment.

These Outcomes are designed to ensure that Scotland has the infrastructure, the physical services, the economic ability, the healthy environment, the cultural references and the social networks that allow our current and future generations to achieve their potential in a balanced manner.

SGHD and A+DS have developed a range of initiatives to assist NHSScotland in addressing design quality issues in the procurement of healthcare building projects, the summary objectives of which are to:

- raise the level of design quality achieved through infrastructure investment;
- increase the capacity of health boards and central agencies in respect of the above; and
- assist in sharing good practices.

In order to meet the above objectives, Architecture and Design Scotland will deliver 3 main activities on behalf of the Scottish Government Health Directorates.

Activity 1

Engaging with partner organisations and central procurement agencies in order to assist them in their work and in raising design awareness of 'external' parties involved in delivery. This will be done through actions such as:

- assisting in the development of policy and guidance relating to the procurement of, and design quality in, the built estate;
- participation in steering groups such as those developed for Frameworks Scotland and in the development of strategies and processes (such as team selection and KPIs) for central procurement agencies. Also assisting, as requested by such central teams, in providing advice to client teams on matters effecting design quality, particularly pertaining to preparation for the assessment described in 2 below; and
- assisting Health Facilities Scotland (HFS) and others in the development of training and awareness sessions.

Activity 2

Providing, in partnership with HFS, a co-ordinated assessment of the potential quality of proposed projects to support those responsible for decision making within the Business Case process.

This will involve contributing particular expertise on the aspects of design relating to government policy on design and place making to a process administered and led by Health Facilities Scotland who will, in addition to the administrative elements, provide particular expertise on the aspects of design relating to functionality, particularly technical and sustainability standards developed by HFS and the Department of Health in England.

Activity 3

Assisting in building a body of knowledge and evidence of good practice in both process and product across NHSScotland, through:

- the development and management of the web-based project resource, '[Pulse](#)';

- the development of case studies of projects on the ground;
- providing dedicated support to ‘demonstration projects’ where ambitious parties are taking on particular aspects of work, particularly around cross-sectoral working; and
- identifying and commissioning targeted pieces of work by relevant specialists to inform, test, and develop concepts and tools to support Health Boards and their stakeholders in their delivery of good design.

Role of the Scottish Futures Trust

The Scottish Futures Trust is an independent company, established by the Scottish Government with a responsibility to deliver value for money across all public sector investment. SFT operates at arms length from the Government but works closely with the public sector to seek and deliver improved value for tax payers.

Currently the Scottish Government and other public sector bodies in Scotland invest some £5billion annually on infrastructure. By any measure this is a substantial amount of money and spend on investment is recognised to be a strong contributor to economic growth. In today’s tight financial environment, improving the value for money of this spend, and finding innovative ways to finance infrastructure investment to enhance economic growth are imperative and are SFT’s primary functions.

Recommendations from Audit Scotland, the National Audit Office and others have included the requirement for many of the services that SFT is now providing. The company brings focused commercial and financial skills in infrastructure financing, procurement and delivery into the public sector. SFT retains and grows this knowledge within infrastructure-investing organisations across the public sector.

SFT is leading the £1.25 Schools Investment Programme and has developed a National Housing Trust to deliver an initial £130million of housing. SFT is also involved in a wide range of major transport and accommodation infrastructure projects and by the end of 2010/11 SFT’s portfolio of projects are expected to be valued at more than £7billion.

In relation to this policy SFT is responsible for managing the ‘hub’ programme. Their remit includes:

- Enabling the establishment and development of hub groups
- Help motivate change
- Help promote the strategy and disseminate best practice
- Steer the implementation of the procurements
- Develop processes, procedures, supporting documentation and guidance
- Support the drive for continuous improvement
- Manage the administration of the enabling fund
- Develop and implement methodology for benefits evaluation

SFT may also get involved in an advisory or validation role on other projects, and therefore has an interest across all healthcare work.

NHSScotland Design Champions

The Scottish Government Health Directorates requires that NHS Board Chairs are responsible for nominating a member of the NHS Board and a Senior Officer to take on the roles of Design Champions for the Board. The Senior Officer should have knowledge and experience in capital investment procedures and expertise in technical matters. Both must be in a position to influence the overarching policies, procedures and ethos of the organisation, albeit in their own manner.

A Design Champion should be:

- well respected and an excellent communicator who is able to promote the need for good design to a wide variety of audiences, both within the Health Board and externally. Both appointees should be able to persuade colleagues and the wider community of the benefits of well designed healthcare buildings;
- a consensus builder, able to bring together the various stakeholders both within the local authority and the wider community; and
- able to see the 'bigger picture' and help develop a 'vision'.

The Design Champions, ideally, are in a position to influence the work undertaken by the Health Board but it is important that the roles are not created for status but, for action.

- The role of the Design Champion is not project specific but is to advocate design quality and to ensure that mechanisms are in place within the NHS Board to deliver the design agenda. NHS Design Champions will be supported, where possible, by Architecture and Design Scotland through ad hoc requests for assistance.

Design Champions will be expected to work with all the necessary disciplines. The role of the Design Champion is expected to include a responsibility to ensure that:

- the building promotes civic pride;
- patients and staff are consulted and their views addressed;
- the building fits into the local surroundings and settings;
- the building is fit for purpose;
- the building takes on board modern technology;
- the design considers sustainability issues;
- quality is questioned throughout the process; and
- there is support for resisting change which reduces quality and VFM.

The Design Champion should ensure that:

- aspirations for design quality underpin all projects undertaken across the NHS Board;
- a Board Design Action Plan is produced and delivered;

- a Design Statement is produced for all development projects establishing the design quality criteria for that project, the key points which these criteria must be given value and profile and, the process by which the board shall assess the developing project against those criteria. **The Design Champions must ensure that appropriate skills are utilised in the self assessment. Depending on their own background and role, this may be either by their own personal actions and involvement or through the appointment of others with appropriate skills;**
- an assessment is made of the current environment for patients, staff and visitors;
- the Achieving Design Excellence Evaluation Toolkit (AEDET) is used throughout a project where appropriate;
- the evaluation of tenders is based on VFM and not lowest cost;
- budgets and timetables are realistic;
- the Board has the correct skill mix to deliver the design agenda; and
- the scheme includes the full involvement of the local community and the support of clinical and other staff.

The Design Champion will raise the profile of design excellence by:

- encouraging the selection of designers with a proven track record of good design or design awards;
- promoting awareness of national and international best practice in healthcare design;
- encouraging schemes, either refurbishments or new build, to be put forward for local and national competitions and awards;
- maintaining a forum for regular review and feedback to the Board; and
- recognising the support, guidance and initiatives available.

It is important that NHS Boards acknowledge the fact that the role of Design Champion is one that requires a considerable amount of time. Design Champions are required to understand what constitutes good design across a range of different and, sometimes very technical, disciplines and the amount of time required to do so can easily be underestimated.

Maintaining design quality on site

There is a risk that, once a project moves on to site, the client may underestimate the effort which will continue to be required to maintain design quality. Any shortcuts taken at this stage can put the overall design quality of the project at risk. The client's design advisers must be retained throughout the construction process in order to monitor the quality of design and finishes.

These advisers should also ensure that design aims are not sacrificed in the management of change during the running of the project. If design standards and quality thresholds are clearly defined, then the review process throughout the delivery stage should provide sufficient safeguards against quality dilution. A structured process of quality checks during construction is important to ensure that what has been agreed is actually being provided. All partners should be involved in these checks as the risks of unsupervised changes on site

can affect a wide range of matters, such as the provision of resource areas necessary for facilities management and the quality of finishes, which in turn may affect both cleaning and maintenance.

Public Space

It is important that public space is not considered as an afterthought. New public buildings need to be responsive to their contexts, both in terms of their scale and form, and in the materials they use. It is not enough to simply respond to the appearance of surrounding buildings; it is important to also think in terms of the integrity of surrounding public spaces. In the creation of new public buildings, it is important that the design team is perceptive of the buildings' relationships to the maintenance or improvement of existing public spaces or the potential for new public spaces.

The creation of public buildings can also give something positive to the public realm rather than simply create residual areas around them, and clients may wish to consider whether the location of a building is sufficiently sensitive to merit the inclusion of an urban design specialist on the team. An approach is required which gives due consideration to the way in which the spaces created by buildings will be used, and to the needs of users in terms of accessibility, safety, lighting, shading, shelter, orientation, views, surfaces, seating, planting, and maintenance.

Transport and car-parking

NHSScotland Bodies are required by Scottish Government policy to co-operate with local authorities, regional transport partnerships and other stakeholders in the planning and implementation of local and regional transport strategies towards ensuring that through integrated transport policies NHSScotland facilities, in particular new developments, are accessible to all by public transport, walking and cycling. NHSScotland Bodies operational policies should take into account the strategy for internal NHSScotland systems and car parking. The organisation's Travel Plan is the integral document to addressing these goals.

Detailed guidance can be obtained from [Health Facilities Scotland](#).

It is important to realise the need to adopt a robust design strategy for on-site car parking and people movement which is consistent with the NHS Body's Travel Plan. The design strategy should address:

- space utilisation;
- traffic and pedestrian flow;
- access for short-stay visitors, mobility-impaired persons and late night/shift workers;
- wayfinding and markings;
- landscaping;
- security, technology and lighting.

The availability of parking for both cars and cycles can influence transport choices for those using a facility. All new and re-development proposals should be designed for safety and the

convenience of all users. Good design and layout of a development can significantly improve the ease of access by non-car modes, for example:

- entrances to be as close as possible to pedestrian routes and bus stops; and
- links to cycle networks, with secure parking near the main entrance.

Proposals should be specifically tailored to local circumstances, aspirations and priorities, for example speed management strategies, attractive green space and landscaping, in order to bring a wide range of social and community benefits and improve quality of life. Design of public transport facilities should be user friendly and attractive as well as functional to encourage and retain modal shift.

Use of the arts in healthcare

There may be scope for the involvement of artists or craftsmen in a project. When successfully implemented, artworks can help to create more distinctive and attractive buildings and urban spaces and enhance the public's experience of an architectural space. In a healthcare perspective, artwork can have an even more positive effect. NHSScotland can benefit in many ways from the adoption of the arts in healthcare programmes including better patient environments and an improvement in staff morale. It is recognised that art in healthcare can benefit the NHS through the promotion of user and staff involvement in the design of the healthcare environment and can subsequently have an impact on health outcomes. There is growing evidence that patient recovery rates and stress levels are improved by the adoption of appropriately selected art in healthcare programmes. The integration of art can also assist in improving the communication of health information and the redesign of services. The involvement of staff, patients, artists and local communities at the earliest stages of the design process for new buildings and refurbishments can result in innovative, creative solutions.

It is important to also realise that a person's perception of environmental stimuli is influenced by their feelings or emotional state. Although scientific research has produced evidence that emotionally appropriate art can improve certain patient outcomes, there is also evidence that inappropriate styles and subject matter can have an opposite effect. This is especially pertinent to psychiatric patients, who, by nature of their illness can be vulnerable to disturbing interpretations of visual arts, thus exacerbating their condition.

The use of art in a healthcare setting need not be restricted to the visual arts. Other arts activities which involve music, performing arts, storytelling and patient workshops can have therapeutic benefits and can have great value in certain healthcare environments. Art-related therapy, e.g. dance, music, drama or art creation, is recognised as an integral psychological and creative tool for the improvement of physical and mental well-being.

Some NHS Boards retain the services of "artists in residence". However, Boards may also wish to seek specialist advice from public art agencies with regard to including artwork within a project.

Boards may wish to consider allocating a specific budget for the inclusion of artwork as an integral element of a project. However, care should be taken to ensure that any resulting expenditure is proportionate to the benefits and is appropriate to the building's status and function, in order to avoid subsequent criticism of the project for inappropriate use of public funds.

Traditional building procurement allows for a detailed design to be developed prior to building contracts being issued. However, under Public Private Partnerships (PPP) projects contractual commitments are made with the private sector partner before the detailed design is complete and thus once contractual agreements are in place any additions or changes to them will incur significant additional costs. The requirements of the design are defined in advance by identifying the outputs required which in turn set the framework for the design, within which more detailed specifications for the services to be provided can be accommodated. **To ensure that the arts are incorporated into both the building and maintenance contracts they must be part of the output specifications.**

Design quality in building procurement

Key issues

- Good design is not an alternative to value for money (VFM), but is integral to its achievement. A good building project must also contribute to the environment in which it is located, deliver a wider range of social and economic benefits and be adaptable to accommodate the needs of future users. An enhanced built environment which incorporates principles of good design can improve the quality of life of those who use and work in public buildings. Throughout the life of a building, design excellence can improve the standard of public service delivery, make it more efficient and contribute to staff recruitment and retention. Good design can ensure that capital costs are competitive and that savings can be achieved on running costs through reduced maintenance, energy and operating costs without compromising the attractiveness and quality of the building. **Therefore investing in good design can make the most beneficial and effective use of resources, can add value and represents a sound investment in the future. High quality building design is therefore a key mechanism in providing VFM in the provision of healthcare services.**
- As the aim of any procurement exercise should be to achieve Value for Money, it is recommended that the "most economically advantageous" evaluation be employed. Value for Money is defined as the optimum combination of whole life costs and quality (or fitness for purpose) to meet the customer's requirements and can be taken to be largely analogous with "most economically advantageous".
- Using an evaluation based on the "most economically advantageous" offer gives the procuring organisation the opportunity to take factors other than price into account when awarding contracts.
- **Good design is not merely a question of visual style or personal perception but arises from the careful synthesis of many interrelated factors including architectural vision, functionality and efficiency, structural integrity and build quality, accessibility, security, sustainability, lifetime costing, flexibility in use and a sense of space in the community.**
- Clients must be clear about the level of funds available for a project from the outset and ensure that their aspirations for quality are underpinned by realistic and affordable assumptions.
- Clients must carefully assess and define their priorities before appointing design consultants.
- The process must allow for effective consultation with all stakeholders to establish a clear, well-defined brief.
- Sufficient time and resources should be allocated towards establishing the client's design quality aspirations.
- Post Project and Post Occupancy Evaluations of building programmes are mandatory for major projects and any lessons learned must be shared with the Scottish Government and other NHSScotland bodies.
- Quality Based Selection (QBS) is a structured procedure for selecting a design team and professional advisers. Design competitions are a means to primarily select specific design ideas or outline design ideas for a project, rather than the design team personnel.

- All public sector appointments, irrespective of the client's preferred nature of competition or reference to any other guidance on design competitions, must be consistent with EU procurement rules in terms of process and outcome. Generally, public sector clients must ensure that design team appointments follow the procedures described in [Section 3](#) of the works procurement guidance part of the Scottish Government Construction Procurement Manual. **However, in the NHSScotland context, detailed guidance on the appointment of consultants, conditions of contract and contract guidance in should be sought from [Health Facilities Scotland](#).**
- The role of an informed client is vital in ensuring the successful delivery of the project within the agreed timescale and budget and to the required standards and requirements of all users.

Achieving good design

From the outset, clients must be clear about the level of funds available for a project and ensure that their aspirations for quality are underpinned by realistic and affordable assumptions through establishing the right budget. These quality matters and functional requirements must then be set out in a clear and thorough project brief. In order to monitor and control the procurement, design and construction processes, procedures and responsibilities should be clearly defined (and assigned). Ideally, designers should engage in challenging and constructive dialogue with the client, building users and those involved in supplying and manufacturing materials, goods and services. All concerned should work to a realistic and robust timetable, which gives the design team enough time to develop and achieve a good solution.

An informed, demanding and committed client is vital in ensuring that aspirations for quality are maintained throughout the procurement, design and construction processes.

By nature of their complexity, healthcare buildings can be expensive to manage and maintain due the imposition of build cost constraints during the procurement process in order to adhere to a short-term financial hurdle. The influence of design is fundamental to the successful outcome of a project not only in terms of how the building will deliver its intended functions but also its long-term operational efficiency. An appropriate level of investment in the design stage early in the process incurs a comparatively small capital outlay but ultimately influences the revenue streams associated with the operation of the facility and also influences the successful provision of the services to be delivered. **It is therefore imperative that the process recognises the need to address the whole-life cycle of the building and the integral part that good design can play in mitigating potential future financial and operational penalties imposed by the adoption of short-term vision. Whole-life costing must be the standard for investment decisions. Those involved in the making of such decisions will be ultimately judged on the lifetime VFM of their decisions rather than whether they managed to get a project past the initial financial hurdle.**

Healthcare facilities and the associated equipment used therein must be designed to support all the people who are likely to use them in order to operate effectively. It is therefore vital that all potential users of a proposed facility – staff, public and patients – are involved early in the design process and throughout its progress. Additionally, stakeholders such as regulators, professional bodies, community bodies, etc, should also be engaged throughout the process as this has the potential to provide a valuable source regarding the projected use of the facility, the processes which will be undertaken therein and how the facility's users will work or interact with it. Early user involvement in the design process can help ensure that a planned facility will support the people who are to use it.

The standardisation of systems and processes to be carried out within a proposed facility, layouts, room orientation, human interfaces, wayfinding and even storage can provide many benefits for patients, staff and visitors. Standardisation can help reduce mental workload and thus reduce errors, can make errors and departures from normal working easier to detect and can allow the transfer of skills and staff between departments with reduced training needs. Thus standardisation in conjunction with a wider engagement with users and stakeholders can also enhance safety.

The Scottish Government Health Directorates requires that NHS Boards appoint Design Champions at Board and Senior Officer level to consolidate a commitment to the championing of good design.

Evaluating good design

Design evaluation can be structured around a number of key design issues. To support the continual improvement of the construction and procurement process, Post Project Evaluations (PPEs) and Post Occupancy Evaluations (POEs) of building programmes are mandatory for major projects with a cost in excess of the delegated limits and are an integral requirement of the [Scottish Capital Investment Manual](#). However, it is recognised that all projects would benefit from such evaluation and any lessons learned should be shared with the Scottish Government and other NHSScotland bodies in order to inform best practice and future policies. Independent PPEs should be carried out before the break up of the design team to review the success of the project against its original objectives, its performance in terms of time, cost and quality outcomes and whether it has delivered value for money.

Guidance on Post Project Evaluations and Post Occupancy Evaluations can be found within the [Scottish Capital Investment Manual](#).

Post-Occupancy Evaluations have a significant role. The key advantage of POEs is the opportunity to achieve improvements in the ways future buildings will support operational objectives. Participants often identify areas where design improvements could be made and ways in which buildings and equipment could be used more cost effectively. These may only be minor, but they could produce significant benefits to future designs. The process of evaluation can provide important feedback on whether resources are being targeted at the most important areas. This can also enable poorly functioning or seldom used features to be eliminated from future designs and the repetition of mistakes to be avoided.

The nature of PPE and POE reports must be set out and agreed at the start, and project sponsors must ensure that provision is made for the independent preparation of both when setting budgets and timetables.

PPEs and POEs can be valuable in the formulation of “evidence based design” methodology. As has been stated in the preambles to this policy document, the field of “evidence-based design” is proving a valuable tool in the design process towards both reducing costs and improving outcomes. Research has shown that evidence-based supportive design methods, introduced early in the process of facility programming and design can have significant impact on the design of physical environments which can affect patient medical outcomes and care quality. An important impetus for the growing international awareness of healthcare facility design has been mounting scientific evidence that certain environmental design strategies can promote improved outcomes whereas other approaches can worsen patient health.

The Business Case

The Business Case process must include statements of expectation for design quality. Discussions with professional advisers at the earliest stage will assist in determining and defining design priorities and setting project objectives. Consideration of the design issues must continue throughout the entire process.

Detailed mandated guidance on the preparation of the business case is contained within the [Scottish Capital Investment Manual](#).

Design Assessment

An assessment of design quality is now part of the SGHD Business Case process. All projects submitted to the SGHD Capital Investment Group for approval are now subject to an assessment of design quality and functionality, including technical and sustainability standards. This **Design Assessment** will take place at the **Initial Agreement**, **Outline Business Case** and **Full Business Case** stages of approval.

There are two complimentary areas of consideration in the design of healthcare buildings. These can broadly be described as healthcare specific design aspects – the areas generally covered by guidance issued by Health Facilities Scotland - and general good practice in design considering the human experience of being in and around buildings. These are brought together in this process and in the collaboration between Health Facilities Scotland and Architecture and Design Scotland in the NHSScotland Design Assessment Group which reports to the SGHD Capital Investment Group. This process forms part of the coordinated tripartite working relationship with SGHD and A+DS.

The Scottish Government Health Directorates' purpose in developing and implementing this process is to ensure that the outcomes of development projects meet the Government's objectives and expectations for public investment. The aim of mapping design into the Business Case process is to improve the level of design quality achieved across NHSScotland and, ultimately, the outcomes achieved by doing so.

[CEL 19 \(2010\)](#) which announces this Policy also announces commencement of this requirement and its incorporation into the Scottish Capital Investment Manual. The SCIM also addresses the Scottish Government's sustainability objectives in the context of the [Business Case Guide](#).

The Design Statement

To assist NHS Boards in utilising good design to achieve the best outcomes from their development projects, Boards are required to develop and produce a Design Statement prior to the submission of their Initial Agreement. The Design Statement is the first control document produced for a project and should be consistent with the Board's overall vision contained within the strategic Design Action Plan.

The design statement is a means of setting out a Board's objectives in a series of agreed statements of intent and subsequently then describing a benchmark for how the physical result of the project will help deliver those investment objectives but not by giving a pre-determined design outcome, rather a view of what "success" might look like.

NHS Boards should also use the completed Design Statement as:

- a **briefing tool** to describe the design intention, or design vision, supplemented by more detailed briefing materials such as schedules of accommodation, key adjacencies and room data sheets as and when prepared;
- a **communication tool** to communicate the direction of the project to stakeholders and allow some early view of the benefits to assist both in building momentum/obtaining buy-in and in allaying the concerns that often accompany the commissioning of a new facility;
- an **advertising tool** to build confidence in the market in the direction and, by showing preparedness, viability of the project; and to motivate the market to bring its best and most appropriate skills to the table (in terms of the vision described).

Further guidance on the development and use of Design Statements can be found within the [Scottish Capital Investment Manual](#) and on the [Healthier Places website](#).

Fire safety

Fire safety legislation and standards generally state that all people should be evacuated from a building in the event of fire. In terms of healthcare premises, this is not the case due to certain circumstances. Fire in a hospital or other healthcare building can be especially serious because of the difficulties and dangers associated with the emergency evacuation of patients, many of whom will be highly dependent. Therefore in such buildings the concept of progressive horizontal evacuation is the norm and is cited as so within the [Technical Handbooks to the Building \(Scotland\) Regulations 2004](#). However, because of other special requirements particular to fire safety in healthcare buildings, guidance and recommendations contained in NHSScotland Fire Safety Management guidance, including NHSScotland Firecode, which is additional to the mandatory requirements set out in the Technical Handbooks to the Building (Scotland) Regulations 2004, must be adhered to. This additional guidance is ratified by the [Scottish Government Health Directorates' Fire Safety Policy](#). The requirements of NHSScotland Firecode must be considered throughout the design process in addition to the requirements of the Building (Scotland) Regulations 2004. NHSScotland Firecode is published by [Health Facilities Scotland](#).

Clients must ensure that there is close collaboration between all those who have an interest in the fire safety provisions of the proposed premises at the earliest stage in the design and, be satisfied that all such premises comply with all statutes bearing upon fire safety.

Designing for equality

NHSScotland, as a provider of services, is subject to equality legislation which requires the provision of services which are accessible to everyone. In a healthcare environment, it is important to recognise the complexity and the number of difficulties with which patients, staff and visitors may have to cope on a day-to-day basis. Sensory impairments, perceptual problems, reduced mobility, chronic pain, communication barriers, are but a few. Informed planning and design plays an important role in enabling people of all abilities access to services and facilities. It is therefore essential that the concept of "access and egress for all" is incorporated early in the design process and throughout its progress and that best practice guidelines are followed. By considering equality issues early in the design process, costs associated with addressing equality issues can be minimised which would inevitably prove more onerous if addressed retrospectively.

Egress for all in the case of an emergency must also be considered during the design process. Everyone rightly expects that if they are in a public building when an emergency occurs they should be subject to evacuation procedures which come into force to ensure their safety. However, in healthcare buildings there may be many persons who, by nature of their presence there or otherwise, may be particularly vulnerable. In particular, in larger healthcare buildings such as hospitals it will not be possible to ascertain the number of people who may have an impairment, let alone the type of impairment, or the number of people who may have cognitive or communication or language difficulties. Addressing the needs of all in the context of emergency egress early and throughout the design process will have significant benefit towards the procurement of a facility which ensures the safety of patients, staff and the general public.

To assist NHSScotland bodies in complying with the current equality and diversity legislative framework, the Scottish Government has produced an [Equality and Diversity Impact Assessment Toolkit](#) which was issued under cover of [NHS HDL \(2005\)9](#).

Designing for dementia

There are over 65,000 people living in Scotland who have dementia and they, in common with other people with cognitive impairment, are users of healthcare facilities on a day to day basis across the country. Most people with dementia (60-80%) live in the community, and many of them have multiple health centre and hospital appointments and admissions in any year. As with designing for equality, designing for people with dementia embraces the concept of 'inclusive' design which tries to ensure that the built environment does not present insurmountable barriers to those who use it. Users will include people with physical, sensory and cognitive impairments, which may be progressive, intermittent or permanent and may also include people who may have temporary disabilities

Considering equality issues and the needs of those with dementia throughout the design process will benefit everyone, including people who use wheelchairs and walking aids, have other types of impairment, older people and families.

The University of Stirling Dementia Services Development Centre published guidance on designing for dementia in 2007. '**Best Practice in Healthcare Design for People with Dementia**' is a resource pack on dementia-friendly design which reflects a growing awareness of the need to create caring environments that meet the needs of people with dementia. Many of the features identified are the result of researched case studies and/or international best practice. The Dementia Services Development Centre at the University of Stirling has a specialist online library and information service and holds a large collection of documents relating to care of people with dementia: www.dementia.stir.ac.uk .

A component of the dementia resource pack is a **Dementia Design Checklist** prepared by Health Facilities Scotland and intended for use across all healthcare properties. It covers areas of healthcare premises, including primary care premises and those operated by independent contractors, where people with dementia are likely to attend as patients or visitors. Although the Checklist has been developed primarily for use in existing buildings it can provide a useful reference throughout the project design development process. The Dementia Design Checklist is available from the Health Facilities Scotland website: www.hfs.scot.nhs.uk .

Role of the Client

The key role of the client is to develop a clear, well-defined brief. At the beginning of the project, the client will need to establish the nature and scale of what is required. Clients should establish the views and aspirations of all stakeholders, and their aims will become the

reference point throughout the design and construction stages and can be used to test the overall success of the project over the long term. As with any building project, the initial stages are vital and a period when the most value can be added. Providing sufficient time and resources for strategic thinking will produce dividends in the long run. An informed and motivated client is critical to the success of a project.

As part of their responsibilities, the client must:

- fully develop a client strategy which has identified the need for the building whilst setting and securing a budget for the project. Understand that the budget cannot be finally established until the brief is settled;
- set a realistic and achievable timetable allowing sufficient time for consultation, brief development and for design;
- involve their Design Champion throughout the briefing and project delivery and listen to their comments;
- allocate sufficient time and resources to establish the client's design quality aspirations and set out clear benchmarks which the client must reinforce through all stages of the process;
- consider the skills and experience required of individual client team members, assess in-house skills and, where necessary, engage external consultants;
- where appropriate, appoint a Client Design Adviser to aid in the preparation of the brief and the assessment of the schemes that come forward through any competitive design process;
- consult with stakeholders to establish a clear, well-defined brief;
- be informed and demanding about operational requirements and quality objectives to get the best possible outcome from the procurement process;
- articulate the Board's requirements not only through the use of DQIs but in a clearly expressed brief that establishes and communicates their vision for the development;
- show commitment to achieving a well-designed and constructed project by giving design quality a high percentage in the assessment of bids and publishing that ratio. Make sure that bidders understand that poor or mediocre developments are not acceptable;
- establish clear and effective routes for communication between the Client Team and the bidding Design Teams during the bidding process so that the Board's needs and aspirations can be more fully discussed and incorporated into the designs that are brought forward;
- choose a Delivery/Design Team which is committed to achieving the best quality possible within the agreed budget and timetable; allow sufficient fee budgets for the work that the designers must do;
- not allow design time to be squeezed in order to recover time lost in the programme for other reasons – good design takes time; and

- carry out Post project Evaluations (PPEs) and Post Occupancy Evaluations (POEs) and ensure that the reports from these are available to SGHD for formulation of generic reports which can properly feed back into future procurement processes.

Project Brief

A vital factor in achieving high quality design is that clients have a firm and well-developed view of what they want, before appointing design consultants, and that this is clearly stated in project briefs. A well-developed brief, with common consensus on operational and quality priorities, is essential for the provision of better design. A rigorous approach to this stage of work will significantly improve the client's capacity to deliver a quality project.

On the other hand, proceeding with sketchy and under-investigated assumptions can be detrimental to the outcome of the project. Statements that set out the client's aspirations on design in terms of matters such as character and durability should be incorporated into briefs.

Detailed guidance can be obtained from [Health Facilities Scotland](#).

Healthcare Associated Infection (HAI)

Of particular importance in the context of healthcare buildings is the need for the Project Brief to incorporate policy, guidance and best practice in relation to reducing Healthcare Associated Infections (HAI). It is vitally important to have a clear understanding of how the briefing, planning, design, procurement, construction, commissioning and ongoing maintenance of our healthcare property can contribute to the prevention and control of HAI. Guidance to ensure that prevention and control of infection issues are identified, analysed and planned for at the earliest stage of the provision of new or refurbished healthcare facilities is contained within Scottish Health Facilities Note 30 (SHFN 30): 'Infection Control in the Built Environment: Design and Planning', published by [Health Facilities Scotland](#). Additionally, Health Facilities Scotland has developed a system which aims to assess and manage the risk of infection in the built healthcare environment called HAI-SCRIBE, an acronym for Healthcare Associated Infection System for Controlling Risk in the Built Environment. HAI-SCRIBE has been designed as an effective tool for the identification and assessment of potential hazards in the built environment and the management of these risks. The tool should be applied from the design and planning stages of a project through to the occupation and operation of the facility.

Sustainability

The project brief should also contain statements on the client's desired approach to sustainability. Integral to the design and procurement process, a commitment to sustainable design can bring real benefits in terms of reduced running costs and quality of environment for users. Further general guidance on achieving sustainability in construction procurement is set out in [Section 7 of the Scottish Executive Construction Procurement Manual](#).

Construction of new NHSScotland premises also provides an ideal opportunity to significantly reduce an organisation's environmental footprint. Designing the building and the processes that will be carried out within it with the aim of minimising the whole life costs and environmental impact of the facility can cut costs, improve client satisfaction, improve the healthcare body's public image and help deliver the nation's environmental objectives.

A NHSScotland Body, when setting specifications and letting contracts, should emphasise and promote environmentally preferable features in both the construction and the operation/running of buildings and, in the organisation of the services delivered within them,

to ensure sustainability over the projected property lifespan. The decision making criterion for selection of components and equipment should take into consideration the whole life costs and the environmental impact by setting out all the operational and physical components and risk aspects that contribute to these. Environmentally preferable solutions should be preferred unless there is clear evidence that their adoption would have outweighing disadvantages elsewhere.

To assist NHSScotland Bodies in delivering sustainable solutions and embedding energy efficiency into healthcare building projects, Health Facilities Scotland has developed a **Sustainable Development Strategy for NHSScotland** which provides a framework for sustainability issues in NHSScotland, including new builds and refurbishments. The use of this guidance in the preparation of Business Cases is a requirement of the Scottish Capital Investment Manual. Further useful guidance is also available within the Scottish Ecological Design Association Design Guides on design and detailing for more sustainable construction: **Design and Detailing for Deconstruction; Design and Detailing for Airtightness** and; **Design and Detailing for Toxic Chemical Reduction in Buildings**.
<http://www.seda.uk.net/guides/>

The Project Brief should also cite the use of the exemplar Environmental Management System, GREENCODE, through which NHSScotland Bodies can continually aim to improve the environmental performance of their property and, the exemplar energy efficiency guidance, EnCO₂de, which aims to ensure that everyone involved in procuring, managing and using healthcare buildings and equipment thinks about the implications of energy use.

Activity DataBase (ADB)

Activity DataBase (ADB) is the briefing, design & commissioning tool for both new-build and refurbishment of healthcare buildings. It is a briefing and design package with an integrated textual and graphical database, an interface with AutoCAD and an extensive graphical library - the complete tool for briefing and design of the healthcare environment.

ADB is produced by the Department of Health in England and is mandated for use in Scotland by the Scottish Government Health Directorates as the preferred briefing and design system for NHSScotland (see Mandatory Requirement 7 of this Policy). It has been developed to assist in the construction, briefing development, design and alteration of healthcare facilities.

Spaces designed using ADB data automatically comply with English planning guidance (such as Health Building Notes (HBNs) and Health Technical memoranda (HTMs) as ADB forms an integral part of the English guidance publication process. Whilst Scottish users can create their own project-specific briefs and designs using ADB's extensive library of integrated graphics and text which includes room data sheets, room layouts and departmental room schedules, extreme care should be taken to ensure that such data generated by the package are consistent and compliant with Scottish-specific guidance* such as Scottish Health Planning Notes, Scottish Health Facilities Notes (SHFNs) and Scottish Health Technical Memoranda (SHTMs) as published by Health Facilities Scotland.

* In the near future, all technical guidance will be available from the 'Space for health web resource. The Space for Health website will provide a single portal to the knowledge and expertise of the four UK health organisations. It will draw together the technical guidance published by HFS, the DoH and their equivalents in Northern Ireland and Wales. Further information is available from Health Facilities Scotland.

The Design Team

Design Team selection

There are several methods of selecting the appropriate design team for a project, including Quality Based Designer Selection (QBS) which is a structured procedure for selecting a design team and, design competitions, which primarily select specific design ideas or outline designs for a project, rather than the design team personnel.

Where **Frameworks Scotland** is the chosen project procurement method, the design team will form part of the Principal Supply Chain Partner's (PSCP) delivery team and the members of the design team will have been assessed during the process of selecting the PSCP from the Framework. Although the design team will be managed by the PSCP they will work closely with the NHS Client in a collaborative fashion in delivering the design. (Further detail of the PSCP Appointment Process is available in the **Frameworks Scotland** section of the [Health Facilities Scotland website](#)).

The Scottish Government [Construction Works Procurement Guidance: Section 3 – Procurement Strategies and the Appointment of Consultants and Contractors](#) provides general information on some of the different procurement strategies available and the consultancy roles and professional advice that may be required at the various projects stages. Further general advice can be found on the [Office of Government Commerce website](#).

In the NHSScotland context, detailed guidance should be sought from [Health Facilities Scotland](#), and, for 'hub' projects, [Scottish Futures Trust](#).

Regardless of the procurement strategy adopted, the appointment of a design team, consultants, professional advisers, etc, should be based upon the principles adhered to in Quality Based Selection methodology, outlined below. The [Royal Institute of British Architects \(RIBA\)](#), together with the [Construction Industry Council](#), has published a booklet of Guidance for Clients to Quality Based Selection.

Quality Based Designer Selection (QBS)

QBS looks for an appropriate balance of design skills, experience, innovation, and an ability to perform on schedule to the required standards and within budget. A client, or client committee, selects a team based upon a weighted scoring of a list of relevant factors, including technical capacity, resources, previous experience of similar projects, deliverability of the design and partnering arrangements, aimed at determining which design team is most able to handle the project successfully and deliver a high quality result.

Throughout a building project, designs will be developed through constant dialogue with the design team, so it's essential that a key selection consideration is inter-personal skills; the client must feel that it has the ability to work with the designers.

It is essential to know that a design team's claimed expertise is actually currently available. The question of whether a design team has completed major quality projects within the past five years may give a more fair comparison between long established and new design teams. It is important to ensure that the principal designer responsible for successful past projects is present for the interview, and such individuals should be named in the contract if that design team is successful.

Design competitions

A competition to select an outline design, rather than the design team members, requires the client to have a well-developed brief for the project. Design competitions may be appropriate where there is either a unique problem that will benefit from a wide range of design approaches being explored (along with likely considerable public interest - which may be the case on a major new public building) or where the competition promoter wishes to encourage the development of new talent.

Procedure for appointing the Design Team

All public sector appointments, irrespective of the client's preferred nature of competition or reference to any other guidance on design competitions, must be consistent with EU procurement rules in terms of process and outcome.

The appointment or competition must therefore:

- strike the correct balance between quality and price to achieve whole-life VFM;
- evaluate the quality and price aspects against clear, unambiguous and pre-determined criteria;
- assess the technical and financial capacity of the design team (including design partnership arrangements) to deliver the project to the required standards of quality as well as the project on time and within budget; and
- maintain a full and transparent record of all aspects of the competitive process from start to conclusion, including the evaluation of the pre-qualification questionnaires as well as the selection and award stages.

Generally, as Public Sector clients, NHS Bodies are required to ensure that design team appointments follow the procedures described in [Section 3](#) of the works procurement guidance part of the Scottish Government Construction Procurement Manual. **However, in the NHSScotland context, detailed guidance should be sought from [Health Facilities Scotland](#).**

Design Team selection criteria

Selection criteria should include design ability, aspiration, financial status, insurance provisions and technical capacity; the last of these enables consideration to be given to resources, technical suitability and past performance. This stage also aids production of an objective and transparent short list of the most suitable organisations, from all those that expressed interest in providing design services.

Selection criteria at the bidding stage

The award criteria enables a further qualitative assessment to be made of the specific proposals for the project - not just technical merit of the design proposals but also other aspects of successful delivery such as proposed team-working, management arrangements, and project team organisation.

Where design partnerships are proposed - perhaps to combine the innovative skills of a new or small design practice with the experience and resources of a longer-established designer - the award criteria enables the client to assess the ability of both parties to fulfil their responsibilities and to evaluate the compatibility of working cultures and practices. Visits to

the design offices of all candidates, including those forming partnerships, should follow a consistent approach and involve the same personnel.

NHSScotland Bodies, as clients, should consider the benefits to be accrued from requesting an Interim Bid Submission from bidders, particularly in a PPP or joint venture (such as 'hub') initiative context. This should be based upon clearly specified requirements within the Invitation To Negotiate (ITN) documentation and should be undertaken at an approximate mid-point stage through the period from release of OJEU to the return of ITN documentation with clear expectations on outputs from bidders that are measured but, not too cumbersome, perhaps structured by means of the use of the AEDET Evolution design evaluation tool.

Client organisations should consider the merits of visiting completed buildings by the shortlisted teams to investigate both their past work and allow the opportunity to meet previous clients and hear their experience of working with the team. Although this does take some time, the investment is small in comparison to the necessary investment of time and resources in the new project, and the potential learning in terms of the bidding teams ability and working relationships is invaluable.

Relation of selection criteria to budget considerations

The qualitative criteria adopted at the selection and award stages should be appropriate for the individual project and weighted to suit the circumstances. It is important that these aspects aren't considered in isolation but should be assessed as part of the VFM evaluation which takes account of fee proposals. [Section 3 of the Scottish Government Construction Procurement Manual](#) describes other aspects of appointing consultants, including the various ways of paying for professional services. In circumstances where *ad valorem* (usually percentage) fee structures are appropriate, consideration must always be given to the application of an abatement or capping mechanism in order to contain fee costs at a fair and appropriate level.

Criteria used during selection and award stages must be applied consistently by all of those involved in that stage of the procurement procedure. In other words, once selection and award criteria are established, individual members of a sift or tender evaluation panel must not apply different criteria. Furthermore, once selection criteria are established, they should be made available to candidates. Award criteria must be set out in either the OJEU contract notice or the contract documents; however it is recommended that criteria be advertised in the OJUE notice to demonstrate the client's commitment to valuing quality in the selection and hence assist in attracting similarly ambitious teams.

Scottish Government Health Directorates asset-related policies

Scottish Capital Investment Manual for NHSScotland [NHS CEL 19 (2009)]

Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/CEL2009_19.pdf

Provision of Single Room Accommodation and Bed Spacing [NHS CEL 48 (2008)]

Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/CEL2008_48.pdf

Fire Safety Policy [NHS CEL 25 (2008)]

Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/CEL2008_25.pdf

Environmental Management Policy for NHSScotland [NHS HDL(2006)21]

(Currently under review)
Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/hdl2006_21.pdf

Sustainable Development Strategy for NHSScotland [NHS CEL 15 (2009)]

(Currently under review)
Scottish Government Health Directorates
http://www.pcpd.scot.nhs.uk/PDFs/CEL2009_15.pdf

NHSScotland Property Transactions [NHS HDL(2001)15]

(Currently under review)
Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/HDL2001_15.htm

Property Management Policy and Other Related Matters [NHS HDL(1999)44]

Scottish Government Health Directorates
http://www.sehd.scot.nhs.uk/mels/1999_44.pdf

Supporting guidance

Scottish Capital Investment Manual website

Scottish Government Health Directorates

Capital Planning and Investment website

Scottish Government Health Directorates

Healthier Places website

A project resource to assist clients in the development of design statements, the briefing of projects and in learning from what is being achieved across NHSScotland and elsewhere.

www.healthierplaces.com

IDEAS

A design tool to aid NHS clients and their architects and design consultants to develop their briefs and design ideas.

<http://ideas.dh.gov.uk/>

Achieving Excellence in Design Evaluation Toolkit (AEDET)

The AEDET Evolution toolkit evaluates a design by posing a series of clear, non-technical statements, encompassing the three key areas of Impact, Build Quality and Functionality.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082089

A Staff and Patient Environment Calibration Tool (ASPECT)

ASPECT is a tool for evaluating the quality of staff and patient environments in healthcare buildings and can be used as a stand-alone tool or in conjunction with AEDET to provide a more comprehensive design evaluation of healthcare environments.

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_082087

Activity Database

The briefing, design & commissioning tool for both new-build and refurbishment of healthcare buildings.
<http://adb.dh.gov.uk/>

Brief Introduction to the Planning System

<http://www.scotland.gov.uk/Topics/Built-Environment/planning/National-Planning-Policy/>

NHSScotland Fire Safety Management / NHSScotland Firecode
Health Facilities Scotland

NHSScotland Asset Management System
Health Facilities Scotland

GREENCODE
Health Facilities Scotland

EnCO₂de
Health Facilities Scotland

Scottish Health Facilities Note 30: Infection Control in the Built Environment: Design and Planning
Health Facilities Scotland

HAI-SCRIBE: HAI System for the Control of Risk of Infection in the Built Environment
Health Facilities Scotland

NHSScotland Property Transactions Handbook
(Currently under review)
Scottish Government Health Directorates

Useful references and web links

General

Health Facilities Scotland

Provides operational guidance to NHSScotland healthcare bodies on non-clinical topics including: building and architecture, procurement, property management, estates engineering, energy & environment.

<http://www.hfs.scot.nhs.uk/>

Architecture and Design Scotland

The Scottish national champion for good architecture, design and planning in the built environment. This site incorporates sections relating to specific programmes of activity including; Scottisharchitecture.com a network of digital resources relating to architecture and the built environment and [SUST - Sustainable Design in Architecture and the Built Environment](#) – which aims to raise awareness of the importance of a sustainable approach to design in the built environment by providing increased access to guidance, tools and techniques for clients, design teams and community-based groups.

<http://www.ads.org.uk/>

Space for Health

Space for Health provides a single ‘front door’ portal to the knowledge and expertise of the four UK health organisations. It draws together the technical guidance published by HFS, the DoH and their equivalents in Northern Ireland and Wales.

Note: As of publication of this Policy, Space for Health is under development – further information should be sought from [Health Facilities Scotland](#).

<http://www.spaceforhealth.nhs.uk/>

University of Stirling Dementia Services Development Centre

The Dementia Services Development Centre promotes good practice for those working in the field of dementia care including guidance on designing for dementia.

<http://www.dementia.stir.ac.uk/>

Centre for Architecture and the Built Environment

The UK government’s advisor on architecture, urban design and public space.

<http://www.cabe.org.uk/>

Construction Industry Council

The representative forum for the professional bodies, research organisations and specialist business associations in the construction industry.

<http://www.cic.org.uk/>

Art in Healthcare

A forward-looking arts-in-health organisation formed from Paintings in Hospitals Scotland and the Friends of Paintings in Hospitals Scotland.

<http://www.artinhealthcare.org.uk/>

Scottish Government links

Scottish Government Built Environment

The provision of planning guidance and advice, construction procurement guidance and technical advice for Scottish Government Directorates and other bodies.

<http://www.scotland.gov.uk/Topics/Built-Environment>

Scottish Government Architecture and Place Division

Promoting and encouraging better architecture.

<http://www.scotland.gov.uk/Topics/Arts-Culture/arch/intro>

Scottish Government Construction Procurement Manual

Provides the Scottish Government Directorates, Executive Agencies and most sponsored bodies (as well as the Scottish Parliament Corporate Body and the Forestry Commission in Scotland) with mandatory policy and procedures for understanding construction works projects.

<http://www.scotland.gov.uk/Publications/2005/11/28100404/04066>

Scottish Government Sustainable Development

Sustainable development is integral to the Scottish Government's overall purpose - to focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth.

<http://www.scotland.gov.uk/Topics/Environment/SustainableDevelopment>

Scottish Government Capital Planning and Asset Management website

Responsibility for the Health Directorates capital planning policy and strategy for NHSScotland and advice on all asset management matters impacting upon the Scottish Government Health Directorates responsibilities for NHSScotland.

<http://www.pcpd.scot.nhs.uk/>

Scottish Government Capital Planning and Investment website

Policy and guidance on planning NHS capital developments including those developed through public private partnerships.

<http://www.pfcu.scot.nhs.uk/>

Department of Health (England) links and publications

The architectural healthcare environment and its effect on patient health outcomes

A research project funded by the Department of Health and led by Professor Bryan Lawson and Dr Michael Phiri of the University of Sheffield School of Architecture, in collaboration with John Wells-Thorpe. The document is available for purchase from The Stationery Office, ISBN 011322480X.

<http://www.tsoshop.co.uk/bookstore.asp?Action=Book&ProductId=011322480X>

The Healing Environment

English Department of Health report which looks at the components of a healing environment and the effect on patients and staff.

http://www.dh.gov.uk/en/Managingyourorganisation/Leadershipandmanagement/Healthcareenvironment/Browse/DH_4116478

Other references

OGC Procurement Guide 09: Design Quality

Office of Government Commerce 2004

Part of the OGC Achieving Excellence Procurement Guides

<http://www.ogc.gov.uk/assets/images/cp0069.pdf>

A guide to quality based selection of consultants: a key to design quality
Published 1998, £15.00 ISBN 1 898671 14 1

Construction Industry Council recommends this Guide as an inclusive guide and method for delivering construction clients with the consultants services they require and to realise the real economies and benefits to be had from good design.

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