Health Facilities Scotland



## Building Design and Construction (BDaC)-Scottish Property Advisory Group (SPAG)

Report on Improving Construction Project Evaluation and Learning for NHSScotland Boards



December 2021 Version v1.0

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### **1. Executive summary**

BDaC workstream 4 aims to improve the construction project evaluation and lessons learned process employed by NHS Boards across Scotland.

Workstream 4 took the form of two workshops employing NHS Lothian Capital Planning and Projects staff to focus on looking forward rather than reviewing past or current post project evaluation approaches. The conclusions and recommendations from these workshops were then shared with BDaC membership from other NHS Boards to test the proposals and outcomes to ensure that they reflected the national position.

The workshops confirmed that post project evaluation is a valuable process and concluded that:

- Lessons learned can provide invaluable insight to project managers and team members of new projects;
- Lessons learned to be documented throughout the life of a project. (Post-workshop discussion added that project team follow existing Project Monitoring and Evaluation (PME) guidance, including the creation and regular review/ update of a PME Plan);
- Lessons learned captured during projects should be easily captured, readily available and reviewed at the initiation of similar projects;
- There are a number of ways that the process could be improved.

Details of recommended improvements to the project monitoring, evaluation and lessons learned processes are summarised in section 11.

### 2. Context, aims and methodology

- 2.1 This BDaC workstream 4, for the NHSScotland (NHSS) Scottish Property Advisory Group (SPAG) - Building Design & Construction (BDaC) sub-group, aims to improve the construction post project evaluation, project monitoring and lessons learned process employed by NHSS Boards on their facility investment. The initial tasks were set out in a BDaC workplan<sup>1</sup> with a BDaC action note<sup>2</sup> providing further clarification, available in our BDaC MS Team<sup>3</sup>. Taken together these documents suggest such a review would be a sizeable exercise. BDaC NHS resource workload commitments precluded this approach from being followed.
- 2.2 An alternative approach was proposed by the workstream lead which entailed undertaking workstream 4 in the form of two workshops employing NHS Lothian Capital Planning staff to focus on looking forward rather than reviewing past approaches. The conclusions and recommendations from these workshops, with their focus on project evaluation, would then be shared with delegates from other NHS Boards to test the proposals and outcomes to ensure that they reflected the national position. Given Covid restrictions, a hybrid approach was proposed; workshops would be conducted in person whilst notes and recommendations would be discussed with delegates from other Boards over MS Teams. It was hoped that this would foster both the frank exchanges achievable in workshops and the broader engagement that MS Teams allows. This alternative approach was accepted by BDaC. This report is part of a SPAG BDaC Report series e.g. <u>Construction Quality Matters</u>; <u>Repeatable Rooms</u>; published in <u>www.nss.nhs.scot/publications</u>.
- 2.3 Scottish Government, through the Scottish Capital Investment Manual (SCIM)4, places particular emphasis on 1) project monitoring during design & construction and 2) post project evaluation of the key service benefits realisation following occupation. SCIM requires project to create and execute a bespoke Project Monitoring & Evaluation (PME) Plan, per SCIM guides. Plus submit their PME Plan to be evaluated as part of their Business Case.
- 2.4 As part of <u>Project Monitoring & Evaluation (PME)</u>, SCIM refers to lessons learned topics to be developed. The PME lessons learned topics focus included:
  - Health and safety performance;
  - Operational change management planning;
  - What went well (and why);
  - What could be improved.
- 2.5 The initial workshop concentrated on reviewing whether these issues are the ones that should be focused on and then considered how best to reduce the barriers to

<sup>1</sup> The initial BDaC workplan set out to review SCIM guidance, identify and review other PME methodologies, review current Board approaches, review the SFT study, and prepare a report. 2 The BDaC action note outlined further tasks including the need to identify and share all PME templates, review opportunities to share best practice, and develop standard documentation. 3 BDaC MS Team:

<sup>4</sup> Refer to SCIM: <u>www.pcpd.scot.nhs.uk/Capital/scimpilot.htm</u>; incl: <u>Project Monitoring & Evaluation</u>, <u>Benefits Realisation</u>, <u>AEDET guide</u> and <u>NDAP guide</u>.

capturing lessons learned. The second workshop considered alternative ways to disseminate best practices and lessons learned.

- 2.6 The workstream was undertaken over the autumn of 2020 and into the early part of 2021. After each workshop initial findings were shared with the BDaC group. Subsequently, members of BDaC were invited to review the workshop conclusions in detail in Teams calls. This process confirmed that the findings and observations of the NHS Lothian workshops broadly reflected the experiences of BDaC members in various NHS boards across Scotland. All the main project evaluation findings/ recommendations outlined in the workshops were supported during the calls.
- 2.7 This paper outlines the workshops' findings in relation to improving construction post project evaluation and the lessons learned process. A summary of recommendations drawn from the findings is given in section 11. The limited remit of this review should be borne in mind when considering these recommendations as they largely reflect the experiences of the NHSL capital planning personnel who took part in the workshops. As indicated above, It has not been possible to follow the original plan for this workstream, particularly where this called for a review of the approaches followed by other Boards. Given this, some of the recommendations outlined in this paper may already be standard practice in other parts of the country.
- 2.8 Furthermore, the recommendations are meant to augment / reinforce existing arrangements, not replace them, thus the current SCIM Project Monitoring & Evaluation (PME) and other lessons learned guidance or requirements e.g. Scottish Futures Trust (SFT), NHSS Assure, NHS England P22, NHSS Soft Landings process (including structured evaluation5 of a buildings' performance & occupant surveys), will continue to be met / developed.
- 2.9 The focus of this paper has been on proposing ways in which those involved in construction projects in NHSScotland can establish a more cohesive network to share their specific expertise, knowledge, and lessons learned.

<sup>5</sup> POE has been incorporated into the NHSS Soft landings Aftercare Plan and requires a budget to fund it. Should the performance of facilities not achieve anticipated targets, or meet user expectations, there may be lessons learned that should be shared with other schemes in development.

## 3. Is construction project evaluation a worthwhile exercise?

- 3.1 Construction project evaluation has a number of objectives:
  - To evaluate the effectiveness of a project in realising the proposed benefits as outlined in the economic appraisal and compare planned costs and benefits with actual costs and benefits to allow an assessment of the project's overall value for money to be made;
  - To determine how effectively overall the project was run;
  - To assess project results and processes in relation to the activities undertaken by those directly involved in project delivery;
  - To learn lessons for the future to ensure that NHS organisations get the greatest possible benefit from each project.
- 3.2 The consensus at the initial workshop, and in subsequent MS Teams calls, was that project evaluation is worth the effort as it can contribute to improving outcomes in construction projects, but should not be limited to post project stage. As such, it has the potential to provide benefits to the NHS both at a local and a national level. However, there are clearly barriers that prevent this happening at present and this workstream aims to suggest ways in which these barriers could be overcome.

### 4. A definition of lessons learned

4.1 A lesson learned is defined as a work practice or a project approach that is captured and shared to promote repeat application of good outcomes, or to avoid recurrence of undesirable outcomes. Well-documented lessons learned should enable NHS Scotland to enhance its project management capability and its ability to deliver projects that leverage positive processes. Both advantageous and adverse consequences within a project can result in lessons learned and those that are particularly positive should be communicated beyond the delivery team and promoted as best practice. These lessons learned should become embedded in NHS Scotland's processes to provide future project teams with valuable insight into previous construction projects highlighting what went well, what did not go well, and any unintended consequences that arose that could have been avoided.

#### 4.2 The post project evaluation workshop group (the group) concluded that

- Lessons learned provide invaluable insight to project managers and team members of new projects;
- Lessons learned should be documented throughout the life of a project, (Postworkshop discussion added that project team follow existing Project Monitoring and Evaluation (PME) guidance, including the creation and regular review/ update of PME Plan);
- Lessons learned captured during projects should be reviewed at the initiation of similar projects.

# 5. Review of current SCIM project evaluation process

#### **Project Monitoring During Construction.**

5.1 The group felt generally that the current level of monitoring of construction issues is appropriate. Whilst contractor reports form the core of project monitoring during construction this has to be supplemented by additional Board monitoring (revenue costs, construction cost control etc.). The contractor should always be made aware of its reporting responsibilities through specific contract conditions or through the Authority's Construction Requirements.

#### **Service Benefits Realised Post Occupation**

5.2 The group felt that the purpose of benefits realisation in relation to a construction investment needs to be clarified. For example, SCIM's Benefits Realisation Plan (BRP) outlines a project's potential benefits and is intended to be crucial in determining whether it is a good project in which to invest - but what constitutes a BRP that justifies the investment? The workshop group was not aware of any business case that has been rejected because the BRP was felt to be weak6. The appropriateness / stretch of proposed benefits cited by the service needs to be reviewed by a scheme's project management board before inclusion in a business case. The group also believed that the service should report on benefits realisation rather than the capital planning team and that this should constitute a separate work stream. The group noted that SCIM states that "benefits are the advantages gained and value received from the outcomes of a solution, and not the delivery of that solution". Given this, the group felt that the BRP for a construction project should focus on benefits that can only be realised by investing in the new facility rather than on broader benefits arising due to other factors.

#### **Current SCIM PME 'Lessons Learned' topics**

- 5.3 The group focus was solely on the three topics they summarised from 2.4 'Learning what lessons can be learnt?' of SCIM's <u>Project Monitoring & Evaluation (PME)</u>.
  - Health and Safety Performance

The group felt that reviewing Health and Safety performance should be based on the contractor project monitoring reports that are prepared as a matter of course. The requirement for NHS actions resulting from construction Health and Safety issues is not considered to be high.

• Service Change Management Planning.

The group felt that service colleagues (not capital planners) should respond to SG on service change issues in a separate work stream.

• What Went Well (and Why) and What could be Improved.

<sup>6</sup> It is acknowledged that this represents the views of those attending the NHSL workshops and may not be the experience of others involved in capital projects.

The statements "what went well" and "what could be improved" were thought by the group to be too vague and should be replaced with more structured lessons learned question sets / templates.

### 6. Appropriateness of SCIM's PME 'Lessons Learned' topics

6.1 Generally, the 'Lessons Learned' topics identified in SCIM's <u>Project Monitoring &</u> <u>Evaluation</u> (PME) were considered appropriate for inclusion in construction project evaluation to identify lessons learned. Each project's PME Plan per SCIM guidance should support an approach to identifying, gathering, evaluating and disseminating project specific key topics / lessons. Plus, it should state how /when these are monitored and resourced.

# 7. How best to report on SCIM'S 'Lessons Learned' topics

7.1 The group felt that standardised construction project evaluation report formats, with more emphasis on encouraging knowledge sharing, would result in greater take-up and more willingness to share lessons learned. However, it was also acknowledged that the best responses are generally elicited in workshops and therefore the focus should be on standardising that process in the first instance to make reporting simpler to complete (see section 9).

## 8. Who should report on SCIM's 'Lessons Learned' topics?

- 8.1 The group's views on who should report on SCIM PME's 'Lessons Learned' topics are set out below:
  - H&S performance Capital planning project team members should comment on the contractor's H&S reports.
  - Service change management planning Service colleagues should report directly to SG on their service change performance.
  - What went well and what could be improved All parties involved in the project's delivery (stakeholders, service users, delivery team, and the main contractor) should contribute to this part of the process.
- 8.2 Consideration should be given to the review being undertaken by an independent facilitator/ reviewer not directly involved in the project's delivery, e.g. peer Board capital planning personnel, or an independent NHS body or an external consultant.

# 9. Question-sets facilitate PME 'Lessons Learned'

9.1 The group felt that a standard form question-sets should be created to facilitate the effective use of lessons learned workshops. These question-sets should be structured to cover the three main phases of construction projects: 1) start up and design, 2) procurement and construction and 3) handover, operation, and the user perspective. Such a question set would help identify both areas where lessons potentially need to be learned and where best practices could be shared with other project teams; these areas would then be explored in depth at the workshops. A sample question-set form is provided in Appendix 1.

# 10. Dissemination of best practice and lessons learned – alternative approaches

## Lessons Learned Summary Published on SG Website (Current Position)

10.1 SG states that 'sponsors of capital projects in NHSScotland are required, under the terms of SCIM, to evaluate and learn from their projects. This is mandatory for projects with a cost in excess of £1.5 million and should be applied as best practice for all projects. For projects less than £5 million Boards are required to submit summary reports to SGHSC and for projects over £5 million individual reports are required'. Despite this requirement, the website's reports7 have not been updated for some time.

#### **Projects less than £5 million**

10.1.1 This was last updated in 2015. The summary of projects is high level and anonymised. The recommendations are sensible but largely self-evident. It was felt that publishing the reports on a public website may have contributed to their anodyne content. The group also felt that the outlined lessons learned were unlikely to change much from year to year and could just as easily be incorporated in appropriate sections of SCIM as examples of best practice.

#### Projects in excess of £5 million

10.1.2 This was last updated in 2011. The anonymised summary covered three projects ranging in capex from £5m to £19.5m. Once again the summaries are high level as are the recommendations. The content is less focussed and largely generic. The 2011 summary was the first for projects in excess of £5 million; it was also the last.

The website does not indicate why it has not been updated, but irrespective of the reasons for this, the group felt that an alternative approach was required to share lessons learned effectively.

#### State of NHSScotland Assets and Facilities report

10.2 SCIM suggests that the annual 'State of NHSScotland Assets and Facilities' (SNAF) report can be used to report on any best practice recommendations. The last SNAF Report was lodged on SG's website in 2018. It covers asset performance, costs, and future investment. There is no lessons learned section in the report and the group felt that, in any event, it did not seem an appropriate vehicle to communicate lessons learned.

#### **Ongoing Enhancement of SCIM by Incorporating Lessons Learned**

10.3 The group thought it would be sensible to incorporate lessons learned into SCIM on an ongoing basis. Best practice lessons learned should be incorporated throughout the guidance (perhaps as sidebars, boxouts, or hyperlinks) rather than sitting in a

<sup>7 &</sup>lt;u>https://www.pcpd.scot.nhs.uk/Capital/Projects.htm</u>

separate section of the website. SCIM should evolve from being: 'what should be done', towards: 'how best to do it'.

#### Reinstatement of a Capital Planning Practitioners' Network.

10.4 The group felt that a Capital Planning Practitioners' Network should be established. The group observed that, over time, the old Capital Investment Network became dominated by finance personnel. Given this, it might be advantageous to have the new network hosted by HFS rather than SGHD Capital Accounting. To remain focussed, the network should be restricted to those managing the briefing, design, and construction stages of projects. The network could meet on a six-monthly basis with standing items such as project updates that would include current lessons learned. The network would allow capital planners to share experience in a confidential setting and make contact with colleagues who are expert in various elements of the construction procurement process.

#### **Online Portal**

10.5 The group felt that an Online Portal (a hosted webpage or separate website) that provides capital planning users a gateway to a variety of information, tools, templates, and links etc. would be an effective way to disseminate lessons learned. With appropriate levels of security, capital planners could update their own personal profiles (including willingness to mentor re specific subjects), project summaries, and share lessons learned reports and other documents confidentially. The group acknowledged that setting up and maintaining such a portal has resourcing implications that would need to be assessed.

#### **Peer Support and Mentoring**

#### **Support for Individuals**

10.6.1 There is considerable capital planning expertise across NHS Scotland that could be shared more effectively. The expertise is effectively the culmination of many years of learning lessons through undertaking construction projects. A structured, mentoring system for individuals involved in capital planning would help share lessons learned at all levels and would be particularly useful to new entrants to the capital planning world. Such a system could also support both career development and succession planning thus helping to address these issues in many boards. The system would be equally useful both at intra-board and inter-board level.

#### **Support for Projects**

10.6.2 Peer support and mentoring could also be useful at project level. For example, at the project initiation stage a lessons learned session could be arranged that would allow peer practitioners from recently completed schemes to share their experience with the team about to embark on its own project. Project boards could also benefit from having a peer practitioner, possibly at project director level, to share experience from other projects and provide assurance and support to both the project team and other board members. This support could take the form of mentoring for those board members that sought a better understanding of the capital planning and/or construction process.

### **11. Summary of recommendations**

## The recommendations made throughout this paper are summarised below:

- Lessons learned to be documented at each stage throughout the life of a project. (Post-workshop discussion added that project team follow existing Project Monitoring and Evaluation (PME) guidance, including the creation and regular review/ update of PME Plan);
- 2. Lessons learned captured during projects should be reviewed at the initiation of similar projects.
- 3. Standardised project evaluation report formats to be developed/ agreed. An emphasis on safe & easy knowledge sharing, would result in greater take-up and willingness to share lessons learned.
- 4. The best responses are generally elicited in **lessons learned workshops** and therefore the focus should be on standardising that process in the first instance to make reporting simpler to complete (see Appendices 1 and 2). The workshop should be undertaken by an **independent facilitator**/ **reviewer**.
- 5. 'What Went Well (and Why)' and 'What Could Be Improved' these questions should be replaced with **more structured lessons learned question sets** (see Appendix 1) agreed in PME Plan & discussed at the lessons learned workshops. Workshops to cover the three main phases of construction projects: 1) start up and design, 2) procurement and construction and 3) handover, operation, and the user perspective.
- 6. Lessons learned / best practice should be incorporated throughout the Scottish Capital Investment Manual as sidebars, boxouts, or hyperlinks rather than sitting in a separate section of the website. SCIM should evolve from being 'what should be done' to incorporate 'how best to do it'.
- 7. A Capital Planning Practitioners' Network should be established. The network should meet on a six-monthly basis with standing items such as project updates that would include current lessons learned. The network will allow capital planners to share experience in a confidential setting and make contact with colleagues who are expert in various elements of the construction procurement process.
- 8. An **Online Portal** to be developed. This will provide capital planning users an entryway to a variety of information, tools, templates, and links etc. and will be an effective, safe & easy way to disseminate lessons learned. With appropriate levels of security, capital planners will be able to update their own personal profiles (including willingness to mentor re specific subjects), project summaries, and share lessons learned reports and other documents confidentially. Setting up and maintaining such a portal has resourcing implications that will need to be addressed.
- 9. A structured, **mentoring system for individuals** would help share lessons learned at all levels and would be particularly useful to new entrants to the capital planning world. Such a system would also support both career development and succession planning and would be equally useful at intra-board and inter-board level.

- **10.** Peer support and mentoring would also be useful at project level. At the project initiation stage a lessons learned session should be arranged that would allow peer practitioners to share their experience with the team about to embark on its own project.
- **11.** Peer practitioner membership at project director level on project boards would also promote the sharing of experience whilst providing assurance and support to both the project team and board members.

### **Appendix 1: Sample Form**

PPE Workshop Pre-Questionnaire

Insert project name

Date:

#### POST-PROJECT EVALUATION QUESTIONNAIRE

Project Name [insert project name]

Release: Draft/Final<sup>"Delete as necessary</sup>

Date:

#### Contents

Introduction

Survey Section 1 – Start Up and Design

Survey Section 2 – Procurement and Construction

Survey Section 3 - Handover, Operation, and User Perspective

#### Introduction

This survey is designed to encourage project participants to think about the significant issues of a project prior to the PPE workshop. The questionnaire should be completed and returned to [*email address of facilitator*] by [*date*].

The following numerical values are used in assessing the information:

- Significant room for improvement = 1
- Room for improvement = 2
- Good = 3
- Very good = 4

By assigning numerical values to the survey matrix score sheets it is possible to determine and review the information in graphical format.

The review of the survey returns normally takes place prior the PPE meeting to provide the facilitator with appropriate feedback. The facilitator will aim to discuss areas where the average score is below 2.0 in greater detail at the workshop in order to determine the key lessons learned. Areas scoring 4 will be explored to determine if there is a case for sharing them as examples of best practice.

It is recognised that all questions cannot be answered by all attendees due to different involvement in project stages therefore please leave such boxes blank.

Date:

#### 1. Survey Section 1 – Start-Up and Design

#### How well would you say the following were carried out:

	Please tick one : 1 – Significant room for improvement 2 – Room for improvement	1	2	3	4
	3 – Good 4 – Very Good				
1.	Clearly defined roles and responsibilities				
2.	Production of a comprehensive clinical / design brief				
3.	A shared and good understanding of the Project Objectives – time, cost, and quality.				
4.	Coordination of design activities.				
5.	Stakeholder and user communication				
6.	Balancing of 'cost in use' revenue costs versus capital costs.				
7.	Proactive risk identification and management during design.				
8.	Value engineering and cost control during design				
9.	Integration and management of cost control with drawing/ design revisions.				
10.	Innovative design solutions				
11.	Timely involvement of Infection Control and Prevention Team and their sign-off of design				
Comr	nents:				

PPE Workshop Pre-Questionnaire

Insert project name

Date:

## 2. Survey Section 2 – Procurement and Construction

#### How well would you say the following were carried out:

4 - Very Good       Image: Communication within the Project team during construction.         1.       Appropriateness of procurement route.         2.       Effectiveness of tendering process.         3.       Careful allocation of risk between parties.         4.       Maintaining a partnering ethos during works.         5.       Overcoming issues and problems during construction.         6.       Controlling and administering change (implications on time, cost, and quality).         7.       Maintaining good Health & Safety standards.         8.       Maintaining good build quality.         9.       Communication within the Project team during construction.         10       Incorporating client specialists into the build programme/ works.		Please tick one : 1 – Significant room for improvement 2 – Room for improvement 3 – Good	1	2	3	4
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. programme/ works.	9.	Communication within the Project team during construction.				
Commente:	10					
Comments.	Com	ments:		1		

Insert project name

Date:

#### 3. Survey Section 3 - Handover, Operation, and User Perspective

#### How well would you say the following were carried out:

	Please tick one: 1 – Significant room for improvement 2 – Room for improvement 3 – Good 4 – Very Good	1	2	3	4
1.	Establishment of clear handover procedures.				
2.	Coordination of handover with the Facilities Management Team(s).				
3.	Timely provision of comprehensive O&M manuals <sup>1</sup> .				
4.	Close out of schedule of defects and snags.				
5.	Appropriate involvement of user representatives in handover and snagging process.				
6.	Adequate training for installed systems/equipment.				
7.	Removal arrangements				
8.	Delivery and installation of NHS's direct orders (e.g. furniture and other equipment)				
9.	General communication with stakeholders and users.				
10.	Building Management System commissioning.				
Com	ments:				

<sup>&</sup>lt;sup>1</sup> Operation and Maintenance Manuals form part of the handover documentation and include operation and maintenance instructions along with manufacturers literature, as built drawings, and signed test and commissioning sheets

## Appendix 2: Facilitating a Lessons Learned workshop

#### Purpose

When NHSS project managers draw together members of a project team, they should invite all those who contributed to the overall effort. The objective of meeting is to discuss, and collectively identify, lessons learned during the previous phase or at project closure so that future projects may benefit from and usefully apply those insights that were gained on past efforts. During the course of the discussion, the objective of the exercise is to recognise and document those insights so that the future project efforts incorporate more of the successful elements and less of the unsuccessful elements encountered by the project delivery team.

Additionally, lessons learned exercises give team members a chance to reflect on events and activities during the project helping to bring closure to the project. It should provide a safe and open opportunity for team members, sponsors, and stakeholders to discuss successes, unintended outcomes, and any subject that, in retrospect, might have been better handled if done differently. This should lead to recommendations to others who will be involved in future projects of a similar type.

#### Categories

When facilitating the workshop focus on the major categories of people and processes, and then further define the lesson learned by type – whether the lesson is beneficial, detrimental, or could be considered best practice.

#### Impact

Consider the impact/outcome of the lesson and how future projects may be affected:

- Beneficial Lesson learned from a project event with an advantageous outcome. Communications relating to beneficial lessons learned may be limited to project personnel or extended to other staff within the Board;
- Detrimental Lesson learned from a project event with adverse consequences. Communications relating to detrimental lessons learned may be limited to project personnel or extended to other staff within the Board;
- Best Practice Practice promoting or resulting in a positive outcome that is
  particularly successful should be considered as 'best practice'. Communications
  relating to best practice lessons learned should be extended to construction
  project personnel across within NHS Scotland

#### **Ground Rules**

Before beginning the workshop it is important to establish ground rules that will help to set expectations for all participants and ensure a productive meeting:

- The point of the exercise is to recognise and document lessons so that the future project efforts of others do more of the successful things and less of the unsuccessful things encountered by the project team;
- The group should remain focused on discussions that will identify lessons learned within the time scheduled for the workshop;

- Focus on behaviours or tactics that were successful or problematic rather than people who were successful or problematic;
- Listen to everybody and recognise that everyone who contributed to the project may have input regardless of the scale of their involvement in the project.
- Most importantly, the discussion must remain positive and productive.

#### Questions that should be asked during a Lessons Learned workshop

The following questions should be considered as a means of structuring a lessons learned discussion:

- To what extent were the project goals achieved?
- What went well? Provide examples of successes that happened during or because of the project.
- What did not go well? Discuss unintended outcomes that happened during or because of the project.
- What might have been better handled if done differently?
- What recommendations should be given to others that might be involved in future projects of a similar type?
- What adverse events occurred that were beyond the project team's control?
- What adverse events occurred that were unforeseen and where no contingency planning had been undertaken?
- What things did the project team anticipate happening that did not happen?
- What adverse events did the project team successfully overcome?
- What recurring processes could be simplified?
- What skills were missing on this project?
- Did other departments (e.g. eHealth, IPCT, Estates etc.) provide appropriate and timely support to the project?

#### Actions Following a Lessons Learned Workshop

The following steps should be undertaken following the lessons learned discussion:

- Fully capture the essence of the discussion and finalise a formal lessons learned report.
- Validate lessons learned, seek clarification when/where necessary.
- Summarise lessons learned and disseminate lessons learned within each project team.
- Ensure that the lessons learned are stored within an NHS Scotland project management system to serve as project assets for future schemes.