

Australasian Health Infrastructure Alliance

# Post Occupancy Evaluation (POE) Framework

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Version 1









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Australasian Health Facility Guidelines

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The AusHFG are an initiative of the Australasian Health Infrastructure Alliance (AHIA). AHIA membership is comprised of representatives from government health infrastructure planning and delivery entities in all jurisdictions in Australia and New Zealand.

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# **Cultural Acknowledgement**

The Australasian Health Facility Guidelines (AusHFG) are developed in collaboration with stakeholders across Australia and Aotearoa, New Zealand.





## **Acknowledgement of Country**

We acknowledge the Aboriginal people as the traditional owners and continuing custodians of the land throughout Australia and the Torres Strait Islander people as the traditional owners and continuing custodians of the land throughout the Torres Strait Islands.

We acknowledge their connection to land, sea and community and pay respects to Elders past, present and emerging.

## Acknowledgement of Te Tiriti o Waitangi

We acknowledge Māori as tangata whenua in Aotearoa New Zealand.

Te Tiriti o Waitangi obligations have been considered in developing the AusHFG resources.





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# Glossary

# Acronyms

Acronym	Definition
AHIA	Australasian Health Infrastructure Alliance
AusHFG	Australasian Health Facility Guidelines
BPE	Building Performance Evaluation
CPTED	Crime Prevention Through Environmental Design
CSP	Clinical Services Plan
DLP	Defects Liability Period
ED	Emergency Department
ESD	Environmentally Sustainable Design
FF&E	Furniture, Fittings & Equipment
HAI	Healthcare Associated Infections
HPU	Health Planning Unit
ICT	Information Communications & Technology
ICU	Intensive Care Unit
IP&C	Infection Prevention and Control
MME	Major Medical Equipment
NZ	New Zealand
PIR	Post Implementation Review
POE	Post Occupancy Evaluation
RACI	Responsible, Accountable, Consulted, and Informed (matrix)
RDS	Room Data Sheet
RLS	Room Layout Sheet
SOA	Schedule of Accommodation
WHS	Work Health and Safety





# 01 Introduction

#### 1.1 Preamble

The Australasian Health Facility Guidelines (AusHFG) (<a href="www.healthfacilityguidelines.com.au">www.healthfacilityguidelines.com.au</a>) are freely available resources for health services and project teams across Australia and New Zealand to support better planning, design, procurement and management of health facilities.

The AusHFG are an initiative of the Australasian Health Infrastructure Alliance (AHIA), a cross-jurisdictional collaboration of all health authorities across Australia and New Zealand. Part A of the AusHFG provides further information relating to the purpose, structure and use of these resources. It is acknowledged that the application of the AusHFG varies between jurisdictions across Australia and New Zealand.

This AHIA Post Occupancy Evaluation (POE) Framework has been developed to support all jurisdictions in delivering POEs and to promote consistency of information to inform future projects and AusHFG reviews. The document has been developed in consultation with health infrastructure experts involved in health facility planning and delivery processes across Australia and New Zealand.

## 1.2 Terminology

There are a range of terms associated with the evaluation of new or refurbished healthcare facilities. For the purposes of this document, a **Post Occupancy Evaluation (POE)** is defined as a structured analysis of the performance of a healthcare facility, typically undertaken 12 months after a facility has been occupied. A POE provides quantitative and qualitative feedback on various aspects of building and service performance, healthcare design and project implementation processes.

A range of capital project evaluation processes are occurring across jurisdictions. It is important to ensure that activities occurring through a POE are not duplicating other evaluation processes. **Building Performance Evaluation (BPE)** is a term used in some jurisdictions. It has a similar focus to POEs, however it incorporates life cycle feedback processes whereby evaluation occurs at different stages throughout project delivery as well as after the initial occupancy of a building (Preiser et al, 2018). A number of jurisdictions evaluate project implementation through **Post Implementation Review (PIR)** processes which are focussed on how well a project has been planned, procured and implemented to inform organisational learning and continual improvement. The application and timing of PIRs varies between jurisdictions, however they are generally undertaken earlier than a POE. Where PIR processes are in place, the evaluation of project implementation processes would be excluded from any subsequent POE scope.

POE processes are related to **Benefits Realisation** which is an established practice in most jurisdictions for ensuring a project or program produces the anticipated benefits articulated in the project's business case and cost benefit analysis. A POE is typically a one-off assessment and a specific final stage in project delivery for continual learning and improvement, whereas benefits realisation is focussed on whether a project achieves its expected benefits over time, and involves ongoing monitoring and correcting the benefits realisation process.

As described further in this Framework, POE and benefits realisation processes should complement and integrate with one another where possible.

#### 1.3 Benefits of POEs

Evaluation is essential to continue improving the return on investment from health facility development. Research demonstrates that the design of healthcare facilities influences patient recovery and wellbeing, visitor experiences, staff satisfaction, and the efficiency of health systems. Given the significant current and projected capital and operational expenditure associated with healthcare facilities across Australia and New Zealand, the planning and design of healthcare facilities must continue to evolve to support more efficient and effective health service delivery models. Evaluation of recently delivered facilities enables continual improvement by:

• sharing of lessons learned to ensure that the development of healthcare facilities is achieving the intended service benefits and optimising outcomes for patients, staff and the community





- providing information regarding strengths, weaknesses, and opportunities to improve the planning, design and delivery of health infrastructure projects
- informing updates to the AusHFG to promote evidence based and best practice design across all jurisdictions
- identifying issues that require further research or expert input to support improved approaches, and
- avoiding outcomes that compromise the safety, functionality, sustainability, efficiency or durability of a facility.

There are three key types of outcomes from POE processes:

- 1. Recommendations specific to the project being evaluated that can be implemented by the health service to improve the operation of the new facility.
- 2. Lessons learned to benefit future projects including feedback regarding the planning, design and delivery of projects.
- **3.** Lessons learned to inform the AusHFG through feedback that may be addressed within future AusHFG reviews.

As noted by Blanch and Frazer (2023), POEs enable the establishment of cyclical programs and feedback loops whereby lessons learned from the evaluation contribute to continuous improvements in project delivery processes. The figure below summarises the broad reaching impact that POEs have by promoting continuous improvement from clinical services planning through to commissioning and occupation of the facility.

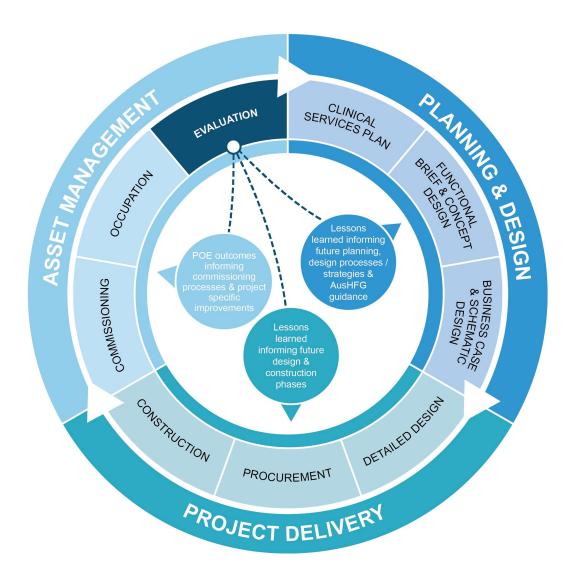


Figure 1: The role of evaluation in promoting continuous improvement across the project planning and delivery cycle





## 1.4 Purpose and Scope of the AHIA POE Framework

#### **Objectives of the AHIA POE Framework**

A number of jurisdictions across Australia and New Zealand have existing POE processes in place. It is intended that this AHIA POE Framework will help improve existing POE approaches by drawing on lessons learned from all jurisdictions and will provide a starting point for jurisdictions that have not yet established formal POE processes.

The objectives of the AHIA POE Framework are to:

- communicate the benefits of post occupancy evaluation
- provide an overarching framework that can be tailored depending on the specific facility / scope of the POE
- provide guidance on:
  - how to establish a POE and the recommended methodology
  - the range of people to be involved
  - o optimal timing of POEs
  - o types of evaluation categories to be addressed
  - o approach to the implementation of POE outcomes and dissemination of learnings
- provide an overarching POE template
- support consistency of POE information that may enable the establishment of a shared database of outcomes.

Individual jurisdictions may produce their own POE guidelines as supplements to this AHIA guide. Project teams commencing a POE should confirm whether there is additional local jurisdictional documentation that must be referred to.

#### Scope of the Framework

This POE Framework provides an overarching methodology for completing POEs. It includes the key steps involved, from establishing a POE through to developing an implementation plan in response to the POE outcomes and ensuring appropriate distribution of learnings.

It is acknowledged that the scope of POEs will vary, and it is intended that the Framework be tailored to suit the various types of POEs. For example, POEs may focus on:

- a whole of hospital / whole of project evaluation following a redevelopment
- a specific service area or Health Planning Unit, e.g. a number of recently delivered Emergency
  Departments may be evaluated to compare and contrast strengths and weaknesses associated with each
  ED. The detailed planning and design recommendations arising from these POEs provide detailed and
  targeted advice for the AusHFG review process but are typically only possible in those jurisdictions with
  a significant volume of recent health infrastructure development
- a specific element of design, for example pendant arrangements within an ICU bedroom
- how the design of healthcare facilities is addressing specific service and operational issues, for example
  how is design supporting contemporary medication management processes, or how is design mitigating
  incidents of workplace violence.





# 02 Methodology

## 2.1 Overarching POE Process

The following methodology is provided to guide the POE process and can be adapted depending on the focus of the POE.

POE Establishment Data Collection and Analysis of Documentation Site Visit / Interview / Surveys Development of Report and Implementation Plan

Distribution of Learnings

#### **POE Establishment**

- Establish governance framework
- · Confirm roles / responsibilities
- · Confirm scope
- Establish evaluation categories / framework
- Develop POE program and identify milestones
- Identify key participants including end users (and sites where relevant)

#### **Data Collection & Analysis of Documentation**

- Request relevant documentation
- Undertake desktop review of project information
- Establish baseline information relevant to POE scope and evaluation categories

#### Site Inspection / Interviews / Surveys

- · Site inspection to assess facility against identified evaluation categories
- Targeted staff interviews / workshops / focus groups
- Consumer interviews or focus groups (where relevant)
- Staff and consumer surveys depending on local jurisdictional approaches and the POE scope

#### **Development of Report and Implementation Plan**

- Analyse information in line with evaluation categories
- Establish key recommendations for the project and lessons learned that may benefit future projects
- Issue draft POE Report for review by relevant agencies
- Finalise POE Report
- Develop Implementation Plan to ensure recommendations are addressed

#### **Distribution of Learnings**

- Distribute learnings to key stakeholders in line with the Implementation Plan
- Communicate lessons learned to relevant agencies, project team members and other stakeholders including AHIA for recommendations relating to the AusHFG
- Include lessons learned on a central database (where available)





## 2.2 Project Establishment and Definition of Scope

#### Governance Structure

Clear governance arrangements and funding mechanisms must be established for the completion of POEs. Several jurisdictions have committees in place to oversee the completion of POEs and to provide advice and direction relating to:

- scope and budget for the POE
- focus of the POE
- timeframes for completion / POE program
- role and responsibilities of those involved in the POE
- personnel / participants to be consulted with and sites to be visited
- approval of the POE report and proposed implementation plan.

#### Roles and Responsibilities

A roles and responsibilities RACI (Responsible, Accountable, Consulted, and Informed) matrix should be established to ensure clarity around who is undertaking the various POE tasks. A **POE Coordinator** is generally required to ensure a consistent approach to POEs that aligns with the established parameters, and to support the level of coordination required with relevant health service/s.

A **POE Evaluator** / Evaluation Team will conduct the review. This may be undertaken through 'in house' resources or by engaging an external consultant. External consultants are typically health planners, architects and/or other technical consultants and careful consideration needs to be given to the skill set required to undertake the POE depending on its particular focus. Where consultants are used, a detailed initial briefing and ongoing support and mentoring are typically required to ensure there is a clear understanding of the focus of the POE and how to translate issues identified, through to clear recommendations.

Where possible, the POE Evaluator / Evaluation Team should be independent from the capital project team that planned, designed and delivered the facility to ensure objective identification and reporting of issues.

Provides strategic direction relating to the POE scope, budget, program, roles **POE Steering** and responsibilities and participants; and provides final endorsement of Committee the POE Report. Ensures a consistent approach to POEs in line with the POE framework / **POE** Coordinator jurisdictional policies. Coordinates the completion of the POE with relevant health service/s. Conducts the POE and develops the POE Report. POE Evaluator / **Evaluator Team** Independent from the capital project team that planned and designed the facility to ensure objective identification and reporting of issues. Hospital staff, consumers, capital project team members and other personnel **POE** Participant consulted with either through site visits, interviews and/or surveys.





#### Scope and Objectives

POEs are extremely resource and time intensive so it is important that the key parameters for the POE are clearly defined during the POE project establishment stage. This includes ensuring that the scope, budget and objectives of the POE are clearly defined upfront in line with the benefits sought from the project. It is not possible to evaluate every aspect of a facility so it is important that the scope is clear and concise and can be readily communicated to all involved. This should include identification of the key questions that the POE is seeking to address, in line with the agreed evaluation categories (refer to Section 3). The POE should focus on the project objectives identified in the early stages of planning and design of the facility and the design response and strategies adopted to meet those objectives.

#### Timing / Program

A POE is ideally undertaken one to two years post commissioning. This provides sufficient time for change management processes to resolve issues relating to transition to the new facility, completion of the defects liability period and access to sufficient available data to support the evaluation process.

A program should be developed by the POE Coordinator, incorporating the full POE process from establishing the evaluation categories through to distribution of learnings. The program should identify major milestones and deliverables so there is a clear understanding of expectations. It is acknowledged that timeframes for completion of a POE will vary between jurisdictions in line with relevant project assurance processes and may be undertaken through multiple reviews over an extended period.

Where the POE is evaluating project implementation criteria, it is essential that participants who were involved in the planning and delivery of the facility are consulted. With the significant passage of time between planning and project completion, there can be challenges with participants recalling details regarding early planning processes and governance arrangements. There is also often significant staff changeover during this time. Some jurisdictions may implement processes to capture lessons learned at the end of each project phase to ensure more accurate and detailed advice is obtained rather than waiting 12 month or longer after completion. Where these processes are in place, the scope of the POE will likely exclude these associated project implementation evaluation categories.

#### **Key Participants**

Once the evaluation categories are identified, the appropriate mix of personnel / participants to be consulted, either through site visits, interviews and/or surveys, can be identified. Depending on the focus of the POE this may include:

- · clinical staff working in the facility
- service managers
- administrative staff
- environmental services / 'back of house' staff
- facilities management / maintenance staff
- infection prevention and control (IP&C) staff
- work health and safety (WHS) staff
- information communications and technology (ICT) / digital technology staff
- project team members involved in the planning, design and delivery of the project
- consumer representatives (where possible)
- cultural representatives
- community members.

It is important to align the identified stakeholders with the scope and objectives of the POE to ensure the process is efficient and targeted to the required information.

It should also be noted whether feedback provided is from:

• staff, patients and carers with familiarity of the old facility replaced by this development, and





• staff who were consulted during the planning and design process and understand the service delivery requirements and other rationale for the facility design.

#### Site Considerations

Where a number of sites are being evaluated, consideration should be given to including a range of service levels and locations, from large metropolitan hospitals through to small regional facilities. This will ensure the outcomes are applicable to a range of future developments.

## 2.3 Data Collection & Analysis of Documentation

A significant volume of project documentation and data will be required to inform the POE. Again, this needs to be limited to those documents that are relevant to the evaluation categories. Documentation should be requested early in the POE process given some may take a while to obtain and the documentation will be important in identifying key areas of focus for the subsequent site visit and interviews.

Key documents may include:

- Clinical Services Plan (CSP)
- Models of care
- Functional Brief
- Schedule of Accommodation
- Change management strategy
- Plans, from concept design through to as-built drawings
- · Design reports including schematic and detailed design
- Value management documentation
- Business Case
- Assurance Reports
- Cost plans and final project financial summary
- Contract documentation
- Construction programmes
- Operational commissioning plan
- Benefits Realisation Plan / Benefits Register and Evaluation Reports
- Sustainability rating tool / reports
- Gateway Review papers and reports
- Building performance / defect liability period reports
- Relevant information from the AusHFGs acknowledging revisions / updates completed following the
  project design phase. AusHFG resources may be more relevant to service / HPU specific POEs or as
  a reference following identification of an issue.

From the documentation, baseline information may be established for the identified evaluation categories. For example, subject to the focus of the POE, this may include identifying the:

- service needs and benefits articulated in the Business Case and Benefits Realisation Plan
- key proposed changes to models of care articulated in the CSP and Functional Brief
- general arrangement of units
- compliance with relevant policies, standards and guidelines (for POE focus areas)





- proposed initiatives relating to technology, sustainability and other items relevant to the identified evaluation categories, and
- other background information relevant to the focus of the POE.

A thorough understanding of the background information will enable the POE Evaluator to have a clear understanding on what the project set out to achieve and the key issues to be considered during the site visit and staff interviews.

Where possible, quantitative data should be obtained to compare baseline measures with post completion data. In relation to service outcomes, some of this information may be available from the Benefits Realisation registers and evaluation reports. Quantitative data provides a clear assessment of elements of facility performance. Qualitative information, obtained through the site visit and participant interviews / surveys, provides insights into their user experience, and the background and context of facility performance and outcomes.

## 2.4 Site Inspection / Interviews / Surveys

The site inspection/s, interviews and distribution of questionnaires to staff and consumers will require significant involvement and assistance of the POE Coordinator.

#### Site Inspection

A site inspection of the facility is an essential element of the POE to assess if the service outcomes have been achieved and that the asset is performing as planned. The site visit will allow the POE Evaluation Team to assess sensory aspects of the design and also provide an opportunity to observe how staff, patients and other visitors use the various areas.

Where possible, it is suggested the Evaluation Team undertakes the site inspection prior to conducting any interviews, workshops and/or focus group meetings so that the team members have a clear understanding of the facility and can participate in more meaningful discussions regarding identified service and asset issues. Often elements of the site may need to be revisited following the interview.

It is generally recommended that the number of facility staff involved in the site inspection is kept to a minimum, for example clinical units may include the Unit Manager and one other clinical staff member. With larger groups there is a risk of the group breaking up and information not being communicated to some members of the Evaluation Team.

#### Interviews / Workshops / Focus Groups

Targeted staff interviews or workshops will inform the assessment of evaluation categories. It is important to identify the key questions for staff prior to the interviews to ensure these are aligned with the focus of the POE.

Depending on the scope of the POE, a single combined workshop may be undertaken or a series of separate workshops may be required with each group of staff. For example, separate workshops with facilities management staff may be required where one of the key areas of focus is the performance of the asset and fabric, and assessing issues relating to maintenance and the quality and durability of FF&E finishes.

Consumer interviews or focus groups may be undertaken to seek feedback on service outcomes such as access and stakeholder satisfaction, and asset performance criteria such as wayfinding. These interviews and/or focus group sessions are used to identify issues and recurring themes that can then be further explored through site visits and review of project documentation.

#### Surveys

Surveys may be undertaken where it is helpful to seek confidential feedback from people that may be more comfortable providing input via this format rather than through an open discussion. This is particularly relevant for consumer representatives and members of the community. These stakeholders are important end users but their involvement in interviews and workshops may not always be appropriate. Surveys should be undertaken prior to the site visit to inform the POE Evaluation Team what to look out for.





Surveys may not always be cost effective given the time taken to develop, implement and analyse the data, and there is often minimal uptake. Depending on the focus of the POE, it may be more effective to undertake focussed interviews. Where used, surveys should be succinct and targeted to the focus / key questions of the POE. Ethics approval may be necessary depending on the types of information being sought. Where this is required, the associated approval timeframes will need to be incorporated within the POE program.

## 2.5 Development of Report and Implementation Plan

The suggested POE report template is contained at Section 4. The key focus of the POE report is to analyse the information received through the documentation review, site visits and interview / surveys into recommendations relating to potential facility and/or project implementation improvements.

Recommendations should be delineated into:

- 1. Recommendations specific to the project being evaluated that can be implemented by the health service to improve the operation of the new facility. This may include minor works that can be implemented to rectify the issues identified.
- Lessons learned to benefit future projects including feedback regarding the planning, and delivery
  of projects and the effectiveness of design strategies developed to respond to the service plan, model
  of care and functional brief.
- 3. Lessons learned to inform the AusHFG through feedback that may be addressed within future AusHFG reviews.

The emphasis needs to be on evidence-based recommendations. It is not just about raising an issue but identifying why it is an issue, how it compares to the guidelines, standards etc and what needs to be done i.e. what are the recommendations in response to this. Recommendations should be clear and concise. This may be through keeping the major recommendations to a limited number of priority issues to ensure the associated Implementation Plan is achievable.

A draft report developed by the POE Evaluation Team should be reviewed by all relevant stakeholders prior to a final report being issued for approval through the Steering Committee. Key findings may be reviewed through a stakeholder workshop depending on the scope of the POE.

An Implementation Plan is a key part of the POE process to ensure recommendations are addressed. The translation of POE lessons learned into tangible changes has been one of the key challenges identified by jurisdictions and so this final stage is essential. Responsibility for development of the Implementation Plan and associated approval processes should be defined during the project establishment phase.

It is also recommended that a separate executive summary of POE recommendations with de-identified health facilities and personnel involved should be provided to assist with dissemination of learning.

# 2.6 Distribution of Learnings

The distribution of learnings is the key final stage in a POE process. It is important to identify methods to disseminate the evaluation results to the wider industry and strengthen the healthcare planning, design and delivery knowledge and processes.

Jurisdictions have noted that the distribution of POE learnings has been limited at times due to the high volume of information provided and confidentiality issues around individual facilities. There can be concerns regarding information being released to the public e.g. relating to reputational damage. These issues can be resolved by ensuring that a limited number of clear recommendations are provided, and a separate executive summary is developed with de-identified health facilities.





The Implementation Plan should provide clear actions relating to the distribution of learnings to ensure they are considered and addressed as appropriate. Key stakeholders / communication channels are summarised below:

Stakeholder	Importance of POE Lessons Learned		
Health Department	Service outcomes and benefits may be used to inform future investment decisions.		
Health Service Providers, e.g. Local Health Districts, Area Health Services etc	To understand if the planned service outcomes have been realised and to implement strategies to address any issues identified.		
Other Relevant Agencies	To inform the future development of models of care, operational practices etc.		
	To better understand the link between facility design and service outcomes / benefits.		
Planning and Design Teams involved in	Relevant POE outcomes can be incorporated within planning and design guidance for future projects.		
health infrastructure projects (Government and Industry)	To identify evidence-based design strategies that achieve health and wellbeing outcomes sought for particular care settings.		
	To support improvements relating to program wide strategies e.g. risk management, change management, communication strategies.		
	To identify issues requiring further research / expert input.		
	To inform ongoing improvements to the AusHFG and promote best practice design.		
Australasian Health Infrastructure Alliance and AusHFG Team	To support the benchmarking activities undertaken by AHIA.		
	To identify issues that require further research and analysis across all Australian and NZ jurisdictions.		

Alternative methods may be considered to distribute learnings. For example, a central database of lessons learned may be established using tools that enable ease of access to relevant learnings through searching by specific fields, such as infection control, doors, acoustics, design for safety etc. The opportunity to develop a central repository of lessons learned to be shared across AHIA jurisdictions may be considered in the future to support sharing of knowledge, continuous improvements in planning and design, and avoid jurisdictions repeating similar mistakes on projects.

Designated fields for a central repository of lessons learned may align with the evaluation categories as noted in the example at Appendix 1.





# 03 Evaluation Categories

The POE evaluation categories must be confirmed during the project establishment phase given this will impact on the overall program, the skill set required of the POE Evaluator/Evaluator Team, identification of key participants to be involved, and the documentation to be requested.

Evaluation categories are broadly grouped into three themes:

- 1. Service Need / Outcome.
- 2. Design and Building Performance, and
- 3. Project Implementation.

For each of these categories, the various evaluation areas should be identified in alignment with the focus of the POE. A range of example evaluation areas are included in the tables below, along with key considerations and potential sources of information. These need to be tailored to the specific POE so not all may be relevant. As noted earlier in this document, the volume of information in a POE can be extremely resource and time intensive so it is important that the evaluation areas are targeted to the scope of the POE.

Several evaluation areas may be covered through other project assurance processes, so it is also important to ensure that the POE is not duplicating these. The reporting of recommendations and lessons learned in the POE Report should be organised across these three themes.

#### 3.1 Service Need / Outcomes

Business case processes require a clear articulation of the service benefits to be realised through investment. While the proposed service benefits will vary depending on the project, health infrastructure projects will typically incorporate similar categories of service benefits outlined in the table below.

The POE Report will include an evaluation of whether the benefits articulated in the business case have been achieved and identify any issues associated with the infrastructure project that may have influenced the achievement of these benefits.

Benefits realisation monitoring and evaluation are typically mandatory requirements of a business case process, with requirements usually linked to project tier classifications based on capital value and/or level of risk. Opportunities to align the evaluation of service outcomes through the POE process with the benefits realisation process should be considered, subject to the timing of benefits monitoring.

Evaluation Area	What is Assessed / Items to Consider	Potential Sources of Information
Service needs and identified benefits	Were the benefits identified in the business case achieved? What is being done or needs to be done to ensure the benefits are realised? How has the infrastructure project influenced the achievement of benefits?  Expected benefits for health projects typically include the following broad categories:  access to services quality of service delivery safety operational efficiency sustainability workforce.	Business Case Clinical Services Plan Model of Care / Service Delivery Model Functional Brief Benefits Register Benefits Evaluation Report Service Activity Waiting List Information Incident Registers Specific information relating to relevant service areas e.g. ED access targets, surgical infection rates etc. Financial documentation and data Site Inspection
Staff, patient, carer satisfaction	Patient and carer experience Staff experience	Consumer / carer questionnaire Patient satisfaction survey Staff questionnaire Site inspection





# 3.2 Design and Building Performance

A range of asset performance elements will be assessed depending on the focus of the POE. The outcomes of this evaluation will provide important information to guide the design of future projects and to inform updates to the AusHFG.

Evaluation Area	What is Assessed / Items to Consider	Potential Sources of Information
Support for endorsed models of care	Does the facility support the models of care as described in the planning documentation?	Clinical Services Plan / Models of Care Functional Brief Site Visit
Functional relationships / activity flows	Does the spatial arrangement of the facility achieve the desired relationships between HPUs and support:  optimal clinical colocations / adjacencies safe and effective patient care efficient movement of staff efficient movement of materials logical wayfinding sharing of support areas	Review of design Site visit Interviews / Workshops
Quality and safety	<ul> <li>Work Health &amp; Safety (WHS)</li> <li>security</li> <li>CPTED</li> <li>infection prevention and control</li> <li>environmental considerations (natural light/views, biophilic design, temperature and air quality control, acoustics, sensory experience)</li> <li>cultural safety, welcoming environment</li> <li>supportive spaces for families and carers</li> <li>adequate space for staff work areas and staff break areas</li> </ul>	Review of design Critical incident reports HAI datasets Site visit Interviews / workshops Staff and consumer surveys
Fit for purpose rooms / spaces	Does the facility provide (with reference to the AusHFG):  • the types of rooms / spaces required  • appropriately sized rooms  • appropriate room layouts  • high quality, attractive and durable finishes Innovations for future projects?	Review of design Reference against AusHFG including SOA, RDS, RLS Site visit Interviews / workshops
FF&E / MME	Major strengths or weaknesses associated with FF&E and MME Procurement methodology Repair and maintenance Innovations for future projects?	Site visit Interviews / workshops
Technology	Use and functionality of technology Procurement methodology Consideration of future adaptability Maintenance requirements Innovations for future projects?	Business Case Functional Brief Site visit Interviews / workshops





Evaluation Area	What is Assessed / Items to Consider	Potential Sources of Information
Site access &	Access to the site including car/ambulance	Functional Brief
accessibility	access, public transport access, parking, patient travel routes, supply delivery and waste collection	Site visit
	Issues relating to access control	Interviews / workshops
	Does the facility support Universal Access	
	requirements?	
Service efficiency	Has the facility supported improved operational	Activity data
	efficiencies for clinical, clinical support and/or non- clinical support services, e.g. through supporting:	Functional Brief – Operational Policies
	new models of care	Site Visit
	<ul> <li>new / enhanced operational practices</li> </ul>	Workshops (including with
	use of new technology / equipment	support services)
Engineering and Building	Use and functionality of engineering systems,	Functional Brief
services	including but not limited to mechanical, electrical and hydraulics.	Review of Design & project specifications
	Particular attention should be provided to ventilation, security and patient call systems.	Value management documentation
		Defects Liability Period (DLP) reports
		Site visit
		Interviews / workshops
Flexibility and adaptability	Does the facility configuration support future	Functional Brief
	expansion and adaptability where briefed as a requirement?	Masterplan Report
	Considerations include:	Review of design
	structural grid	Site visit
	structural floor capacity	Interviews / workshops
	<ul> <li>floor to ceiling and floor to floor heights</li> </ul>	
Environment	corridor and door widths	Pusings Occas FOR Ottak
Environmental sustainability	Has the facility supported implementation of sustainability initiatives?	Business Case – ESD Strategies
,	Has energy and environmental performance improved following completion of the facility?	Sustainability rating tools / reports
Placemaking / Symbolic	What are the local perceptions of the facility from	Review of design
performance	an aesthetic perspective?	Government Architect Reports
	Does the design of the facility sit well within the local social, historical, cultural and heritage context?	Community surveys
	COLIGAL!	

# 3.3 Project Implementation

This category incorporates an analysis of planning and design processes undertaken for the project with the aim of ensuring continuous improvement in the way projects are managed and implemented from initial planning through to project commissioning. The outcomes of this evaluation can provide important insights into the internal processes undertaken by capital development teams.





Evaluation Area	What is Assessed / Items to Consider	Potential Sources of Information		
Governance arrangements	Did the project follow the prescribed governance structure for capital health projects in the jurisdiction?	Business Case / Project Definition Plan Gateway Review Reports		
	Was the composition of teams within the governance structure appropriate for the project?	Interviews / workshops		
	Were roles and responsibilities clearly defined?			
	Were there clear processes in place to manage design change requests and other issues, and make decisions?			
	What were the strengths and weaknesses of the governance arrangements?			
Program wide strategies	Were there clear strategies in place for the following program wide strategies and were they effective:  Risk management	Risk management plan Change management plan Communication strategy Workforce strategy		
	<ul> <li>Change management</li> <li>Communication and stakeholder</li> </ul>	Business Case / Project Definition Plan		
	<ul><li>management</li><li>Workforce planning</li></ul>	Interviews / workshops		
		Surveys		
Planning and design processes	Was there a clear governance arrangement in place for the planning and design process?	Business Case / Project Definition Plan		
p. 222222	Was the membership of the planning and design	Gateway Review Reports		
	teams (internal and external) appropriate for the project?	Value management documentation		
	Were roles and responsibilities clearly defined?	User group / stakeholder		
	Were there clear processes in place for submitting design change requests and	engagement documentation and approvals		
	receiving formal authorisation for them?	Design principles or other standardisation documentation		
		Interviews / workshops		
Project delivery /	What delivery model was implemented, how was	Business Case		
construction	it selected, and was it effective in meeting the required outcomes?	Procurement and contract documentation and evaluation		
	Was there a clear governance arrangement during the construction process?	reports Site visit		
	Was the composition of governance teams	Interviews / workshops		
	appropriate for the project?	Infection control impact reports		
	Were there any operational issues identified during construction e.g. were communication processes effective, were there issues associated with decanting of services?	Disturbance, interruptions		
	Were there identified issues with the built environment e.g. latent conditions, poor construction, supply/coordination of FF&E.			
Project commissioning / handover	Were roles and responsibilities relating to project commissioning clearly defined?	Commissioning Plan Interviews / workshops		
	Was adequate time allowed for commissioning?			





Evaluation Area	What is Assessed / Items to Consider	Potential Sources of Information
	Were the appropriate resources engaged in the commissioning process?	
	Was an operational manual provided for the facility during commissioning?	
	What were the strengths and weaknesses associated with the handover process?	
Economic performance	Comparison of final capital expenditure against	Business case
	the capital cost estimate stated in the Business Case and benchmarks.	Economic Appraisal / Cost Benefit Analysis
	Comparison of operating expenditure against projected recurrent costs stated in the Business	Contract documentation
	Case.	Final project financial summary
	What is the cause of discrepancies between estimated and actual capital expenditure?	
	What is the cause of discrepancies between estimated and actual recurrent expenditure?	





# 04 POE Report Template

The table below provides a suggested POE template as a basis for further detail to be developed at a jurisdictional level. It is acknowledged that a number of jurisdictions already have detailed POE templates in place.

Section	Content
Executive Summary	Project name and high-level description of the project deliverables
	Scope of the POE
	Overview of POE methodology
	Major recommendations
Project Description	Brief overview of:
	Site/s including types and level of services provided
	Project scope
	Budget
	Procurement strategy
	Program including commissioning date and date of POE visit
POE Methodology	<ul> <li>POE governance arrangements including personnel involved in developing the POE</li> </ul>
	How was the POE undertaken e.g. desktop review, site visit, interviews etc.
	Documentation reviewed and data collection methodology
	<ul> <li>Key participants involved (interviews, workshops, surveys)</li> </ul>
Findings	Service Need / Outcomes
	- Quantitative and qualitative assessment of evaluation areas
	- Strengths and weaknesses
	Design and Building Performance
	- Quantitative and qualitative assessment of evaluation areas
	- Strengths and weaknesses
	Project Implementation
	- Assessment of evaluation areas
	- Strengths and weaknesses
Recommendations	Recommendations specific to the project
	Lessons learned that may benefit current and future projects
	<ul> <li>Lessons learned to be considered in future AusHFG reviews.</li> </ul>
Appendices	





# 05 References & Further Reading

#### References

Blanch, S., Frazer, A., 2023, Understanding Post Occupancy Evaluation Processes for Public Healthcare Facilities in Australia and Aotearoa New Zealand, Health Environments Research & Design Journal. 16(4), DOI: 10.1177/19375867231171706

Preiser, W., Hardy, A., and Schramm, U., 2018, From Linear Delivery Process to Life Cycle Phases: The Validity of the Concept of Building Performance Evaluation, in 'Building Performance Evaluation', Springer International, pp. 3-18.

## **Further Reading**

POE guidelines, policies and templates should be sought from the relevant jurisdiction, acknowledging that a number of these are not publicly available or may have been updated since this document was published.

Jurisdictional Guidelines and Frameworks:

ACT Government Capital Framework, <u>Post Implementation Review Process & Evaluation Methodology</u> NSW Health Infrastructure Guidelines for Post Occupancy Evaluation in NSW 2022



# Appendix 1: Example Fields for Central Repository of Lessons Learned

A central repository of POE outcomes / lessons learned can support the distribution of learnings and allow stakeholders to search by specific fields relevant to their project or area of interest. An example of the types of fields that may be considered is included below. **The POE categories noted are examples only and this is not intended to be an exhaustive list.** These may be linked to the evaluation categories outlined in Section 3.

The opportunity to share lessons learned across jurisdictions may be considered by AHIA in the future, acknowledging that an agreed set of fields and POE categories will need to be established.

Jurisdiction / Health Service Provider	Hospital Type	Project Type	Service (HPU)	POE Category	POE Sub-Category	Lesson Learned / POE Recommendation	For consideration in future AusHFG reviews?
This will depend on the scope of the repository.	Small Rural Hospital / MPS through to Principal Referral Hospital and Specialist Hospitals (e.g. Paediatrics; Women's & Newborns).  The types of hospitals may be linked to the Australian hospital peer groups as defined by the Australian Institute of Health and Welfare.	Categories may include new build, refurbishment, ICT, equipment replacement etc.	General or specific HPU e.g. ED, ICU, Operating Suite, Medical Imaging etc.	Functional relationships / activity flows  Support for service efficiency  Quality and safety  Fit for purpose rooms / spaces  Room fabrics / finishes	<ul> <li>Patient flows</li> <li>Movement of staff</li> <li>Movement of materials</li> <li>Wayfinding</li> <li>Models of care</li> <li>Operational practices</li> <li>New technology / equipment</li> <li>Work Health &amp; Safety</li> <li>Security</li> <li>CPTED</li> <li>Infection prevention and control</li> <li>Environmental considerations</li> <li>Types of rooms / spaces</li> <li>Room sizes</li> <li>Room layouts</li> <li>Ceilings</li> <li>Walls and wall protection</li> <li>Floors</li> <li>Windows</li> <li>Door Protection</li> </ul>		Yes / No

Jurisdiction / Health Service Provider	Hospital Type	Project Type	Service (HPU)	POE Category	POE Sub-Category	Lesson Learned / POE Recommendation	For consideration in future AusHFG reviews?
				FF&E / MME	<ul> <li>FF&amp;E – major categories may be defined e.g. doors.</li> <li>MM&amp;E</li> <li>Procurement methodology</li> <li>Repair and maintenance</li> </ul>		
				Technology	Use and functionality of technology     Technology innovations		
				Site access & accessibility	<ul> <li>Vehicle access</li> <li>Pedestrian access</li> <li>Parking</li> <li>Access control</li> <li>Universal Access</li> </ul>		
				Engineering and Building services	<ul><li> Electrical</li><li> ICT</li><li> Fire Services</li><li> Hydraulics</li><li> Mechanical</li></ul>		
				Environmental sustainability	Medical Gas		
				Project governance arrangements			
				Program wide strategies	<ul> <li>Risk management</li> <li>Change management</li> <li>Communication and stakeholder management</li> <li>Workforce planning</li> </ul>		
				Project commissioning / handover			