

# Key Stage Assurance Review Workbook

**Initial  
Agreement**

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Version 1.0

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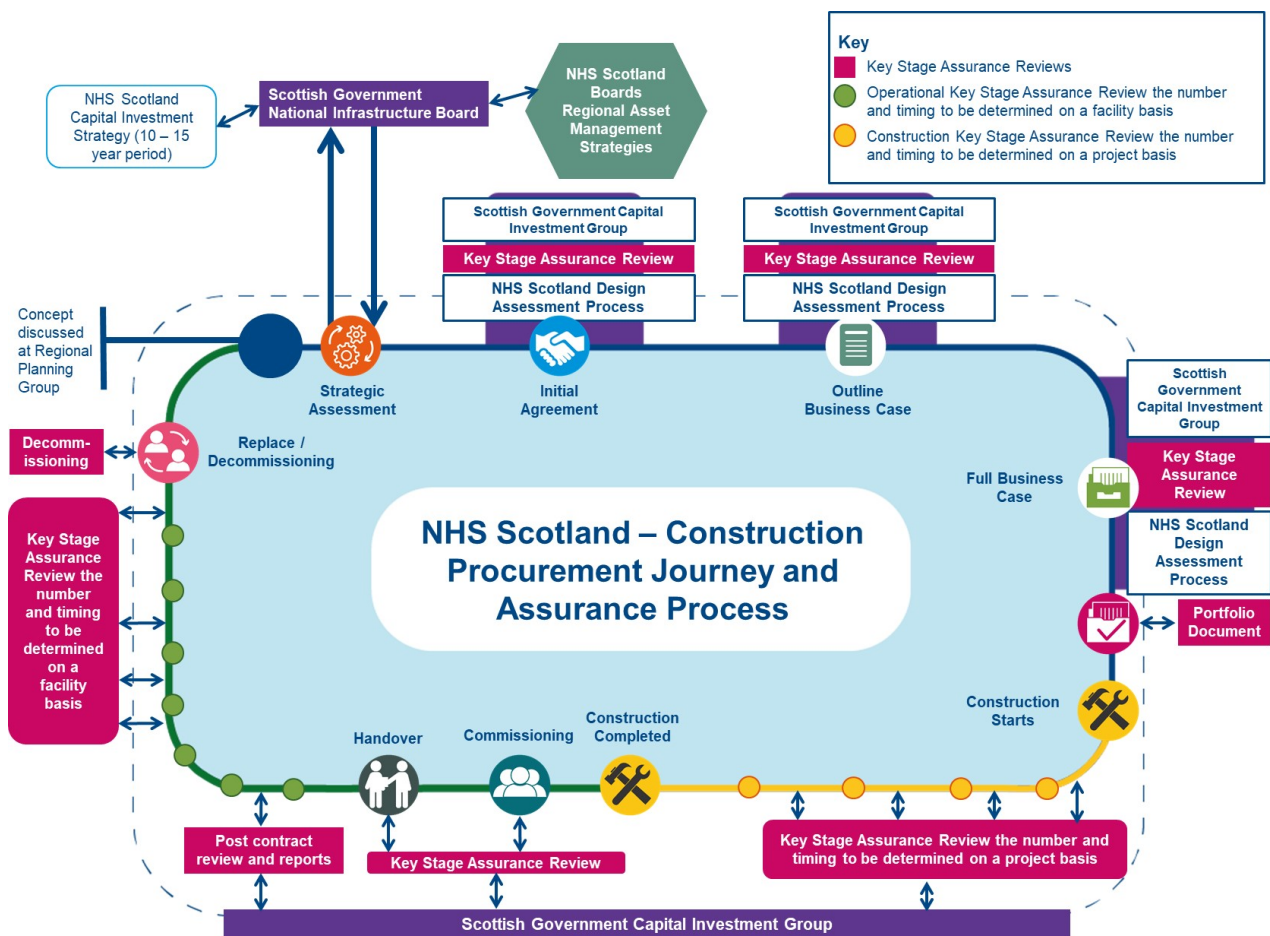
# 1. About this workbook

This workbook supports the Initial Agreement Key Stage Assurance Review (KSAR), delivered by NHS Scotland Assure Assurance service.

Further information about the NHS Scotland Assure Assurance service and KSAR process is provided in Section 2.

Figure 1. shows how the Initial Agreement stage in the procurement and construction journey commences following strategic assessment. The timing and frequency of KSARs during this stage will vary dependent upon the facility. Specific workbooks also have been developed for further stages within this journey.

**Figure 1: Construction Procurement Journey**



KSARs are of a process ensuring facilities and the teams using them are able to deliver the standards required to provide the best and safest outcomes for patients, staff and visitors in the built environment.

KSARs deliver an independent peer review. NSS staff outside the project use their experience and expertise to examine the progress and likelihood of successful delivery, with a particular emphasis on the safety of the patients, staff and visitors using the facility.

It is vital to receive feedback on the following elements of health facilities - Infection Prevention and Control (IPC), water, ventilation, electrical, plumbing, medical gases installations and fire. This ensures they are designed, installed and functioning from

initial commissioning of a new facility and throughout its lifetime. Health Boards are required to have appropriate governance in place at all stages of the construction procurement journey.

The KSAR workbook provides a transparent, structured framework for all clinical specialisms, facilities and operational management professionals to assess and manage a health care build or refurbishment. Allowing facilities to align with current standards as the assurance reviews are taking place, as well as aligning changes for patient cohort.

## Using this workbook

The review at the Initial Agreement stage investigates the approach of the initial design and how the appropriate level of patient and user needs will influence the development of the design. The purpose of the KSAR at Initial Agreement stage is to confirm there is a good understanding of who will be using the proposed facility, and the project team consider how appropriate quality and safety standards will influence the design. It looks to provide assurance that the project can proceed to the Outline Business Case.

The workbook is predominantly intended to be used by NHS Scotland Assure KSAR review teams, Health Boards are encouraged to use its content to support their own projects. It provides guidance on the review structure and areas of investigation to be addressed by the review team and should be regarded as indicative and not prescriptive.

The review team will consider whether any emerging findings require additional topics to be addressed. If so, evidence relating to these areas, regarding the safety of the patients, staff and visitors, should be provided.



## 2. Key Stage Assurance Review

### Introduction to NHS Scotland Assure - Assurance Service

Good management effective control of projects is an essential element to the successful delivery and maintenance of healthcare facilities across NHS Scotland estates.

The initial delivery of the NHS Scotland Assure - Assurance Service will focus upon new builds and major refurbishments in the acute estate, submitted to the Scottish Government Capital Investment Group (CIG). In addition, a number of projects identified as being complex, primarily due to the needs of patients utilising the facilities, will be reviewed by this service. Whilst not an exhaustive list, these projects will cover oncology, maternity, theatre and critical care units, no matter of their financial value.

The NHS Scotland Assure - Assurance Service will deliver KSARs, designed to provide independent assurance to Scottish Government Health and Social Care Directorates (SGHSCD's).

It will assess if Health Boards Project Management teams (inclusive of clinicians, appointed construction consultants, and contractors) are briefed and following best practice procedures in the provision of facilities. We will review if projects are compliant in all aspects of safety, if specific engineering systems are designed, installed and commissioned, and for ongoing safety maintenance including IPC.

The KSAR process is applicable regardless of procurement route chosen.



## The KSAR process

The KSAR process examines projects at key points in their lifecycle. It does not remove any legal or contractual obligations from the NHS Health Board, their designers or contractors. It provides assurance to progress successfully to the next review point and the process will be mandated for projects requiring CIG approval. KSARs focus on the assessment of the delivery approach, and will work with the Health Board's project team to ensure there is comprehensive understanding of the patient cohorts utilising the facility. KSARs also ensure relevant guidance is fully implemented and any technical derogations have been fully reasoned, transparently discussed, the implications understood, recorded and signed off by the Health Board and their advisors.

With a focus on construction elements where previous reviews have demonstrated potential patient safety concerns, KSARs will concentrate on water; ventilation, electrical, plumbing, medical gases installations, fire, and associated IPC guidance. If further issues are raised with the review team, they will fully incorporate those issues into the reporting process.

## Value of the KSAR Process

Key Stage Assurance Reviews (KSARs) deliver an independent peer review. NSS staff outside the Health Board's project use their experience and expertise to examine the progress and likelihood of successful delivery, with a particular emphasis on the safety of the patients, staff and visitors using the facility. KSARs provide an external perspective and provide a challenge to the robustness of the Health Board's brief, plans and processes.

This includes work delivered by construction consultants, employed either directly or through construction contractors, and the work being delivered by the primary contractor, their sub-contractors and specialist suppliers.

The KSAR provides an independent report and action plan, which is shared with the Health Board to ensure:

- Appropriate skills and experience are deployed on the project by the Health Board, consultants, primary contractor and all sub-contractors.
- The clinicians and wider stakeholders covered by the project fully understand the project status, aims and the issues involved.
- Appropriate management structures put in place to ensure appropriate infection prevention and control measures are designed into the project to reduce the risk of transmission of infectious agent.
- There is assurance the project can progress to the next stage of development or implementation with particular emphasis on the safety of the patients, staff and visitors utilising the facility.
- Provision of advice and guidance to programme and project teams by fellow Practitioners.

The KSAR report and the Health Board's response and action plan is submitted to CIG along with a recommendation from the NHS Scotland Assure - Assurance



Service regarding the projects' progression to the next stage of the construction procurement journey.

## KSAR as part of the overall assurance framework

Each NHS Health Board will be fully responsible for the delivery of all projects, and its own internal process and resources for carrying out internal reviews and audits of its activities. The KSAR is seen as a complementary independent review, and not as a replacement for the responsibilities of the Health Board.

NHS Health Boards should have in place an effective framework to provide a suitable level of assurance for their programmes and projects. Health Boards are encouraged and expected to ensure adequate and timely coordination and sharing of information, including plans, between the various internal reviews and functions.

The KSAR process is not a substitute for a rigorous governance framework in the Board to manage key processes including business planning, investment appraisal, business case management, risk management and service and contract management.

## KSAR and NHS Scotland Design Assessment Process (NDAP) relationship

The Scottish Government's ambition for NHS Scotland's estate and the need for well-designed healthcare environments is articulated in the Policy on Design Quality for NHS Scotland. Good design in the built environment encompasses a wide range of inter-related factors such as, sustainability, engineering, architecture, fire safety, energy, environment, decontamination, space utilisation, landscaping, security, technology, lighting, access for visitors and mobility impaired persons.

The NDAP process is overseen by Health Facilities Scotland and Architecture and Design Scotland and holistically considers all of the above. It sets the principles for the resolution of potential conflicts of statutory or mandatory compliance to ensure the specific facility provides; the best balance of the technical requirements, meets clinical needs and fulfils the conceptual aims of the policy on Design Quality. The NDAP process begins at the initial agreement stage of a project and provides advice through to the Full Business Case. There is no change to either SCIM or NDAP processes.



The Scottish Government is progressing policy to improve the safety of the healthcare environment in relation to the built environment risk. The Assurance Service delivered through NHS Scotland Assure is a response to this policy and the KSARs are integral to the compliance work. The aspiration is not to duplicate any of the work included in the NDAP process, but to provide assurance regarding the critical components highlighted throughout this workbook.

Integral to the KSARs will be a review of the balance between sustainability issues and patient safety.

The NDAP, working with Health Boards, will set the principles of the design solution, whereas the KSAR will provide a detailed technical review of the specifics of the design solution. Where possible the two reviews will be aligned to avoid duplication of work. For example, in instances where the NDAP has reviewed detail at a technical level, this will be used by the KSAR team rather than being separately requested and reviewed.

## Sustainability

The review will provide assurance that the proposals for the project provide an effective balance in terms of patient, staff and visitors safety, whilst meeting required sustainability outcomes and complying with the guidance standards.





## Initial Agreement KSAR

KSARs investigate the approach taken at design commencement, to confirm there is already a good understanding of the category of patient who will be using the proposed facility, and that the project team are aware of how their needs and expectations for appropriate quality and safety standards will influence the design of the accommodation.

The Initial Agreement KSAR will focus on how this understanding of patient needs and expectations have influenced the following critical components of design, particularly in relation to Infection Prevention and Control.

- Water systems
- Ventilation systems
- Plumbing and drainage
- Fire safety
- Electrical systems
- Medical gases
- Any other building or engineering component critical to the safety and welfare of a particular patient cohort (defined by the review team).

At all stages of design development, knowledge of compliance in design and implementation will need to encompass (not limited to) the following:

- NHS Scotland policy letters (DLs, CELs, CMOs)
- Scottish Health Planning Notes (SHPN)
- Scottish Health Facilities Notes (SHFN)
- Scottish Health Technical Memoranda (SHTM)
- Scottish Fire Practice Notes (SFPN)
- Health Building Notes (HBN)
- Health Technical Memoranda (HTM)
- Health Facilities Notes (HFN)
- UK construction industry bodies best practice or design guidance publications e.g. HSE, CIBSE, BRE, IHEEM, IET, BRE, BSRIA, sustainability, dementia and equality.
- Incident Reporting and Investigation Centre (IRIC) Alerts
- Relevant British Standards
- Other statutory requirements: Planning permission; Building Regulations compliance; Equality Act compliance; Health and Safety Executive (HSE) compliance; Construction (Design and Management) Regulations compliance; Fire Scotland Act.
- Other mandatory NHS Scotland use of:
  - Activity Data Base (ADB);
  - Achieving Excellence Design Evaluation Tool;
  - BREEAM Healthcare or equivalent (BRE environmental & sustainability tools);

- Scottish Government BIM Policy (SPPN 1/2017; implementation of building information modelling within construction projects: March 2017);
- The implementation of NHS Scotland Soft Landings (SL) guidance
- Confirm plans are in place for risk management and issue management and are shared with suppliers and delivery partners.
- Evaluation of actions taken to implement recommendations made in earlier assessment of deliverability.
- Confirm plans are in place for the requirements of the National Infection Prevention and Control Manual for Scotland are being incorporated in a manner to allow staff allocated to the role, to deliver services to patients.

The review teams will consist of experienced operational estates professionals and experienced Infection Prevention and Control clinicians. The team will work with the Board's Project Team, inclusive of their clinicians and their appointed consultants and contractor. Each review will result in a report being prepared for the Programme Director at the Board and a copy of the report will also be provided to Scottish Government Capital Investment Group.

An appendix is provided indicating the typical question set for Initial Agreement Stage, which the review team will use as the basis of KSAR evidence. The review team will amend this as necessary depending on the project and areas of particular interest. The Health Board, their designers and contractors should be aware that this information is expected and the design should effectively be completed at Initial Agreement at the time of the KSAR to ensure the accuracy of the report.



### 3. Assessment of Delivery Approach

No.	Areas to probe	Evidence expected
1.1	Service / clinical input into early design decisions based on knowledge of patient cohort.	<ul style="list-style-type: none"> <li>Recorded input taken from service lead(s) / clinician(s) about relevant patient cohort characteristics and their typical needs in terms of the accommodation's environment, safety and infection control standards.</li> <li>Demonstrable expertise of service lead(s) / clinician(s) in providing this advice.</li> </ul>
1.2	Health Board Project team understanding of needs of main users and patient cohorts of the proposed accommodation and how this will influence the design of critical building, engineering, and infection prevention and control quality and safety standards.	<ul style="list-style-type: none"> <li>List available of all stakeholders, service users and patient cohorts impacted by this project, plus the identification of any high risk groups and their specialist needs.</li> <li>Recorded engagement on these designs issues having taken place between the project team and service lead(s) / clinician(s), infection prevention and control team, and other key stakeholders (e.g. the AEDET, NDAP or other design briefing workshops).</li> <li>Details available of proposed service model, understanding of what the patient journey will be through the service, and records of expected patient throughput levels.</li> <li>Details available of how service users / patient cohort needs and their expected use of the accommodation has influenced the initial design brief; including critical building, engineering and infection prevention and control quality and safety standards.</li> </ul>
1.3	What is the Health Board's formal process for derogations'?	<ul style="list-style-type: none"> <li>List of the relevant NHS and non-NHS guidance to be used and adopted (see previous section of workbook for examples of appropriate guidance) and how this is to be highlighted in the Board's Construction Requirements (BCR).</li> <li>List of any proposed derogations from NHS or other guidance and / or list of known gaps in guidance that will need to be resolved in order to meet the needs of the patient / user cohort.</li> <li>Knowledge of the role of infection prevention and control and microbiologist advisors to be used throughout the design stages, and details of the resource plan in place to ensure this advice will be available.</li> </ul>

No.	Areas to probe	Evidence expected
1.4	Planned approach for managing the design process to ensure successful compliance with agreed and approved standards.	<ul style="list-style-type: none"> <li>• The project governance arrangements and resource plan in place to ensure that the necessary decision making authority and technical expertise is available to take responsibility for and deliver the project as planned and agreed.</li> <li>• Gap analysis on expertise required specifically for the project and details of how gaps in expertise are to be filled.</li> <li>• Details of how compliance with the appropriate guidance, design brief and other standards will be agreed, signed off, monitored, reported against and if necessary escalated / adjudicated throughout the design, construction and commissioning stages.</li> <li>• Details of how all stakeholders' interests will be agreed, signed off, monitored, reported against and if necessary escalated / adjudicated throughout the design, construction and commissioning stages.</li> </ul>
1.5	Conceptual approach on the procurement journey with initial plans on how the Board will provide assurance, particularly on the identified areas described earlier.	<ul style="list-style-type: none"> <li>• Initial plans on how this requirement will be managed and how it fits with the project governance arrangements.</li> <li>• Initial plans to identify any gaps in the procurement approach that may require to be addressed.</li> <li>• Initial plans to indicate that the Health Boards selected procurement route will go through the Health Board's Governance channels.</li> <li>• Initial consideration on how the Infection Prevention and Control Procedures and management will fit with the conceptual procurement approach and initial thinking on how it will be managed.</li> </ul>

## 4. References

### KSAR Master Glossary

Available to download from NHS National Services Scotland website.

## 5. Bibliography

**Scottish Property Advisory Group – Building Design and Construction:  
Report on Construction Quality Matters**

*John Donnelly, Chair BDAC*

*Dated: December 2020*

