

# Key Stage Assurance Review Workbook

**Handover**

December 2022

Version d0.15

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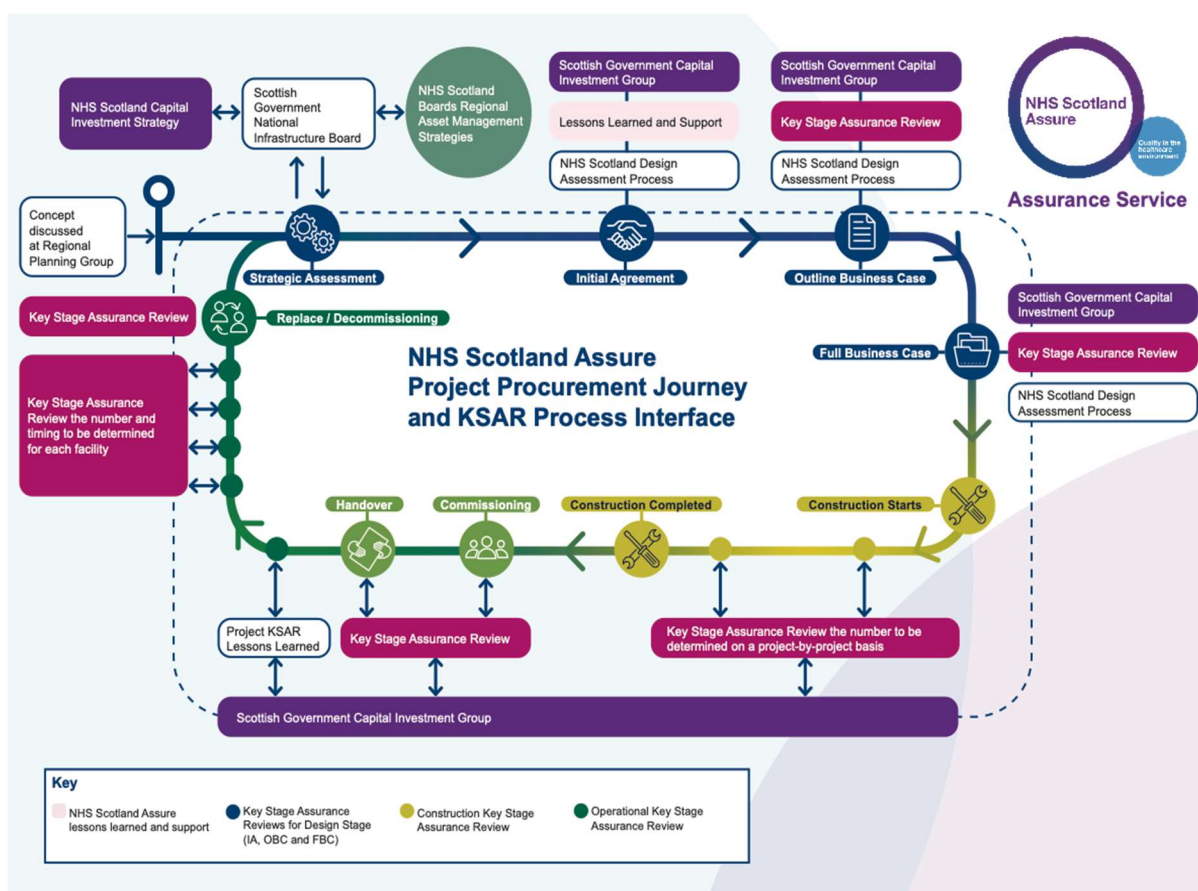
# 1. About this workbook

This workbook supports the Handover Key Stage Assurance Review (KSAR), delivered by the 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 Handover stage in the procurement and construction journey. The timing and frequency of KSARs during this stage will vary dependent upon the facility. Specific workbooks have been developed for the other stages within this journey.

**Figure 1: Construction Procurement Journey**



The KSAR process and workbooks provide a transparent, structured framework for all clinical specialisms, facilities and operational management professionals to assess and manage a healthcare build or refurbishment. In turn this assists health boards to provide the best and safest outcomes for patients, staff and visitors in the built environment.

KSARs deliver an independent peer review. NHS Scotland Assure 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. KSARs also focus on how projects are able to demonstrate compliance with relevant guidance and standards.

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

## Using this workbook

The review at Handover stage investigates the approach taken by the health board and other stakeholders during this critical stage of the project to ensure that there continues to be an appropriate level of knowledge and awareness of the importance of the Handover stage on patient, staff and visitor safety.

The purpose of the KSAR at Handover stage is to confirm there is a continued good and comprehensive understanding of the category of patient who will use the proposed facility, and that the project team consider how appropriate quality and safety standards will influence the handover of the various systems. It looks to provide assurance that the project can proceed to the Operational phase.

Additionally, the KSAR at Handover will carry out an appropriate level of checking of the handover documentation. This level of checking will be set by the review team following their initial discussions on site.

The KSAR workbook is a tool for both NHS Scotland Assure to undertake project reviews and for health boards to support the development of 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 and effective control of projects are essential elements to the successful delivery and maintenance of healthcare facilities across NHS Scotland estates.

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

It will assess if health board's 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 safe maintenance including IPC consideration.

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. KSARs focus on the assessment of the delivery approach and the review team 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.

KSARs will concentrate on project governance related to the core review topics of 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 recommended 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 agents.
- 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.

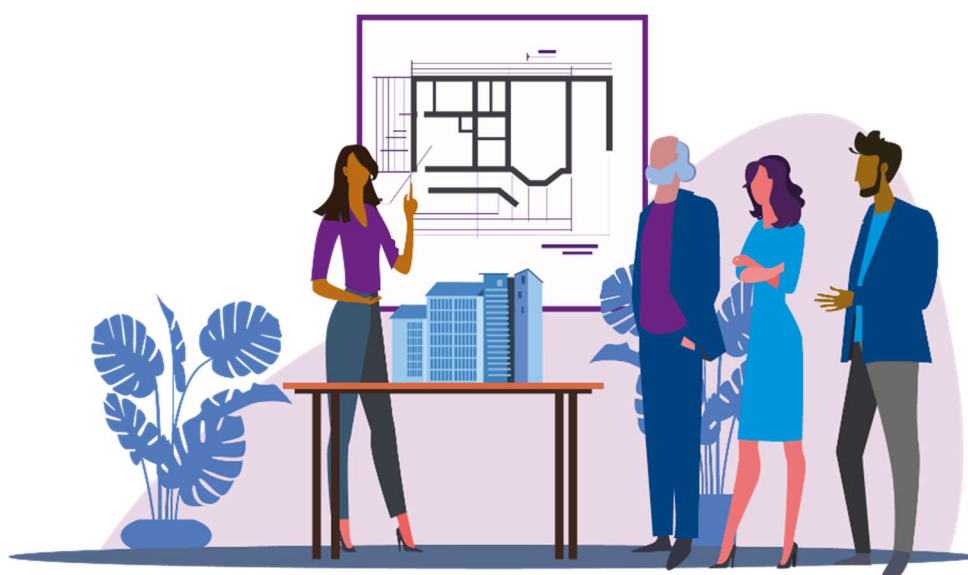


## KSAR as part of the overall assurance framework

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 being put place by the health board to manage key processes including business planning, investment appraisal, business case management, risk management and service and contract management.



## The KSAR Process relationship with NHS Scotland Design Assessment Process (NDAP)

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:

- access for visitors and mobility impaired persons
- architecture
- decontamination
- energy
- engineering
- environment
- fire safety
- landscaping
- lighting
- security
- space utilisation
- sustainability
- technology.

The mandated NHS Scotland Design Assessment Process (NDAP) process is undertaken by NHS Scotland Assure, Architecture and Design Scotland, and 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 (FBC). There is no change to either Scottish Capital Investment Manual (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.

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.

## Handover KSAR

The Handover KSAR will be an independent “peer review” in which NHS Scotland Assure (NHS SA) subject matter experts, independent of the project, use their experience and expertise to review and assess the proposed pre-Handover and Handover stage documentation. It is anticipated that the implementation of the Handover KSAR will differ from other reviews, as it will predominately take the form of a site-based audit of the processes and documentation associated with the Handover phase.

Any areas of concern found during this KSAR will be immediately raised with the NHS health board.

The Handover KSAR will consider (particularly with respect to IPC measures):

- 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).
- The requirements of Infection Prevention & Control Guidance have been incorporated and implemented, including the NHS Scotland National Infection Prevention and Control Manual, to allow staff to deliver the health services in a safe and comprehensive manner.



At all stages of the Handover phase, knowledge of compliance in design and implementation will need to encompass (but is 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).
- Incident Reporting and Investigation Centre (IRIC) Alerts.
- Relevant British Standards.
- 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.
- The implementation of NHS Scotland Soft Landings (SL) guidance.
- Confirm that there are plans in place for risk management, issue management and that these plans are being shared with suppliers and delivery partners.
- Evaluation of actions taken to implement recommendations made in earlier assessment of deliverability.
- Confirm there are plans in place to ensure the requirements of IPC Guidance, including the NHS Scotland National Infection Prevention and Control Manual for Scotland, are being incorporated into the development in a manner which will allow the staff allocated to the role to deliver the services to the patients.
- 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.
  - Sustainable Design and Construction (SDaC).
  - Scottish Government BIM Policy (SPPN 1/2017; implementation of building information modelling within construction projects: March 2017).

Additionally, the Handover KSAR will carry out an appropriate level of checking of the commissioning results, as-installed drawings, health and safety documents, manufacturers' literature and solutions adopted.



This level of checking will be set by the review team following their initial discussions on site. One impact of this work may be that the review will take longer than the initial programme, dependant on the conclusions / findings from this assessment of the design.

The review teams consist of experienced professionals and Infection Control clinicians. The team will work with the health board's project team, inclusive of their clinicians and their appointed facility management 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.

Section 3 below provides the typical question sets for each discipline that the review team will use as the basis for the Handover KSAR review process. The 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 is the information which will be expected, and the project should effectively be completed and ready for acceptance at the time of the KSAR to ensure the accuracy of the report.



### 3. Assessment of Delivery Approach

It is anticipated that Project Handover may be phased as determined by the scale and complexity of the building and systems.

The review should focus on Governance, management, planning, resources, risk assessments, method statements, validation and health board acceptance of Commissioning results. Those responsible for Project Handover should have the appropriate level of competency to undertake the receipt of the systems which they are responsible for. The Handover process should be carried out in accordance with the Board Contract Requirements (BCR).

A suite of documents should be specified for handover to include health and safety files and operations and maintenance manuals. Further, project handover plan checklist should be completed by all relevant parties confirming system completion, system acceptance, training, certification and as installed document handover.

#### Project Governance and General Arrangements

No.	Areas to probe	Evidence expected
1.1	How does the health board assure itself that actions from the previous Key Stage Assurance Review have been appropriately closed out?	<ul style="list-style-type: none"> <li>Evidence of a completed action plan, with reference to evidence, to demonstrate appropriate close out of actions.</li> </ul>
1.2	How does the health board ensure that all Commissioning activities have been completed successfully, appropriately validated (including witnessing) and documented, prior to handover?	<ul style="list-style-type: none"> <li>Evidence that commissioning / validation processes are complete, and that the Contractor has issued a verification letter to confirm that the systems have been installed and commissioned in line with specification and guidance.</li> <li>Evidence of commissioning and witnessing activities, including any independent 3<sup>rd</sup> party validation.</li> <li>Completed commissioning and validation records for all mechanical, electrical and public health (MEP) systems.</li> <li>Completed commissioning and validation records for all fire safety systems.</li> <li>Completed commissioning and validation records for all MEP plant, including plant associated with incoming utilities.</li> </ul>



No.	Areas to probe	Evidence expected
1.3	How does the health board ensure that all relevant information from the Commissioning and Handover phases has been collated, appropriately documented and reviewed prior to Handover?	<ul style="list-style-type: none"> <li>• Evidence of the completed, final Commissioning records which demonstrate design conditions and actual commissioned conditions.</li> <li>• Evidence of completed O&amp;M information in line with the requirements of guidance, the BCRs and BSRIA BG 79.</li> <li>• Evidence of record drawings.</li> <li>• Evidence of the completed Health and Safety file.</li> <li>• Evidence of digital information exchange in line with Employers Information Requirements (EIRs). (Graphical and non-graphical data, e.g. Federated BIM model, COBie data, asset lists etc.).</li> <li>• Evidence of an updated access and maintenance strategy.</li> <li>• Evidence that any derogations from standards have been agreed by the health board and signed-off prior to Handover.</li> <li>• Evidence of processes in place to allow stakeholders to review and comment on Handover documentation prior to Handover.</li> <li>• Completed handover checklists.</li> <li>• Evidence that testing commissioning and validation processes are complete, and documentation has been received and reviewed by key stakeholders from the health board (e.g. WSG/VSG/ESG, AEs, IPC etc.) in line with their governance processes.</li> </ul>
1.4	How does the health board ensure that the works have been completed to the required safety and quality standards?	<ul style="list-style-type: none"> <li>• Evidence of a quality monitoring role having been undertaken with associated supporting documentation e.g. actioned observation trackers.</li> <li>• Evidence there is a process in place to track the close out of any observations / defects prior to handover, including review by key health board stakeholders.</li> <li>• Evidence of contractor/designer approvals of completed works.</li> </ul>



No.	Areas to probe	Evidence expected
1.5	How does the health board assure itself that key stakeholders have been involved in the handover process?	<ul style="list-style-type: none"> <li>• Evidence of a roles and responsibilities document for all individuals involved in the handover process.</li> <li>• Evidence of how the health board assures themselves that relevant stakeholders (e.g., IPC / AE / AP) are available for handover activities as required.</li> <li>• Evidence that maintenance procedures and operational processes have been completed with clinical and IPC stakeholders (to consider access requirements etc).</li> </ul>
1.6	How does the health board ensure that there is sufficient resource allocated to manage the accommodation post-handover?	<ul style="list-style-type: none"> <li>• Evidence that health boards (and/or their appointed FM provider) have appropriate number of competent, qualified staff appointed to carry out specific duties during operation e.g., IPC, Estates staff, APs, CPs etc.</li> <li>• Evidence that the health board (and/or their appointed FM provider) has a fully recorded duty holder matrix, stating the required roles and responsibilities.</li> <li>• Evidence there is a Handover plan in place for staff assuming responsibility for ongoing maintenance and operation of the systems.</li> </ul>
1.7	How does the health board ensure that adequate site familiarisation training has been provided?	<ul style="list-style-type: none"> <li>• Evidence of processes in place to deliver relevant site training / familiarisation sessions to key stakeholders (including end users, IPC, Estates, Hard FM / Soft FM).</li> <li>• Evidence of site visits and walk-rounds by end users.</li> </ul>
1.8	How does the health board ensure that adequate technical training has been provided?	<ul style="list-style-type: none"> <li>• Evidence of demonstrations/ training of system operation for those who will operate and maintain the installed systems, including routine planned preventive maintenance activities.</li> <li>• Evidence that dedicated training has been provided to clinical staff on the operation of technical systems (for example theatre control panels, magnehelic gauges, staff call systems, etc).</li> <li>• Evidence of attendance at training sessions / demonstrations.</li> <li>• Evidence of any training resources / materials provided.</li> <li>• Evidence that all required tools, spares and consumables have been received, along with an inventory.</li> <li>• Evidence of maintenance processes in place.</li> </ul>





No.	Areas to probe	Evidence expected
1.9	<p>How does the health board ensure that knowledge of the project is transferred to operational teams?</p> <p>How does the health board ensure that Soft Landings processes are being implemented?</p>	<ul style="list-style-type: none"> <li>• Evidence of a detailed Handover programme encompassing all Handover activities, as agreed with the health board.</li> <li>• Evidence of PPM activities undertaken in the period between commissioning and handover.</li> <li>• Evidence of Soft Landings review meetings.</li> <li>• Evidence of user guides provided for systems.</li> <li>• Evidence of an aftercare team in place, with delivery plan for in-use support and monitoring.</li> <li>• Evidence of Post Occupancy Evaluation plan.</li> <li>• Evidence of a process for fine tuning, measuring performance and capturing lessons learned from the building operation following Handover.</li> </ul>
1.10	<p>How does the health board ensure that there is a process in place for managing Statutory Compliance (including use of the NHS Scotland SCART system)</p>	<ul style="list-style-type: none"> <li>• Evidence of SCART question review.</li> <li>• Evidence of personnel allocated to compliance.</li> <li>• Evidence of policies and procedures in place for managing and operating engineering systems.</li> <li>• Evidence of process for storing and managing documentation and statutory maintenance records associated with the project.</li> </ul>



## IPC Built Environment

No.	Areas to probe	Evidence expected
2.1	How does the health board assure itself that IPC specialists have been fully involved in the handover process?	<ul style="list-style-type: none"> <li>• Evidence of Executive Board reports.</li> <li>• Evidence of Board Minutes.</li> <li>• Evidence of Minutes and actions from Governance and Operational Groups relevant to the project, including IPCC.</li> <li>• Evidence of completed Stage 4 HAI-SCRIBE.</li> </ul>
2.2	How does the health board assure itself that those IPC specialists involved in the Handover process are appropriately qualified and experienced?	<ul style="list-style-type: none"> <li>• Evidence of the structure of IPCT with details of qualifications held and previous experience in commissioning new builds, refurbishments, or special projects.</li> <li>• Evidence that this has been reviewed and recorded by the health board.</li> </ul>
2.3	How has the health board ensured that the IPC specialists engaged in the handover process have access to all relevant Commissioning completion documentation for all water, ventilation, and decontamination equipment?	<ul style="list-style-type: none"> <li>• Evidence that the respective technical commissioning experts have liaised with IPC on final commissioning results, including consideration of any residual IPC risks. Evidence of minutes and actions from governance and operational groups relevant to the project, including IPCC and Water / Ventilation Safety Groups.</li> </ul>
2.4	How has the health board assured itself that staff in the facility will be able to comply with the requirements of IPC guidance including the National Infection Prevention and Control Manual?	<ul style="list-style-type: none"> <li>• Evidence of HAI-SCRIBE documentation.</li> <li>• Evidence of minutes and actions from governance and operational groups relevant to the project, including IPCC.</li> <li>• Evidence of a process in place for access to NIPCM across the facility/organisation.</li> </ul>
2.5	How has the health board assured itself that proposed cleaning schedules will meet the requirements of the National Cleaning Specification?	<ul style="list-style-type: none"> <li>• Evidence that proposed cleaning schedules have been matched against the National Cleaning Specification.</li> <li>• Details of facilities, clinical and IPC teams' involvement in drawing up proposed cleaning schedules.</li> </ul>

## Fire

No.	Areas to probe	Evidence expected
3.1	Have there been any changes to the fire strategy since the previous Key Stage Assurance Review?	<ul style="list-style-type: none"> <li>Evidence of written confirmation of any changes that have been made to the fire strategy.</li> </ul>
3.2	Has a Fire Risk Assessment been carried out in accordance with SHTM 86?	<ul style="list-style-type: none"> <li>Evidence of Fire Risk Assessment Documentation.</li> </ul>
3.3	Have the findings of the Fire Risk Assessment generated a significant findings report?	<ul style="list-style-type: none"> <li>Evidence of significant findings Action Plan.</li> <li>Evidence of the timeline for completion of actions has been documented.</li> </ul>
3.4	Are appropriate members of the management team including the Nominated Officer (fire) aware of their responsibility for fire safety management procedures?	<ul style="list-style-type: none"> <li>Written documentation and verbal verification from responsible persons.</li> <li>Evidence of the Board Fire Safety Policy.</li> <li>Evidence of the Board fire safety procedures.</li> </ul>
3.5	Has an Emergency Fire Action Plan (EFAP) been produced in accordance with SHTM 83?	<ul style="list-style-type: none"> <li>Evidence of the Emergency Fire Action Plan (EFAP) documentation.</li> <li>Evidence that this is available to staff.</li> <li>Details of Emergency response team and their expected actions in response to fire.</li> </ul>
3.6	Is there a fire safety induction-training programme in place in line with SHTM 83 Part 2: Fire Safety Training?	<ul style="list-style-type: none"> <li>Evidence of the training syllabus.</li> <li>Evidence of all training programmes and materials.</li> <li>Evidence of training records.</li> </ul>
3.7	Are commissioning documents such as completed for all passive and active fire safety measures?	<ul style="list-style-type: none"> <li>Evidence of documentation such as OEM manuals, testing/inspection reports, as-installed information and certificates for all passive and active fire safety measures?</li> <li>Evidence that the documents are available to relevant staff.</li> </ul>
3.8	Has a Fire Safety Manual been produced?	<ul style="list-style-type: none"> <li>Evidence of Fire Safety Manual documentation.</li> <li>Evidence that the document is available to relevant staff.</li> </ul>

## 4. Appendix

### KSAR Master Glossary

Please refer to NHS Scotland Assure – Assurance Service Master Glossary document.

