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Health Workforce Australia Expanded Scopes of Practice Program: evaluation framework

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Health Workforce Australia Expanded Scopes of Practice Program: evaluation framework

Abstract

In June 2012, the Centre for Health Service Development (CHSD), University of Wollongong, was appointed by Health Workforce Australia (HWA) as the national evaluator of the Expanded Scopes of Practice (ESOP) Program. This report provides the current iteration of the evaluation framework for HWA Australia's ESOP Program. HWA through this Program has initiated a range of projects that support implementation of the National Health Workforce Innovation and Reform Strategic Framework for Action 2011-2015. The ESOP Program (also referred to as the 'Program'), has been developed as part of the corresponding HWA work plan. This evaluation framework aims to ensure a robust evidence base is developed to support evaluation at the local setting and a national approach for each of the four sub-projects and the Program as a whole. It has been refined in consultation with lead and implementation sites through a combination of teleconferences, meetings and site visits. The introductory workshops (which included Clinical Advisers) that were held for each sub-project in August and September 2012 also provided an opportunity for feedback. The evaluation framework has been presented to each of the three Project Advisory/Reference Groups to gain input from these key stakeholders. Officers of HWA have provided detailed feedback which has been incorporated in this version of the evaluation framework. A set of Key Performance Indicators (KPIs) will be collected for each sub-project in addition to a range of evaluation information to address national evaluation requirements. In combination this data and information will ensure the evaluation reports on the key domains of inquiry for HWA: workforce capacity; effectiveness including the impact and experience for consumers and service providers as well as safety and quality outcomes; economic measures including cost and efficiency; workforce productivity; sustainability and the generalisability or scalability of the implemented models. The evaluation framework will be progressively implemented at all project sites. It will form the basis for future reporting by the National Evaluation Team.

Keywords

framework, evaluation, program, practice, workforce, scopes, health, expanded, australia

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Table of Contents

1	INTRODUCTION	5
1.1	Background and context	5
1.2	Program structure and objectives	5
1.3	Expanded Scope of Practice-Advanced Practice in Endoscopy Nursing	7
1.4	Expanded Scope of Practice-Physiotherapists in the Emergency Department	8
1.5	Expanded Scope of Practice - Nurses in the Emergency Department.....	8
1.6	Extending the Role of Paramedics.....	9
2	EVALUATION STRATEGY	11
2.1	Aim and purpose	11
2.2	Elements	12
2.3	Evaluation framework design	12
2.4	Formative and summative evaluation.....	14
2.5	Evaluation questions for the ESOP Program.....	15
2.6	Key concepts	16
3	METHODS – PROGRAM LEVEL EVALUATION	19
3.1	Training evaluation	19
3.2	Implementation evaluation	20
3.3	Economic evaluation	21
3.4	National implementation requirements	22
4	METHODS – SUB PROJECT AND PROJECT EVALUATION	24
4.1	Introduction	24
4.2	Expanded Scope of Practice-Advanced Practice in Endoscopy Nursing	24
4.3	Expanded Scope of Practice-Physiotherapists in the Emergency Department	29
4.4	Expanded Scope of Practice-Nurses in the Emergency Department.....	34
4.5	Extending the Role of Paramedics.....	38
5	SOURCES OF DATA	43
5.1	Routinely collected clinical and administrative datasets.....	43
5.2	One off data collection activities	45
5.3	Tools developed specifically for the national evaluation	45
5.4	Evaluation methods and metrics developed specifically by project sites	46
5.5	Project progress reports	46
5.6	Site visits	46
5.7	National workshops	47
5.8	Stakeholder interviews and surveys	47
5.9	Sampling	47

5.10	Ethics and confidentiality -----	48
6	PROGRAM EVALUATION REPORTS	49
6.1	Progress reports-----	49
6.2	Final report-----	49
7	EVALUATION RISKS	50
7.1	Managing risks-----	50
7.2	Evaluation risks-----	50
8	STAKEHOLDER MANAGEMENT PLAN	54
8.1	Who are the stakeholders? -----	54
8.2	Communication with HWA -----	54
9	COMMUNICATION WITH PROJECTS	55
9.1	Communication with Project Advisory Groups and Clinical Advisers -----	55
9.2	Communication with Jurisdictions-----	56
Appendix 1	Evaluation Framework.....	60
Appendix 2	Lead and implementation sites and proposed workshop locations.....	63

List of Tables

Table 1	Projects included in the ESOP Program-----	6
Table 2	Domains of Inquiry -----	17
Table 3	KPIs for ESOP-APEN Sub-project-----	25
Table 4	KPIs for ESOP-PED Sub-project-----	30
Table 5	KPIs for ESOP-NED Sub-project -----	34
Table 6	KPIs for ERP Sub-project-----	39
Table 7	Summary of site visits -----	46
Table 8	Summary of workshops -----	47

List of Figures

Figure 1	Program structure and components – ESOP Program.....	6
Figure 2	Evaluation requirements span three levels.....	11
Figure 3	Evaluation framework.....	13

Abbreviations

CHSD	Centre for Health Service Development, University of Wollongong
ECP	Extended Care Paramedic
ED	Emergency Department
ESOP	Expanded Scopes of Practice Program also referred to as the Program
ESOP-APEN	Expanded Scope of Practice – Advanced Practice in Endoscopy Nursing
ESOP-PED	Expanded Scope of Practice – Physiotherapists in the ED
ESOP-NED	Expanded Scope of Practice – Nurses in the ED
ERP	Extending the Role of Paramedics
GP	General Practitioner
HWA	Health Workforce Australia
ICP	Intensive Care Paramedic
NET	National Evaluation Team
SAAS	South Australian Ambulance Service
VIRIAF	Victorian Innovation and Reform Impact Assessment Framework

1 INTRODUCTION

1.1 *Background and context*

In June 2012, the Centre for Health Service Development (CHSD), University of Wollongong, was appointed by Health Workforce Australia (HWA) as the national evaluator of the Expanded Scopes of Practice (ESOP) Program. This report provides the current iteration of the evaluation framework for HWA Australia's ESOP Program. HWA through this Program has initiated a range of projects that support implementation of the National Health Workforce Innovation and Reform Strategic Framework for Action 2011-2015. The ESOP Program (also referred to as the 'Program'), has been developed as part of the corresponding HWA work plan.

This evaluation framework aims to ensure a robust evidence base is developed to support evaluation at the local setting and a national approach for each of the four sub-projects and the Program as a whole. It has been refined in consultation with lead and implementation sites through a combination of teleconferences, meetings and site visits. The introductory workshops (which included Clinical Advisers) that were held for each sub-project in August and September 2012 also provided an opportunity for feedback. The evaluation framework has been presented to each of the three Project Advisory/Reference Groups to gain input from these key stakeholders. Officers of HWA have provided detailed feedback which has been incorporated in this version of the evaluation framework.

A set of Key Performance Indicators (KPIs) will be collected for each sub-project in addition to a range of evaluation information to address national evaluation requirements. In combination this data and information will ensure the evaluation reports on the key domains of inquiry for HWA: workforce capacity; effectiveness including the impact and experience for consumers and service providers as well as safety and quality outcomes; economic measures including cost and efficiency; workforce productivity; sustainability and the generalisability or scalability of the implemented models.

The evaluation framework will be progressively implemented at all project sites. It will form the basis for future reporting by the National Evaluation Team.

1.2 *Program structure and objectives*

Innovative work has already been undertaken by State and Territory health authorities in expanding scopes of practice, but there is a need for evaluation and knowledge transfer. HWA has identified promising examples of expanded scope of practice interventions that are already occurring. The overall aim of the Program is to introduce innovative health workforce roles that have the capacity to be adapted for other locations or scaled up nationally. These re-configured workforce roles are intended to improve access to care, enhance the patient journey and ultimately improve health outcomes. The ESOP Program will rigorously assess and identify what works within specific contexts; provide the tools and guidelines required for wider national implementation if appropriate and promote the lessons from these projects.

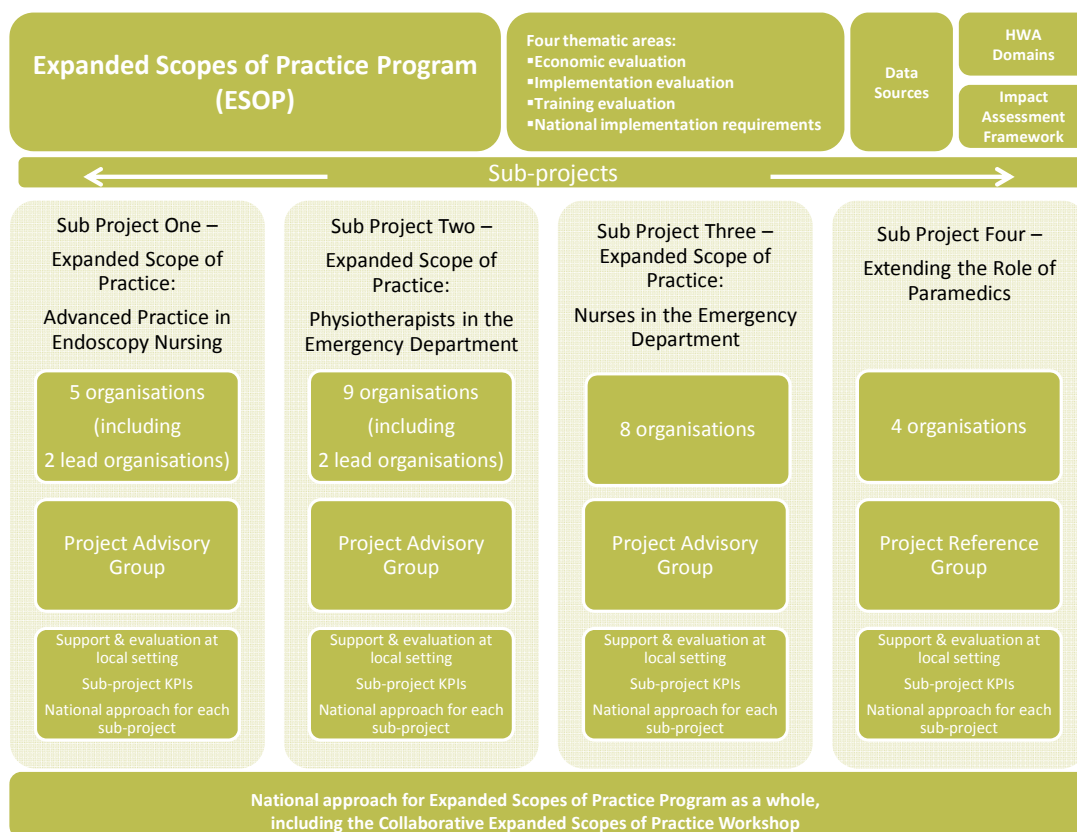
Four sub-projects have been specified and each has multiple project sites. Project implementation will be influenced by local conditions and development opportunities. As a result, the evaluation tasks vary for each sub-project, depending on its specific aims and particular stage of development. For example, sub-projects with lead sites require dynamic evaluation methods that address implementation fidelity issues and the relationship between the lead and implementation sites. In addition, within each sub-project there is a desire that lessons learned are shared and that the collective experience of projects is harnessed. Future sub-project workshops and the final national collaborative workshop provide a forum to share lessons learned.

The four sub-projects of the Program comprise the following:

- **Expanded Scope of Practice** - Advanced Practice in Endoscopy Nursing (Lead and Implementation sites)
- **Expanded Scope of Practice** - Physiotherapists in the Emergency Department (Lead and Implementation sites)
- **Expanded Scope of Practice** - Nurses in the Emergency Department (Implementation sites)
- **Extending the Role of Paramedics** (Implementation sites)

The Program structure is diagrammatically represented in Figure 1.

Figure 1 Program structure and components – ESOP Program



The projects are spread across all States and Territories, with the exception of Western Australia. Two sub-projects have both lead and implementation sites and the remaining two sub-projects focus on implementation sites. The location of all project sites is provided in Table 1 below.

Table 1 Projects included in the ESOP Program

Project Name	Lead Site	Implementation Site
Expanded Scope of Practice - Advanced Practice in Endoscopy Nursing	Logan and Beaudesert Hospital	<ul style="list-style-type: none"> ▪ Logan Hospital, Queensland
	Austin Hospital Consortium	<ul style="list-style-type: none"> ▪ Austin Hospital and Heidelberg Repatriation Hospital, Austin Health, Victoria ▪ Western Hospital and Sunbury Day Hospital, Western Health, Victoria ▪ Alfred Hospital, Alfred Health, Victoria

Project Name	Lead Site	Implementation Site
		<ul style="list-style-type: none"> ▪ Monash Medical Centre, Southern Health, Victoria
Expanded Scope of Practice – Physiotherapists in the ED	The Alfred Hospital	<ul style="list-style-type: none"> ▪ Alfred Hospital and Sandringham Hospital, Alfred Health, Victoria ▪ Casey Hospital and Dandenong Hospital, Southern Health, Victoria ▪ St Vincent’s Hospital Melbourne and Ballarat Hospital, Victoria ▪ Alice Springs Hospital, Northern Territory
	The Canberra Hospital/ACT Health	<ul style="list-style-type: none"> ▪ Canberra Hospital, Australian Capital Territory ▪ Cairns Base Hospital, Queensland ▪ Robina Hospital, Gold Coast Health Service District, Queensland ▪ Flinders Medical Centre, South Australia
Expanded Scope of Practice – Nurses in the ED		<ul style="list-style-type: none"> ▪ Prince of Wales Hospital, Sydney, New South Wales (fourth door project) ▪ Royal Prince Alfred Hospital, Sydney, New South Wales (mental health) ▪ Wollongong Hospital, Wollongong, New South Wales (mental health) ▪ Murrumbidgee Local Health District, New South Wales – including four rural hospital sites (rural model) ▪ Kilmore and District Hospital, Kilmore, Victoria (rural model) ▪ Sunshine Hospital, Melbourne, Victoria (paediatrics) ▪ Royal Children’s Hospital, Melbourne, Victoria (paediatrics) ▪ Eastern Health (Maroondah Hospital, Box Hill Hospital and Angliss Hospital), Melbourne, Victoria (mental health)
Extending the Role of Paramedics		<ul style="list-style-type: none"> ▪ Port Lincoln on the Eyre Peninsula, South Australia, SA Ambulance Service (regional setting) ▪ Limestone Coast, adjacent to Mt Gambier and the South Australian /Victorian border, SA Ambulance Service (regional setting) ▪ Australian Capital Territory, ACT Ambulance Service (urban setting) ▪ Northern Territory, St John Ambulance NT – the greater Darwin region (urban/regional setting) ▪ Tasmania, Ambulance Tasmania – Launceston region (rural and regional setting).

1.3 *Expanded Scope of Practice-Advanced Practice in Endoscopy Nursing*

This sub-project responds to the national trend of increasing demand for endoscopy due to the implementation of the national bowel cancer screening program. There is a resulting need to enhance the capacity and capability of the workforce to cope with this demand (The Cancer Council Australia and Australian Government Department of Health and Ageing 2006; Quality Working Group for the National Bowel Cancer Screening Program 2008). The sub-project aims to implement an innovative model of expanded scope of practice for nurse endoscopists. Although there is not a mature model of advanced practice in nurse delivered endoscopy developed within Australia, progress is occurring, hence the establishment of two lead sites. There are well established models and training programs in the UK (Williams et al, 2009). The two lead organisations are also implementation sites and in turn are supporting five implementation sites as listed in Table 1, (thus there is a total of seven project sites).

According to the RFP documentation, the objectives of this sub-project are to:

- Identify an innovative model of extended scope of practice for nurse endoscopists that demonstrates improved productivity in terms of waiting times for an endoscopic procedure;
- Implement a new workforce role on a national basis with consideration of national training and scope of practice guidelines;
- Establish a national training program for nurse endoscopists;
- Facilitate the redesign of the workforce to match the changing needs and demands of the service and not the determination of professional boundaries;

- Develop toolkits and implementation guidelines including requirements to support national implementation.¹

1.4 Expanded Scope of Practice–Physiotherapists in the Emergency Department

This sub-project responds to the increasing number of presentations to Emergency Departments and the pressures on local systems from the newly implemented national four hour rule (the National Emergency Access Target). This sub-project has two lead organisations (The Alfred Hospital in Melbourne and The Canberra Hospital – ACT Health Directorate - both sites currently have existing models in place) and are also implementation sites. There are a further nine implementation sites who are implementing a model from a lead site directly or adapting it as needed with the support of the lead site refer to Table 1, (thus there is a total of eleven project sites).

According to the RFP documentation, the objectives of this sub-project are:

- To implement new workforce roles, on a national basis with consideration of national training pathways, by building on work already undertaken on extended scope of practice in physiotherapy roles;
- To facilitate the redesign of the workforce to match the changing needs of the service and not the determination of professional boundaries;
- To implement innovative roles that operate as stand alone practitioners in the ED environment, with the scope to assess, order diagnostics, treat and discharge patients without intervention from a medical practitioner;
- To identify models of extended scope of practice for physiotherapists in EDs that demonstrate improved productivity by improving patient flow, decreasing waiting time for patients in the ED and meeting KPIs for triage times by category and for 4 hours waiting time;
- To support medical staff in the environment of recruitment issues and shortage of ED medical practitioners;
- To develop toolkits and implementation guidelines including consideration of training requirements and training programs to support national implementation.²

The workforce issues for emergency medicine specialists arising from the combination of increased demand and stringent performance targets are well suited to strategies to develop innovative expanded scope of practice roles for the current workforce. In this sub-project there is a relatively straightforward time-based effectiveness indicator, in this case derived from the nationally mandated four hour target. The model in place at lead sites is seen as relatively robust and to have succeeded in the metropolitan setting. Of particular interest is the adaptability of this model to regional and rural settings.

1.5 Expanded Scope of Practice - Nurses in the Emergency Department

This sub-project also responds to the increasing number of presentations to Emergency Departments and the pressures resulting from the national four hour rule. The aim of this initiative is to introduce expanded scope of practice to nursing roles to support medical practitioners and nurse practitioners to focus on consumers with higher triage categories.

¹ HWA Request for Proposals Extended Scope of Practice for Nurse Endoscopists (Lead Organisations) HWA-RFP/2011/011 and HWA Request for Proposals Extended Scope of Practice for Nurse Endoscopists (Implementation Sites) HWA-RFP/2011/012.

² HWA Request for Proposals Extended Scope of Practice for Physiotherapists in Emergency Departments (Lead Organisations) HWA-RFP/2011/007 and HWA Request for Proposals Extended Scope of Practice for Physiotherapists in Emergency Departments (Implementation Sites) HWA-RFP/2011/008.

The inter-professional, integration and partnership issues described in the physiotherapy sub-project are also relevant here. These include describing the challenges of successfully linking the ESOP work with existing state and territory-based initiatives in clinical services redesign, which have been particularly strong in the areas of aged care and mental health, where managing the partnership arrangements between the new models and the wider system are crucial to the challenge of implementation and long term sustainability. Particular attention in this sub-project will be focussed on the priority areas of mental health, paediatrics and rural and regional implementation.

The multiple implementation sites selected, (thirteen project sites across 8 organisations), are listed in Table 1.

According to the RFP documentation, the objectives of this sub-project are:

- To implement new workforce roles on a national basis with consideration of national training pathways, by building on work already undertaken on extended scope of practice nursing roles;
- To facilitate the redesign of the workforce to match the changing needs of the service and not the determination of professional boundaries;
- To implement roles that operate as stand alone practitioners in the ED environment, with the scope to assess, order diagnostics, treat and discharge patients without the intervention from a medical practitioner;
- To identify innovative models of extended scope of practice for nurses in EDs that demonstrate improved productivity by improving patient flow, decreasing waiting time for patients in the ED and meeting KPIs for triage times by category and potentially improving performance against 4 hours waiting time targets for triage categories 4 and 5.
- To support medical staff in the environment of workforce issues in relation to ED medical practitioners and to reduce workforce time constraints to allow a focus on higher level ED presentations (Australasian triage categories 1-3);
- To develop from these successful models toolkits and implementation guidelines including training requirements to support national implementation.³

1.6 ***Extending the Role of Paramedics***

This sub-project will support the implementation and national transfer of key success elements identified from an existing Extended Care Paramedic (ECP) metro model developed by the South Australian Ambulance Service (SAAS) at several sites across Australia. The capacity of sites to customise the model to meet local needs and conditions is likely to be particularly important as ambulance services are structured differently in most States and Territories. The paramedics participating in this initiative are expected to be at the level of an Intensive Care Paramedic. The academic level associated with this grasp of knowledge and problem solving abilities equates to a Graduate Diploma or equivalent⁴.

According to the RFP documentation:

'Extended Care Paramedic' is based on the description of a South Australian Extended Care Paramedic (ECP). It is an experienced paramedic at intensive care paramedic or equivalent level who has subsequently gained extra expertise in evaluation and assessment of complex clinical and social/environmental situations. The ECP has advanced problem solving and negotiating/communicating skills. ECPs work as an integrated part of a multidisciplinary care team, utilising their assessment, problem-solving and communication skills to ensure that the

³ HWA Request for Proposals: Extended Scope of Practice for Nurses in Emergency Departments (Implementation Sites) HWA-RFP/2011/010.

⁴ HWA Request for Proposals: Extending the Role of Paramedics RFP Number: HWA-RFP/2011/015, pages 5 and 26.

consumer receives the right care delivered in the right situation at the right time by the right members of the health care team.'

In summary this project will focus on extending the competencies and capabilities of paramedics (at SA ICP equivalent level) to provide, in collaboration with other health care professionals, emergency health care to consumers in their usual residence wherever appropriate. It aims to be complementary to the primary care delivered by the consumer's usual General Practitioner.

The objectives of this sub-project are to:

- reduce costs to the health system associated with ED presentations or early entry into aged care facilities that could be more effectively and appropriately managed in the patients' usual place of residence, and involves the patients' usual GP wherever possible;
- increase the capability and capacity of aged care and community health professionals to deliver quality care in the patients' usual place of residence;
- minimise disruption to patients, their carers and family by providing high level care in their usual residence where appropriate;
- increase career pathways and retention strategies for paramedic professionals.

This project aims to support the national transfer and further implementation of critical elements of an existing Extended Care Paramedic model.⁵

The five implementation sites that have been selected are listed in Table 1 (note that one organisation is supporting two implementation sites).

⁵ HWA Request for Proposals: Extending the Role of Paramedics RFP Number: HWA-RFP/2011/015.

2 EVALUATION STRATEGY

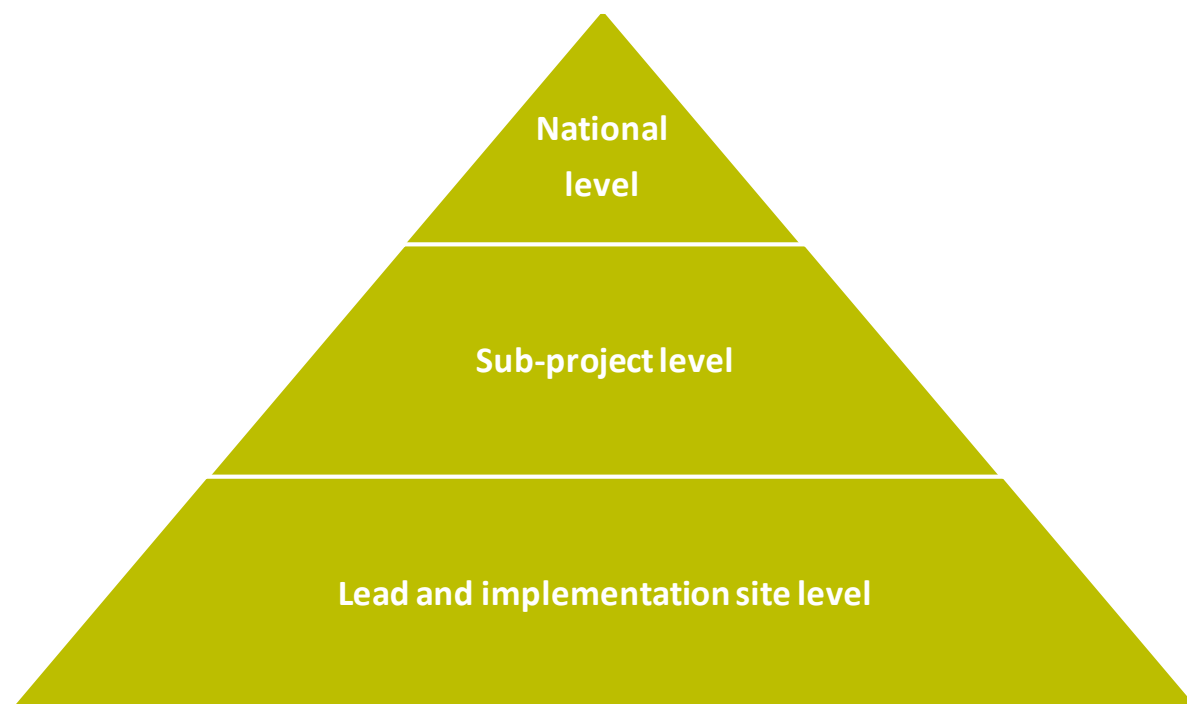
2.1 *Aim and purpose*

The role of CHSD is to evaluate the Program as a whole as well as to provide evaluation support and assistance to each of the funded local projects within the Program. The requirements of the evaluation, as specified in the Official Order/Contract are to:

- Develop and implement an evaluation approach for HWA's ESOP Program. The evaluation approach will ensure a robust evidence base is developed to support evaluation at the local setting, a national approach for each of the four sub-projects and for the ESOP Program as a whole.

The overall aim of the evaluation is to allow the achievements of the ESOP Program to be assessed against its objectives. This will include assessing how successfully the Program has been implemented, whether the desired results have been achieved and what lessons have been learnt that can lay the ground-work for national replication of appropriate projects. The evaluation framework is designed to generate findings at the level of each project site (including lead and implementation sites); these will be rolled up to the level of each sub-project, with these findings in turn contributing to the evaluation findings at the national level (refer to Figure 2). Each project site is responsible for conducting their own local evaluation. This must align with the requirements of the overarching Program or national evaluation. At the very least each project site will collect the data and information required for the national evaluation. Some projects may wish to collect additional data to answer questions that are particularly relevant to their local organisational setting. HWA is particularly interested in the associated workforce impact of the expanded scope of practice roles on other members of the health care team and the workforce changes that occur across the care continuum.

Figure 2 Evaluation requirements span three levels



In addition the ESOP Program evaluation will specifically address four thematic areas:

- Implementation evaluation
- Economic evaluation
- Training evaluation
- National implementation requirements

The National Evaluation Team is responsible for producing a final report on each of the four sub-projects and a final synthesising report that addresses the national implementation requirements. These reports are due from June – September 2014. The reporting requirements for lead and implementation sites are outlined in each project's respective Funding Agreement with HWA.

2.2 Elements

The Program evaluation comprises six elements:

- An evaluation framework that allows the ESOP Program to be systematically evaluated over the life of the Program, using a framework developed previously by CHSD that has been adapted for the purposes of this evaluation;
- A set of key 'evaluation questions' that focus on the principal domains of inquiry for the ESOP Program, (refer to Appendix 1);
- A set of Project level evaluation measures that includes KPIs to monitor and measure the sub-project inputs, outputs and outcomes;
- A set of additional sub-project evaluation measures that focus on the functioning of each;
- A set of Program evaluation measures that assess the overall performance of the Program;
- A methodology for the collection and analysis of evaluation data.

2.3 Evaluation framework design

The ESOP Program evaluation is based on a broad evaluation framework that we have used previously in several national program evaluations. This framework recognises that Programs such as the ESOP aim to make an impact at multiple levels, each of which needs to be considered in the evaluation:

- Level 1: Impact on, and outcomes for, consumers (consumers, families, carers, friends, communities)
- Level 2: Impact on, and outcomes for, providers (professionals, volunteers, organisations)
- Level 3: Impact on, and outcomes for, the system (structures and processes, networks, relationships)

Six 'plain language' evaluation questions are posed to assist in considering all the relevant evaluation issues (Figure 3). These questions provide a starting point to define the scope of the evaluation and assist with data collection. This framework aligns well with the HWA Impact Assessment Framework and is able to integrate with the key domains of inquiry relevant to HWA. It is also compatible with the Victorian Innovation and Reform Impact Assessment Framework.

A brief overview of each of the six key elements in the evaluation framework follows.

Figure 3 Evaluation framework

EVALUATION HIERARCHY	What did you do?	How did it go?	Can you keep going?	What has been learnt?	Are your lessons useful for someone else?	Who did you tell?
	PROGRAM / PROJECT DELIVERY	PROGRAM / PROJECT IMPACT	PROGRAM / PROJECT SUSTAINABILITY	PROGRAM / PROJECT CAPACITY BUILDING	PROGRAM / PROJECT GENERALISABILITY	DISSEMINATION
Level 1 Impact on, and outcomes for, patients (consumers, families, carers, friends, communities)						
Outcomes, indicators and measures to be developed for each cell as relevant	Describe what was implemented and, if necessary, contrast to what was planned	Impact on consumers and carers	Sustainability assessment	Capacity building assessment	Generalisability assessment	Dissemination log
Level 2 Impact on, and outcomes for, providers (professionals, volunteers, organisations)						
Outcomes, indicators and measures to be developed for each cell as relevant	Describe what was implemented and, if necessary, contrast to what was planned	Impact on professionals, volunteers, organisations	Sustainability assessment	Capacity building assessment	Generalisability assessment	Dissemination log
Level 3 Impact on, and outcomes for, the system (structures, processes, networks, relationships)						
Outcomes, indicators and measures to be developed for each cell as relevant	Describe what was implemented and, if necessary, contrast to what was planned	System level impacts, including external relationships	Sustainability assessment	Capacity building assessment	Generalisability assessment	Dissemination log

Program/Project delivery

Program/project delivery (implementation) explores ‘what did you do?’ It includes what was done and how it was done. This includes comparison of what was planned with what was actually delivered. This is a fundamental step in the evaluation process and contributes to evaluability assessment (Hawe et al. 1990).

Program/Project impact

Here we are asking the question ‘how did it go?’ Projects are usually able to describe what they did, but often have a much less clear understanding of whether their activities were successful. This usually includes exploring several dimensions of both project and Program effectiveness with a focus on the project’s objectives.

Sustainability

This element of the framework asks ‘can you keep going?’ The various definitions of sustainability coalesce around two main ideas - sustainability of the direct improvements made as part of a Program, and the sustainability of the techniques and approaches learnt as part of the Program. Evaluation of sustainability is closely aligned with the issue of capacity building (e.g. increased capability and skills, increased resources) and any changes in structures and systems that ‘anchor’ or embed changes and facilitate sustainability.

Capacity building

Capacity building is a key component of the evaluation framework and answers the question, ‘what has been learnt?’ Capacity building includes improving the knowledge and skills of professionals and the system.

Generalisability

The concept of generalisability refers to whether lessons learnt from a project or the Program may be useful to others. In the context of the evaluation of the ESOP Program it also includes the issue of scalability. Can the workforce models be replicated more broadly and/or on a national level?

When considering generalisability it will also be critical to clarify what was unique to each project implementation site and what factors or characteristics were both beneficial and applicable to other sites. This will assist in identifying the key elements that drive the expanded scope of practice models.

Dissemination

This final element focuses on disseminating lessons learnt from both within and beyond the Program. It challenges the projects and the Program to share the knowledge gained throughout the life of the ESOP Program by answering the question 'who did you tell?' Dissemination activities can often be distinguished by two purposes, as follows:

- Information shared with project stakeholders, such as Project Advisory/Reference Group members, management and staff of participating services, and groups or individuals in the local community. This type of dissemination supports the capacity building and sustainability aspects of the project.
- Information shared with the wider community, including clinicians, academics, managers, planners and policy makers. This type of dissemination supports the generalisability of the project.

2.4 *Formative and summative evaluation*

The evaluation framework is structured to generate both formative and summative findings. In designing the methodology for the program evaluation clarity is needed about the purpose of the evaluation. In the case of the ESOP Program there are two components:

- Formative evaluation whereby the results of the evaluation inform the ongoing development and improvement of the program. This 'action research' approach fits well with the aim of the Program to build capacity within the health system for longer term sustainable change. We call this evaluation for learning ('how can we learn and get better as we go?').
- Summative evaluation which seeks to ascertain whether and to what extent the Program was implemented as intended and the desired/anticipated results achieved. The purpose is to ensure accountability and value for money with the results of the evaluation informing any future planning decisions, policy and resource allocation. We call this evaluation for judgment ('how did we do?').

Both components of the evaluation seek to achieve the same goal: to assist clinicians, managers and policy makers to make better informed decisions about how to improve the implementation of expanded scope of practice interventions.

Evaluation is essentially about comparison, for example, comparing:

- What was done with what was planned
- What was achieved with what was intended
- Results before and after a project/intervention
- The results in one project with the results of a similar project
- What was achieved against a set of standards?

Our evaluation will focus on comparing what was achieved by the ESOP Program against the objectives for the Program, and seeking to explore the main barriers and enablers relating to change, including any variation in the experiences of projects and sub-projects. We anticipate that much of the project-level evaluation will compare results before and after the implementation of the expanded scope of practice interventions. During the course of our evaluation we will present and analyse the data collected by ourselves and the data collected by projects on our behalf and make judgments based on our interpretation of the findings.

2.5 Evaluation questions for the ESOP Program

The evaluation logic is derived from the evaluation framework and a series of questions in relation to assessing and estimating the impacts of the ESOP Program. Some questions may need to be adapted as the evaluation progresses, usually due to the lack of appropriate means to collect the required data, and some new questions may emerge over the course of the evaluation. Not all the questions to be answered by the evaluation have a direct link to the Program objectives i.e. the evaluation of the Program is broader than simply determining whether the objectives have been met.

At a national level a range of evaluation questions will be investigated e.g.

- What productivity impacts have been realised in project sites through the ESOP Program?
- Has cost effectiveness been demonstrated in practice?
- Who have been the efficient peers in adopting ESOP strategies in practice?
- What barriers and enablers were there to successful adoption of the ESOP projects?
- What is the best way to implement ESOP initiatives at a national level? (Replicability, from both the health service provider perspective and the broader health system level).
- How can successful expanded scopes of practice models be scaled up nationally?
- What issues emerge when working on expanded scopes of practice models with multiple jurisdictions?

At the sub-project level a range of evaluation questions will be investigated e.g.

- What productivity shifts occurred in the four sub-projects?
- How do you build momentum around the achievements of sub-projects? (Explore the process from idea generation to development then diffusion).
- How did the presence of lead sites influence and impact upon implementation sites?
- What factors contribute to flexibility of use of the workforce in the sub-projects?
- What mechanisms supported sustainability of sub-projects?

At the project level a range of evaluation questions will be investigated e.g.

- Did the projects work and if so, why and what was the context?
- How were changes in the scope of practice implemented at the various project sites?
- What change management processes were used to support implementation? (Identify the barriers to change).
- For projects with existing training curricula – did this meet competency requirements for the context of project implementation?
- What data can be collected at a local level to capture evidence of workforce substitution so that this can inform models of workforce planning?

The questions to be answered by the evaluation are summarised in Appendix 1.

2.5.1 Evaluation information

The evaluation requires data and information to support the activities outlined in the evaluation framework. Data will be collected by individual projects, at the level of sub-projects and to meet the national evaluation requirements.

We will also make extensive use of administrative datasets to reduce the burden of data collection upon project sites in addition to the data resulting from KPIs that projects have identified. Special purpose data collections will occur throughout the implementation period. These will occur for snapshot periods and will vary across sub-projects. For example data relating to the economic evaluation of performance in practice, needs to be collected once training has been completed and implementation is in progress. This is likely to be in the latter stages of some projects.

2.5.2 Key performance indicators

KPIs can be defined in a number of ways, typically involving the measurement of a piece of important and useful information about the performance of a project or program. Where possible, this is usually expressed as a percentage, index, rate or other form of comparison. The KPIs for each sub-project are included in Section 4. These have been refined through consultation with lead and implementation sites, Clinical Advisers, Project Advisory/Reference Groups, independent experts and representatives of HWA.

Under the terms of their funding agreements, each project site is required to provide regular reports on the progress and performance of the implementation of the expanded scope of practice service model. Each project is required to report on KPIs in consultation with the national evaluation team. This evaluation aims to improve the overarching HWA Expanded Scopes of Practice initiative so it is important to identify the most strategic and critical indicators that will show what aspects are working and those aspects in need of improvement. These may be both process and outcome oriented e.g. what critical processes can be designed to show how the implementation sites are going? The KPIs also must contribute to assessment of the effectiveness and efficiency of each project.

A challenge of this evaluation is to find measures that are common to all lead and implementation sites. All projects are concerned with capturing what changes in the scope of practice actually occur, measures of throughput and performance in relation to key metrics (for example in relation to the National Emergency Access Targets for ED based projects); consumer safety and quality outcomes; consumer experience and satisfaction; staff acceptability of the expanded scopes of practice roles; the impact of any practice changes on other members of the health care team and conditions for sustainability.

2.6 Key concepts

The utility of the ESOP Program as a national approach to health workforce reform will be assessed by a wide range of evaluation measures including:

- Implementation activities;
- Relationships built within and between services;
- Increased skills and competencies of practitioners;
- Changes in protocols and/or practices;
- Changes in practitioner roles;
- Consumer outcomes such as safety and acceptability;
- The capacity for national roll-out.

It is important that the implications and additional requirements for national implementation are considered in terms that are consistent with HWA's Domains for Action and contribute to the achievement of its strategic directions:

- Health workforce reform for more effective, efficient and accessible service delivery;
- Health workforce capacity and skills development;
- Leadership for the sustainability of the health system;
- Health workforce planning; and
- Health workforce policy, funding and regulation (HWA, 2011).

In accordance with the charter of HWA, the evaluation of the ESOP Program will address several domains of inquiry: workforce capacity, effectiveness including the impact and experience for consumers and service providers as well as safety and quality outcomes, economic measures including cost and efficiency; workforce productivity; sustainability and the generalisability or scalability of the implemented models (refer to Table 2). These are briefly explained below.

Table 2 *Domains of Inquiry*

HWA Domain of Inquiry	Primary Evaluation Component	Links to CHSD Evaluation Framework
Workforce capacity	Training	Level 2 and 3
Effectiveness	Implementation and Economic	Level 1 and 2
Consumer outcomes and experience	Implementation	Level 1
Provider outcomes and experience	Implementation	Level 2
Safety and quality	Implementation	Level 1 and 2
Cost	Economic	Level 2 and 3
Efficiency	Economic	Level 2 and 3
Workforce productivity	Economic	Level 2 and 3
Sustainability	Requirements for national implementation	Level 3
Generalisability/Scalability	Requirements for national implementation	Level 3

Workforce capacity

Workforce capacity refers to the ability of the workforce to respond to the needs of the population or community it serves. Programs or activities aimed at improving workforce capacity within the health sector aim to upgrade the skills of health care practitioners and the quality and mix of the health workforce to meet the requirements of health services, including through training, registration, accreditation and distribution strategies.

Effectiveness

Effectiveness is the extent to which project objectives are achieved, for example: improvements in waiting time for diagnostic endoscopy; four hour or less waiting time in the ED; increased avoidance of hospital admissions through changes in the scope of practice of ambulance paramedics; skill development and capacity building as appropriate to the scope of practice area.

For the purposes of the evaluation three specific dimensions of effectiveness/cost-effectiveness will be considered: consumer outcomes and experience; provider outcomes and experience; and safety and quality outcomes.

Cost

Costs represent factor inputs weighted by their prices, e.g. labour inputs multiplied by wage rates, disposables by their prices and amortised capital costs.

Efficiency

Efficiency⁶ is relative to what is possible given current technology. In the case of health services efficiency should account for service domain objectives (quality of care) as well as traditional inputs (labour) and outputs in assessing relative performance (Coelli et al., 2005; Eckermann and Coelli, 2008).

Efficiency scores can be measured from an input perspective or output perspective, in each case efficient peers have a score of 1 and inefficient providers a score less than 1. An input perspective allows efficiency measures consistent with the underlying objective of maximising net benefit applying the net benefit correspondence theorem. Inefficiency (1 – efficiency) from an input perspective represents the extent to which a provider could have used less inputs (labour, capital, disposables) and quality indicators framed from a disutility bearing perspective (waiting times, readmissions, iatrogenic events, mortality, morbidity etc.) for given output (ED services, admissions).

Efficiency scores can be calculated for:

- Technical efficiency - proportion could have reduced all inputs for given output, allowing for quality;
- Economic efficiency - proportion could have reduced costs if cost minimisation is the underlying economic objective; quality inclusive costs if maximising net benefit is the underlying economic objective applying the net benefit correspondence theorem;
- Allocative efficiency - proportion could have reduced costs if had appropriate factor input mix given relative factor prices (calculated as residual of economic and technical efficiency);
- Scale efficiency - proportion by which technical efficiency can be explained by size impacts - residual of technical efficiency under constant and variable returns to scale.

Workforce productivity

The concept of workforce productivity is often used synonymously with labour productivity. In the context of this evaluation the term workforce productivity encompasses both labour productivity and total factor productivity.

Labour productivity: the amount of labour inputs per unit of output e.g. full time equivalent (FTE) staff per service (ED occasions of service, admission).

Total factor productivity: weighted total factors (labour, capital, disposables, overheads etc.) per unit of output. Note: weights used may be a set of prices in which case weighted total factors are often represented by costs, or indexed costs over time (costs with a fixed set of index prices or deflated costs), e.g. cost per service (ED occasion of service, admission).

Sustainability

The various definitions of sustainability coalesce around two main ideas - sustainability of the direct improvements made as part of a Program, and the sustainability of the techniques and approaches learnt as part of the Program. Evaluation of sustainability is closely aligned with the issue of capacity building (e.g. increased capability and skills, increased resources) and any changes in structures and systems that 'anchor' or embed changes and facilitate sustainability.

Generalisability/Scalability

The concept of generalisability refers to whether lessons learnt from a project or the Program may be useful to others. In the context of the evaluation of the Program it also includes the issue of scalability. Can the workforce models be replicated more broadly and/or at a national level?

⁶ Refer to the Reference list for the body of work by Coelli, Eckermann, Scott et al that support this interpretation.

3 METHODS – PROGRAM LEVEL EVALUATION

The ESOP Program evaluation is structured around four components (training, implementation, economic and requirements for national implementation) and five broad key performance areas:

- workforce productivity;
- efficiency and effectiveness of the expanded scope of practice, including cost effectiveness;
- increased workforce capacity;
- sustainability of the implemented model; and
- impact on consumer outcomes.

In addition we have also identified provider outcomes and experience, safety and quality and generalisability/scalability as areas for inclusion. We have labelled these concepts as the 'HWA Domains of Inquiry' as they reflect the focus of the evaluation (refer to Table 2).

There is a risk of over specification of the domains so the evaluation will analyse these factors collectively for the relevant primary evaluation components and levels of the evaluation framework. For example, the first and third key performance areas - workforce productivity, and efficiency and effectiveness, including cost-effectiveness – mesh most easily with the economic evaluation, although the implementation evaluation will also shed light on these issues. Increased workforce capacity is best addressed by the training evaluation. The implementation evaluation will also seek to identify the impact of the expanded scope of practice on the workforce capacity of other related members of the health care team i.e. how does the expanded scope of practice influence the work of other members of the health care team. Sustainability of the implemented models will be demonstrated by elements of the implementation evaluation and of course the requirements for national implementation evaluation, but the economic and training evaluations will also be informative here. Similarly, impacts on consumer outcomes will be demonstrated by all four evaluation components; for example, the economic evaluation may tell us about impacts on waiting times in EDs or for endoscopy, while the implementation evaluation tells us about acceptability to consumers. Appendix 1 illustrates these connections and links them to evaluation questions.

3.1 *Training evaluation*

This component of the evaluation focuses on the efficiency and effectiveness of training programs implemented by sub-projects and individual sites in order to provide the necessary skills for the expanded scopes of practice. The key objective relating to this evaluation component is a review of the training programs and their delivery and an analysis of the extent to which they result in “work ready” participants. Specific evaluation criteria will be based on evidence around what contributes to effective health training, and are likely to include factors such as:

- The scope and relevance of the program;
- Trainee selection, including previous qualifications and entry criteria;
- Appropriate delivery, including structured practice experiences and arrangements for clinical supervision;
- Facilities and resources available, including staff qualifications and student support;
- Retention and completion rates;
- The processes supporting assessment of student performance; and
- The development and management of training program delivery across sites (where lead sites exist).

Many of these criteria are common to all sub-projects and sites involved in delivering training. For example, we would expect programs to be developed in consultation with key stakeholders and to address professional body/accreditation requirements, although the specific stakeholders and accreditation requirements will vary by sub-project and site. Similarly, evidence of the attainment of the expanded scope of practice competencies will need to be provided by each site, understanding the specifics will vary.

The application of simulated clinical training in the training pathway may also be considered if appropriate. HWA already has significant experience in assessing the suitability of simulated learning environments.

In the case of the fourth sub-project, Extending the Role of Paramedics, projects will tailor their own training methods starting from a baseline of the SAAS ECP program that has been provided to the sites as a reference. This will be modified according to their particular local needs. These methods will be systematically assessed along with supporting mechanisms (e.g., clinical governance). Where possible the National Evaluation Team will work with other organisations already supporting project sites to ensure that evaluation activities are complementary. For example, the St John's Ambulance organisation in the Northern Territory already has an academic/training partner, Edith Cowan University, which supports the service in the collection of data relating to learning and teaching performed through the partnership. Changes to the content of clinical practice guidelines or protocols are out of project scope as are specific research questions such as whether intensive skills training up front improves competency.

To support the training evaluation three evaluation tools have been developed. Tool 1 "Training Program Review Report" will be completed by all lead sites and any paramedic site that completes training on behalf of other ERP project sites. On completion it will be issued to all related implementation sites for review and comment. Tool 2 "Training Program Quality" will only be completed by the ESOP- Nurses in ED projects to reflect the diverse nature of the training pathways within these project sites. Early indications of the proposed training pathways suggest that Tool 1 is unlikely to be appropriate. Tool 3 "Trainee experiences and satisfaction" will be completed by every practitioner at the completion of their training pathway (irrespective of how long that training pathway takes). All tools will be collated and analysed by the National Evaluation Team.

3.2 Implementation evaluation

This component of the evaluation has an important formative focus: to document differences in implementation methods and progress across sub-projects and sites. This will also contribute to the summative aspect of the evaluation, enabling us to assess the extent to which variations in impacts and outcomes across sub-projects and sites can be attributed to differences in implementation methods. Common strategies and methods will also be documented.

Key questions for the implementation evaluation include the role of the lead organisations (where applicable) and their influence on the working of the implementation sites. Each site will address change management issues to a greater or lesser extent, and will face different barriers and challenges in doing so. The effectiveness of implementation will be influenced by factors such as: funding structures; availability of other resources; policies and guidelines; leadership; staff morale; cooperation across professional boundaries; availability of mentoring and support for trained staff; and communication within the sub-project or site, and with stakeholders.

In addition, the implementation evaluation provides an opportunity to document shifts in workforce time use and roles, and changes in productivity and costs. Where relevant, we will draw on existing administrative data sets and service utilisation data. The longer-term impacts of training are also

relevant to the implementation evaluation. For example, we will want to identify any gaps in training or support discovered by staff after working in their new roles for a while; assess their satisfaction with their expanded duties and responsibilities; the value of ongoing mentoring and professional development opportunities; perceived impacts on career opportunities; and employee turnover. Finally, impacts on consumer safety and quality of care need to be considered as part of the implementation evaluation. Establishing that the new models are acceptable to both providers and consumers is an essential pre-requisite to the potential national roll-out of the expanded scopes of practice.

3.3 *Economic evaluation*

Our economic evaluation will assess incremental impacts of proposed workforce models in practice on service throughput (patient flow), quality of care, and cost per service and compare the relative cost-effectiveness and efficiency of observed practice across sites for:

- Each workforce model compared relatively across sites for the Advanced Practice in Endoscopy Nursing sub-project;
- Each workforce model compared relatively across sites for the Physiotherapists in the Emergency Department sub-project;
- Each workforce model compared across sites for Nurses in the Emergency Department to identify best bet models for further investigation with grouping by location remoteness (metropolitan, rural, regional and remote);
- The models adopted in the implementation sites for extending the role of paramedics with reference to the key success elements identified from the SAAS ECP model and included in the RFP documentation.

HWA is particularly interested in the economic evaluation quantifying the changes in workforce inputs (quantity and cost) and the resultant changes in outputs (quantity and quality). In each case, an assessment will be undertaken as a snapshot of current practice and associated costs and outcomes prior to full implementation and where possible post implementation. This design will facilitate pre-post evaluation in each site as well as case control evaluation between sites to support triangulation in as robust assessment as possible. These comparisons will assist in attributing incremental impacts of differences between organisations, locations and types of expanded practices. It will also allow changes over time to be examined, which is important because these sub-projects will have variable implementation timetables related to the quantity and quality of resources in local settings. Methodological approaches will be the subject of ongoing discussion and refinement in accordance with the models of expanded scope of practice implemented in practice. A patient journey analysis may be useful in highlighting the various members of the healthcare team and the time that each professional contributes to a particular ED episode of care for projects based within the ED setting.

The methods used will be valuable in assessing measurable workforce outcomes, which can relate to multiple factors such as recruitment rate and time, workforce flexibility, skill development and overall productivity.

In summary the approach to economic evaluation differs for each sub-project:

- For the Advanced Practice in Endoscopy Nursing project, we will monitor over the training period how the trajectory changes for the time taken to complete the scope. The same approach can be applied to examine the trajectory for the number of scopes performed per list. A more comprehensive economic evaluation should be delayed until the training pathway has been completed and an efficient level of competency is reached from the extended period of training and learning by doing in practice.

- For the Physiotherapy in ED projects it may be most useful to investigate the extent to which differences in expanded scope of practice roles in various sites explain any differences in total treatment time within the ED. For example does the extent to which Primary Care Physiotherapists can order imaging impact upon total treatment time within the ED?
- For the Nurses in ED projects the economic evaluation is likely to be restricted to a pre and post analysis looking at changes in meeting the National Emergency Access Target (NEAT); changes in total time spent in ED and for re-presentation rates for the type of patients targeted in each project site to determine the best bets for further investment. (This is dependent on the capacity of each site to access these data for the target population pre-implementation of the ESOP project).
- For the Extended Care Paramedic models we will model the incremental cost offsets from any change in the proportion of patients and their casemix that are transported to hospital for each project site. From this analysis a threshold level of the proportion of avoided transports (and potentially subsequent admissions) required to offset the direct cost of the initiative can also be calculated for each site given their observed casemix.

Efficiency

Assessing the incremental cost-effectiveness, efficiency and productivity of the models implemented across ESOP sites will involve case study methods. The aim will be to identify what has been implemented and at what cost. Then the critical elements of each model contributing to any improvements in cost-effectiveness will be investigated.

The field of economic evaluation in health care has expanded rapidly and our methods are consistent with standard textbooks in the field (Drummond et al., 2005; Willan and Briggs 2006), the characterisation of uncertainty, the concept of net benefit and the use of cost-effectiveness thresholds. Additional emphasis is on the latest views on efficiency and productivity (Coelli, Rao and Batesse 2005), skill mix change (Gallagher 2010) and allowing for health outcomes and quality of care impacts in comparing performance in practice (Eckermann, Briggs and Willan 2005, 2008; Eckermann and Coelli 2008, Eckermann and Willan 2011; Eckermann and Coelli 2012).

3.4 National implementation requirements

This component of the evaluation framework aims to identify the conditions and contexts under which implementation is most likely to succeed and the projects are most likely to remain sustainable and cost-effective when scaled up to a national level. Difficulties that might occur when transferring across jurisdictions will need to be identified (e.g. legislative barriers), along with other potential barriers and successful strategies to address these barriers. It is important that this component is considered throughout the Program as well as in a summative fashion at the completion of the sub-projects' activities.

Each sub-project and funded organisation will describe its own context and model and compile its own lessons about the barriers and enablers for implementation. This information will be available to the National Evaluation Team via project documentation including project plans and progress reports. Ideally – and we will work with sites to ensure this – this information will include the perspectives of participating health professionals, other workforce groups and consumers. In addition to this case-specific learning, common data collections based on the use of the national evaluation framework will help draw out lessons for future national implementation, particularly the resource and training implications. This evaluation component is particularly relevant to the sub-projects using more mature models. Each site will be required to contribute data including:

- estimates of net impacts on national workforce costs and quality;
- consideration of possible unintended consequences;

- modelling of training and workforce requirements, both now and in the future, including impacts on related fields and workforce groups;
- an indication of how national training programs in each of the participating workforce groups (physiotherapists, emergency department nurses, paramedics) might be configured to accommodate expanded scopes of practice, considering the capacity required to meet estimated training requirements;
- consideration of system-level changes, including funding, legislation, industrial relations and regulatory requirements, to facilitate wider implementation.

In order to meet these requirements, projects will need to put in place appropriate baseline and ongoing data collections. We see the national evaluator's role as critical in the process of linking data collections with outcomes via the evaluation framework, coordinating data collection and analysis, and integrating information to inform future policy and practice. The collaborative workshop will provide an opportunity to discuss these lessons, highlight successful implementation approaches, and generate suggestions and guidelines leading to the development of a national approach. One important contribution of the ESOP Program evaluation should be an enhanced understanding of how different workforce groups can work together to maximise benefits for consumers and communities, while maximising the cost-effectiveness of services (HWA 2011). In terms of facilitating collaborative practices, the comparisons built into the evaluation framework will be useful in improving the information available to the whole program of work and strengthening the evidence base in the particular areas of nurses' roles, ED practices and paramedic care in the home. One aim of the collaborative workshop component of the evaluation should be to draw out generalisations about the various costs and net benefits of the sub-projects and thereby contribute to the evidence base about workforce process improvement.

4 METHODS – SUB PROJECT AND PROJECT EVALUATION

4.1 *Introduction*

The Program is designed to support local innovations and to evaluate them in terms of their national significance. At the sub-project level we are looking to synthesise the lessons across projects. This data will be generated at the project level and sub-project level.

Each project site (whether lead or implementation) is required to monitor and report on a small suite of common key performance indicators that have been derived from project documentation. These KPIs have been customised for each sub-project; however align with the overarching evaluation framework and HWA domains of inquiry.

In addition, projects may wish to monitor locally relevant KPIs. A range of additional evaluation information will be required to capture findings from lead and implementation sites; at the level of sub-projects and at the national level. The following section outlines the evaluation issues and preliminary KPIs for the four sub-projects.

4.2 *Expanded Scope of Practice-Advanced Practice in Endoscopy Nursing*

4.2.1 *Evaluation issues*

The Expanded Scope of Practice – Advanced Practice in Endoscopy Nursing (ESOP-APEN) project has two lead sites (which are also implementation sites) and an additional five implementation sites, (thus a total of seven project sites). It should be noted that both lead sites are also implementing the initiative within their hospital.

A key evaluation issue is whether the sites can demonstrate improved total factor productivity and effectiveness, defined in terms of cost per diagnostic endoscopy and waiting times for diagnostic endoscopic procedures, (particularly colonoscopy). As well as the relatively straightforward site-specific waiting time indicator there will be evaluation issues in understanding consumer experiences and other indicators of quality and safety. For the ESOP-APEN project we are particularly interested in whether the model leads to equivalent clinical quality in endoscopy assessment and subsequent consumer outcomes. The longer term evaluation questions are more developmental than summative as an aim is to implement a new workforce role on a national basis, taking into consideration the development of toolkits and national training and scope of practice guidelines and whether the sub-project will build the capacity to establish a national training program for nurse endoscopists. Whilst there is interest in understanding whether resource constraints impact upon the demand for endoscopy (i.e. lack of infrastructure and funding for additional lists), this is out of scope of this evaluation.

It is also expected that all implementation sites will complete the same training program; however it should be noted for evaluation purposes if any modifications are made to suit local circumstances. As this sub-project includes both lead and implementation sites, monitoring the partnership arrangements between the lead and implementation sites will be important for this sub-project.

In addition, a range of sites have identified the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) as a useful and practical tool for measuring the appropriateness of workforce projects and their feasibility for broader 'roll-out'. Indicators measured with this tool include: efficiency, effectiveness, sustainability, replicability, scalability and risk.

4.2.2 KPIs

A range of KPIs are provided in Table 3 below. These KPIs have been developed through reviewing the proposed KPIs from each project provided in their response to the Request for Proposal and/or Project Plan. They have been discussed and refined through consultation at the initial sub-project workshop, through site visits and discussion with the Project Advisory Group. Ideally, the aim is to develop a suite of KPIs that are broadly applicable across all four sub-projects.

It is intended that every project site collects the KPIs listed below for a minimum of twelve months. Through monitoring these KPIs project teams will gather information that will assist them to evaluate the achievement of their project objectives at the end of the implementation period. The process of monitoring also supports formative evaluation through providing early indication of risks, allowing corrective action to be taken. Other methods of data collection conducted by the National Evaluation Team will further support the interpretation of the information arising from the KPIs.

Table 3 *KPIs for ESOP-APEN Sub-project*

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
Workforce capacity	1.1 Increased number of nurse endoscopists who have completed the agreed nurse endoscopist training pathway through the ESOP-APEN projects	Record of completion (including evidence of competency assessment) of the agreed nurse endoscopist training pathway.	Quantitative	Level 2
	1.2 Turnover rate of recruited nurse endoscopists during the funded period of the expanded scope of practice project	Record of staff employment for the duration of the project.		
Effectiveness	1.3 Progressive increase in skills of nurse endoscopists in endoscopy procedures	Log book data collected for each nurse endoscopist to comply with the requirements of the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy	Qualitative Quantitative	Level 2
Consumer outcomes and experience	1.4 High level of consumer satisfaction/experience with ESOP-APEN endoscopy services	Consumer survey Consumer follow-up telephone survey 30 days post endoscopic procedure for a 'snapshot' period Patient journey analysis pre and post implementation Log book data and administrative	Qualitative	Level 1

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
	1.5 Number of patients who refuse to be scoped by the nurse endoscopist	records		
Provider outcomes and experience	1.6 High level of staff satisfaction and acceptance of the nurse endoscopy role; staff experience of the impact of the expanded scope of practice role	Staff survey (other members of the health care team)	Quantitative	Level 2
	1.7 Perceptions of the impact of the expanded scope of practice role on key stakeholders	Key stakeholder interviews	Qualitative	
Safety and quality	1.8 Consistent or improved unit safety outcomes post introduction of the ESOP-APEN initiative e.g. number of adverse events; number of consumer complaints	Administrative &/or unit routine data sets	Quantitative	Level 1, 2 & 3
Workforce productivity	1.9 Increased number of 'routine / surveillance' endoscopic procedures completed within the Endoscopy Unit	Administrative &/or unit routine data sets	Quantitative	Levels 2 & 3
	2.0 Number of endoscopic procedures completed by the nurse endoscopist throughout the project (per list and total)			
	2.1 Quantum of other types of activity that the nurse endoscopist is involved in besides endoscopic procedures, e.g. this may include outpatient consultations, multi-disciplinary clinical meetings, etc.	Log book data	Qualitative	
Workforce productivity	2.2 Decreased waiting time for 'routine / surveillance' endoscopic procedures	Administrative &/or unit routine data sets	Quantitative	Level 3
Sustainability	2.3 Conditions for sustained implementation in place	Semi-structured interviews with senior managers to ascertain their perceptions of project sustainability	Qualitative	Level 2 & 3

4.2.3 Explanatory notes

KPI 1.1 Feedback received highlighted the importance of a standard method for assessing competence that should be used across all implementation sites. Nurse endoscopists who complete the agreed training pathway that has been developed by the lead sites in consultation with the Project Advisory Group will have been assessed at multiple stages along the training pathway using a variety

of methods. Whilst ideally each nurse endoscopist will complete the training pathway this may not be the case and it is important to capture how far along the pathway each trainee progresses within the funding period.

KPI 1.2 It was suggested that 'burn out' rates amongst staff should be captured. Measuring turnover of the trainee cohort in comparison with turnover of nurses within the Endoscopy Unit and Hospital will provide an indication of this.

KPI 1.3 Feedback received indicated that this KPI needed to include a specific indication of how 'increased skills' would be measured and to recognise that these skills will progressively increase as the nurses may not start with any skills in conducting endoscopy procedures. The training pathway that has been developed is based on the requirements of the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy and the experience of nurse endoscopy training in the UK, at Logan Hospital, Queensland and Austin Hospital, Victoria. These requirements have several key performance metrics that trainees must record in an electronic log book, for example, colonoscopy trainees must achieve a 90% caecal intubation rate by the completion of training.

KPI 1.4 There was general support for this KPI and most comments related to methodological issues. For example, the consumer survey could be mailed out immediately following the procedure or at the time that the procedure results were provided to the consumer. The consumer survey will be collected for a snapshot period later in the implementation phase of the project when trainees are nearing completion of the training pathway. The timing and method of delivery will be discussed with lead sites.

One lead site currently conducts a follow-up telephone survey 30 days post endoscopic procedure for every consumer and wishes to continue with this practice. This telephone survey is done to collect 30 day morbidity and mortality data. Other implementation sites may wish to replicate this telephone survey as a snapshot data collection for a defined period, to collect additional information on patient outcomes.

Project sites may also choose to complete several patient journey analyses of a high volume procedure, e.g. routine colonoscopy, pre and post implementation of the nurse endoscopist role. This will provide richer detail of the consumer experience, particularly the time spent in each stage of the patient journey and the member of the health care team involved. These patient journeys may produce a suitable subject for the development of a case study by the National Evaluation Team.

KPI 1.5 Consumer feedback highlighted the importance of monitoring patient/consumer refusal to be scoped by the Nurse Endoscopist. When this data is captured is dependent on the booking and consent process of each hospital. It should be noted that recording of refusal may not necessarily demonstrate decreased satisfaction as patients will not experience the procedure performed by a nurse endoscopist. Reasons for refusal need to be documented and reviewed to understand the cause, for example, understanding of communication processes.

KPI 1.6 A staff survey will be completed to gather the views of related members of the health care team working within the Endoscopy Unit and Gastroenterology Service to ascertain their level of acceptance for and satisfaction with the nurse endoscopy role and expanded scopes of practice project. This on-line survey will be developed in Survey Monkey and provide information on the perceived impact of the role on other members of the health care team. Some sites have indicated a preference for before and after surveys of staff attitudes and perceptions, however it is recommended that the staff survey is collected for a snapshot period later in the implementation phase of the project.

Consumer feedback suggested that exploring changes in the professional recognition of ESOP clinicians by their peers should be incorporated in the evaluation; referring to the issue of mutual professional respect and recognition of the expanded skills of the ESOP workforce. This will be incorporated where possible, within the staff survey and/or through the key stakeholder interviews.

KPI 1.7 Perceptions of the impact of the expanded scope of practice role on other key stakeholders will be obtained through conducting semi-structured interviews with key stakeholders. These interviews will be conducted by the National Evaluation Team.

KPI 1.8 Safety and quality outcomes are routinely monitored in hospitals and through data such as consumer complaints and adverse events. All trainees should be required to record this information in their logbook; these entries could then be cross referenced with hospital clinical governance information records. It was noted that the outcomes measured should be comparable across project sites. It was suggested that the number of re-admissions of consumers in 28 days treated for the same health care problem could be monitored. Feedback was received that as polyps regrow this may not be an effective quality measure, however as this is unlikely to occur within 28 days this indicator has been retained. As the completion of endoscopic procedures will be recorded against KPI 1.9, it was suggested that capturing the number of incidences when the trainee 'failed to complete the scope' would also be a useful quality metric. This would need to be monitored at the completion of the training and could be compared with the normative standard established by the Conjoint Committee for the Recognition of Training in Gastrointestinal Endoscopy or with the rates of other endoscopists within the unit.

KPI 1.9, KPI 2.0 and KPI 2.1 These KPIs were initially seen as too broad and that any scopes undertaken by the nurse endoscopist would represent an increase as they currently do not do any, (depending on whether an existing service list is replaced by a training list, in this case there would be a decrease in the number of procedures performed in the unit). It was suggested that the overall throughput of the unit should be monitored, recognising that throughput may decrease because of the supervision requirements of the senior gastroenterologists. It is also important to monitor the number of endoscopic procedures completed by the nurse endoscopist throughout the project in total and how the number per list varies over time with increased training and experience. As these numbers may not necessarily demonstrate an increase, it may be more useful to complete some modelling based on the numbers of scopes being performed by nurse endoscopists that have completed the training pathway at the close of the project to understand the predicted impact of the project in the future.

Several sites raised the importance of capturing other types of activity that the nurse endoscopist is involved in besides endoscopic procedures, e.g. this may include outpatient consultations, multi-disciplinary clinical meetings, etc. The trainee logbook offers the simplest method of recording this activity as it is likely to vary from project site to project site.

KPI 2.2 The waiting time for 'routine/surveillance' endoscopic procedures was identified as an important indicator of performance. Ideally this will decrease when the nurse endoscopist is fully trained and routinely completing lists each week. It was consistently pointed out that it effectively takes two years to train a nurse endoscopist and as such, the real benefits of the expanded scope of practice role will not be seen for several years following this. Data will be collected on the total lists per endoscopy unit for 12 months pre implementation of the ESOP project and during the ESOP implementation period to identify changes in throughput (e.g. through changes in lists), that are not related to the ESOP project. It should be noted that as the model may not demonstrate improved productivity in terms of waiting time within the life of the project (and therefore this indicator may not be measurable), in practice the evaluation will focus on the model's 'potential' to demonstrate improved productivity once fully implemented.

KPI 2.3 HWA wishes to understand the factors that support sustainability of the ESOP projects. The National Evaluation Team will conduct semi-structured interviews with senior managers to ascertain their perceptions of project sustainability at intervals throughout the implementation period.

4.3 Expanded Scope of Practice-Physiotherapists in the Emergency Department

4.3.1 Evaluation issues

The Expanded Scope of Practice – Physiotherapists in the Emergency Department (ESOP-PED) project has two lead and nine implementation sites (a total of eleven project sites). It should be noted that both lead sites are also implementing the initiative within their hospital.

The related evaluation issues of understanding consumer experiences and other indicators of quality and safety will also be relevant in each site, as well as investigating cross professional relationships and how this role supports other members of the health care team. The national implementation issues in the development and dissemination of toolkits, national training and guidelines will need to be understood as a key part of the evaluation. Investigating the barriers and enablers of the wider adoption of successful models will be important as they involve more than the availability of guidelines and toolkits. Workforce acceptance of practice change and the associated scope of physiotherapist integrated activities in ED practice will be key indicators and determinants of ED skill mix change, productivity and effectiveness in practice. For the ESOP-PED projects we are particularly interested in whether musculoskeletal patients can be seen and treated faster by specialised musculoskeletal physiotherapists and experience acceptable and appropriate care. It may also be possible to explore the difference in the quality of care provided by a musculoskeletal physiotherapist in ED compared to usual medical care across some specific parameters.

The evaluation tasks of describing and understanding the challenges of successfully linking the ESOP work with existing State and Territory-based initiatives, managing the partnership arrangements between the lead organisation and the implementation sites and the question of the long term sustainability of the working models will be important. The partnership-building activities between lead and implementation sites will be an additional, important focus for evaluation.

As both lead sites are well established they have evaluation methods already in train, consequently the National Evaluation Team met with the leads to discuss their methods and data collection tools so that where appropriate, the national evaluation can build upon this pre-existing work. In addition, a range of sites have identified the Victorian Innovation and Reform Impact Assessment Framework (VIRIAF) as a useful and practical tool for measuring the appropriateness of workforce projects and their feasibility for broader 'roll-out'. Indicators measured with this tool include: efficiency, effectiveness, sustainability, replicability, scalability and risk.

4.3.2 KPIs

A range of KPIs are provided in Table 4 below. These KPIs have been developed through reviewing the proposed KPIs by each project provided in their response to the Request for Proposal and/or Project Plan. They have been refined through consultation at the initial sub-project workshop, through site visits and discussion with the Project Advisory Group. Ideally, the aim is to develop a suite of KPIs that are broadly applicable across all four sub-projects.

It is intended that every project site collects the KPIs listed below for a minimum of twelve months. Through monitoring these KPIs project teams will gather information that will assist them to evaluate the achievement of their project objectives at the end of the implementation period. The process of monitoring also supports formative evaluation through providing early indication of risks, allowing

corrective action to be taken. Other methods of data collection conducted by the National Evaluation Team will further support the interpretation of the information arising from the KPIs.

Table 4 *KPIs for ESOP-PED Sub-project*

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
Workforce capacity	1.1 Increased number of ESOP physiotherapists who have completed the agreed training pathway through the ESOP-PED projects	Record of completion (including evidence of attainment of competency) of the agreed ESOP physiotherapist training pathway.	Quantitative	Level 2
	1.2 Turnover rate of recruited ESOP physiotherapists during the funded period of the expanded scope of practice project.	Record of staff employment for the duration of the project.		
Effectiveness	1.3 Increased number of Triage Category 3, 4 and 5 musculoskeletal consumers seen by ESOP physiotherapist discharged within 4 hours	Administrative data sets	Quantitative	Level 3
	1.4 Number of Triage Category 3, 4 and 5 patients seen by the ESOP physiotherapist that required medical imaging	ESOP Physiotherapy database		
Efficiency	1.5 Average number of patients/consumers seen per day by the ESOP physiotherapist	Administrative data sets	Quantitative	Level 3
	1.6 Decreased total treatment time for Triage Category 3, 4 and 5 consumers seen by the ESOP physiotherapist			
	1.7 Decreased waiting time for Category 3, 4 and 5 consumers seen by the ESOP physiotherapist			
Consumer outcomes and experience	1.8 High level of consumer satisfaction/experience with ESOP-PED	Consumer survey Patient journey analysis pre and post implementation	Qualitative	Level 1
Provider outcomes and experience	1.9 High level of staff satisfaction and acceptance of the ESOP physiotherapy role; staff experience of the impact of the expanded scope of practice role	Staff survey (other members of the health care team)	Quantitative	Level 2

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
Workforce productivity	2.0 Perceptions of the impact of the expanded scope of practice role on key stakeholders	Key stakeholder interviews	Qualitative	
Safety and quality	2.1 Consistent or improved unit safety outcomes pre and post introduction of the ESOP-PED initiative e.g. number of re-presentations of patients/consumers treated for the same health care problem within 96 hours/readmissions within 28 days; number of adverse events; number of consumer complaints; decreased number of consumers who 'Did not wait'.	Administrative &/or unit routine data sets	Quantitative	Level 1, 2 & 3
Workforce productivity	2.2 Increased capacity of medical staff for the management of more complex ED consumers in a more timely fashion	Administrative &/or unit routine data sets	Quantitative	Level 2 & 3
Workforce productivity	2.3 Increased number of expanded scope of practice physiotherapy procedures undertaken by ESOP-PED in each of the implementation sites e.g. imaging, medication, certification, referrals	Administrative &/or department routine data sets ESOP Physiotherapy database	Quantitative	Levels 2 & 3
Sustainability	2.4 Conditions for sustained implementation in place	Semi-structured interviews with senior managers to ascertain their perceptions of project sustainability	Qualitative	Levels 2 & 3

4.3.3 Explanatory notes

KPI 1.1 Different training pathways have been developed by each lead site. Physiotherapists who complete the agreed training pathway will have been assessed at multiple stages along the training pathway using a variety of methods. (The lead sites will monitor the attainment of competency). Whilst ideally each physiotherapist will complete the training pathway this may not be the case and it is important to capture how far along the pathway each physiotherapist progresses within the funding period.

KPI 1.2 This KPI monitors the retention of personnel for the duration of the project implementation period. Turnover of the trainee cohort can be measured and compared with turnover of physiotherapists within the Hospital; this may provide an indication of burnout.

KPI 1.3 Improvements in the achievement of the National Emergency Access Target, particularly the four hour rule, has been identified by several project sites as a core expectation of the project. The focus is on consumers presenting with a musculoskeletal condition and assessed as Triage Category 3, 4 and 5 (noting that Triage Category 4 and 5 are likely to provide the highest volume of cases

however on occasion a Triage Category 3 case may also be included). As long as ED information systems include a unique identifier for the primary clinician who treated the patient, it may also be possible to compare outcomes for KPIs 1.3 to 1.7 amongst different professional groups e.g. primary contact physiotherapists and medical practitioners. This will assist in identifying any differences in relative effectiveness and efficiency within the context of these indicators.

KPI 1.4 Physiotherapists have indicated that they are likely to order less medical imaging due to their advanced assessment skills for musculoskeletal problems. Consequently monitoring the number of Triage Category 3, 4 and 5 consumers seen by the ESOP physiotherapist that required medical imaging will allow comparison with 'usual practice' in the ED when similar categories of consumers are seen by a Medical Officer or Nurse Practitioner. A project specific data collection tool has been developed by lead sites for use by all implementation sites. This database has been designed to capture the proposed 'expanded' practice of the physiotherapist, e.g. whether medical imaging was ordered and reviewed by the physiotherapist; whether the consumer required medication, certification and/or post discharge referral.

KPI 1.5 Several sites advised that their ED Director expected that the ESOP physiotherapist would see an agreed number of patients/consumers per day/shift and that this metric needed to be monitored. It also provides a basis for comparison with the number of patients/consumers per day/shift seen by other members of the health care team, for example, the Nurse Practitioner. One site noted that this calculation needed to account for any 'non-clinical time' when the ESOP Physiotherapist was not on the ED floor providing consumer care, otherwise the average number of patients/consumers seen per day by the ESOP physiotherapist would be mis-represented.

KPI 1.6 and KPI 1.7 address efficiency measures with most sites anticipating a decreased total treatment time for Triage Category 3, 4 and 5 consumers seen by the ESOP physiotherapist and a decreased waiting time for Category 3, 4 and 5 consumers seen by the ESOP physiotherapist when compared with 'usual practice' (this would be determined by comparing these metrics for the ESOP physiotherapist with what has been recorded retrospectively for other ED health professionals for a matched patient cohort).

KPI 1.8 There was general support for this KPI. Most comments related to methodological issues. For example, the consumer survey could be administered immediately on conclusion of the ED visit. The consumer survey will be collected for a snapshot period later in the implementation phase of the project when ESOP physiotherapists are nearing completion of the training pathway. One site indicated that they would require a specific tool for their indigenous community, whilst other sites raised the challenge of collecting this data from consumers who are non English speaking. If an interpreter is required for the consumer's treatment episode then ideally the interpreter would verbally ask the consumer the questions on the consumer survey at the end of the episode of care. Several sites with higher volumes of paediatric presentations to the ED may require a patient satisfaction survey tool suitable for completion by parents.

One lead site currently conducts a follow-up telephone survey several weeks post ED presentation to obtain consumer outcome data relating to function, pain and return to work indicators. The majority of project sites indicated that they did not have the resources to implement this telephone survey. Other implementation sites may wish to replicate appropriate elements of this telephone survey as a snapshot data collection for a defined period, to provide enhanced insights into patient outcomes.

Project sites may also choose to complete several patient journey analyses of a high volume procedure, e.g. non specific ankle injury, pre and post implementation of the ESOP physiotherapist role. This will provide richer detail of the consumer experience, particularly the time spent in each

stage of the patient journey and the member of the health care team involved. These patient journeys may produce a suitable subject for the development of a case study by the National Evaluation Team.

KPI 1.9 A staff survey will be completed to gather the views of related members of the health care team working within the ED and possibly Physiotherapy Department to ascertain their level of acceptance for and satisfaction with the ESOP physiotherapist role and expanded scopes of practice project. This on-line survey will be developed in Survey Monkey and provide information on the perceived impact of the role on other members of the health care team. Some sites have indicated a preference for before and after surveys of staff attitudes and perceptions, however it is recommended that the staff survey is collected for a snapshot period later in the implementation phase of the project.

Consumer feedback suggested that exploring changes in the professional recognition of ESOP clinicians by their peers should be incorporated in the evaluation; referring to the issue of mutual professional respect and recognition of the expanded skills of the ESOP workforce. This will be incorporated where possible, within the staff survey and/or through the key stakeholder interviews

KPI 2.0 Perceptions of the impact of the expanded scope of practice role on other key stakeholders will be obtained through conducting semi-structured interviews with key stakeholders. These interviews will be conducted by the National Evaluation Team.

KPI 2.1 Safety and quality outcomes are routinely monitored in hospitals and include data that relates to consumer complaints and adverse events. It was noted that the outcomes measured should be comparable across project sites. It was suggested that the number of re-presentations of patients treated for the same health care problem should be monitored. Some facilities monitor patients who re-present to the ED within 96 hours whereas others monitor re-admissions within 28 days; each project site will need to advise on what metric is routinely collected in their hospital. Other safety and quality outcomes include the number of adverse events; number of consumer complaints; and the number of consumers who 'Did not wait'. This data could be linked to the consumers seen by the ESOP physiotherapist and compared to other health care providers within the ED or the performance of the ED as a whole.

KPI 2.2 This KPI aims to capture the increased capacity of medical staff to manage more complex ED consumers. It was suggested by one site that this could be measured by looking for changes particularly in the number of Category 4 and 5 triage presentations compared with Category 1 to 3 triage presentations seen by senior medical staff during the time that the ESOP physiotherapist is within the ED. This information is easily captured in the routine ED administrative dataset so can be analysed. The limited resources for the ESOP projects are likely to result in a negligible impact on the workload of senior medical staff due to the high volume overall of ED presentations, in most departments.

KPI 2.3 The expanded scope of practice is largely derived from the physiotherapist working in a primary contact role. This means that the ESOP physiotherapist will order and review medical imaging; in some jurisdictions prescribe medication; provide sick leave and/or work cover certification as necessary and refer the consumer for ongoing care to hospital outpatient clinics. These planned changes in practice can be monitored over time.

KPI 2.4 HWA wishes to understand the factors that support sustainability of the ESOP projects. The National Evaluation Team will conduct semi-structured interviews with senior managers to ascertain their perceptions of project sustainability at intervals throughout the implementation period.

4.4 Expanded Scope of Practice–Nurses in the Emergency Department

4.4.1 Evaluation issues

The Expanded Scope of Practice – Nurses in the Emergency Department (ESOP-NED) projects are being implemented in eight organisations across multiple implementation sites.

A specific evaluation challenge in this sub-project is finding common evaluation indicators across all projects within each sub-project as the funded initiatives vary markedly in terms of focus and context. The diversity of models are challenging with several at the earlier end of the innovation spectrum. There is interest in whether any of these models generate efficiency improvements within the Emergency Department and identifying the ‘best bets’ for future investment. For the ESOP-NED projects we are particularly interested in more timely assessment, management and discharge of rural, paediatric and mental health ED consumers and their subsequent health outcomes.

4.4.2 KPIs

A range of KPIs are provided in Table 5 below. These KPIs have been developed through reviewing the proposed KPIs by each project provided in their response to the Request for Proposal and/or Project Plan. They have been discussed and refined through consultation at the initial sub-project workshop, through site visits and discussion with the Project Advisory Group. Ideally, the aim is to develop a suite of KPIs that are broadly applicable across all four sub-projects.

It is intended that every project site collects the KPIs listed below for a minimum of twelve months. Through monitoring these KPIs project teams will gather information that will assist them to evaluate the achievement of their project objectives at the end of the implementation period. The process of monitoring also supports formative evaluation through providing early indication of risks, allowing corrective action to be taken. Other methods of data collection conducted by the National Evaluation Team will further support the interpretation of the information arising from the KPIs.

Table 5 KPIs for ESOP-NED Sub-project

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
Workforce capacity	1.1 Number of structured learning sessions/modules that were provided as part of the ESOP- NED project to health care professionals working within the ED.	Project records	Quantitative	Level 2
	1.2 Attendance records of ESOP related personnel at required training activities and summative assessment of competence.	Professional portfolio or log book records of ESOP related nurses.		
	1.3 Turnover rate of recruited ESOP nurses during the funded period of the expanded scope of practice project.	Record of staff employment for the duration of the project.		
Effectiveness	1.4 Evidence of practice changes	Documentary records;	Qualitative	Level 2

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
	made due to the project intervention	logbooks Administrative datasets	Quantitative	
Efficiency	1.5 Increased number of Triage Category 3, 4 and 5 consumers seen by ESOP-NED discharged within 4 hours (as appropriate)	Administrative datasets	Quantitative	Level 3
Consumer outcomes and experience	1.6 High level of consumer satisfaction/experience with ESOP-NED	Consumer survey or focus groups Patient journey analysis pre and post implementation	Qualitative	Level 1
Provider outcomes and experience	1.7 High level of staff satisfaction and acceptance of the ESOP nurse role; staff experience of the impact of the expanded scope of practice role	Staff survey (other members of the health care team)	Quantitative	Level 2
	1.8 Perceptions of the impact of the expanded scope of practice role on key stakeholders	Key stakeholder interviews	Qualitative	
Safety and quality	1.9 Consistent or improved unit safety outcomes pre and post introduction of the ESOP-NED initiative e.g. number of re-presentations of consumers treated for the same health care problem within 96 hours/within 28 days; number of adverse events; number of consumer complaints; number of consumers who 'Did not wait', number of consumers who left against medical advice	Administrative &/or unit routine data sets	Quantitative	Level 1, 2 & 3
Workforce productivity	2.0 Increased capacity of medical staff for the management of more complex ED consumers in a more timely fashion	Semi-structured interviews with other members of the ESOP-NED health care team to ascertain their perceptions of any changes in workflow	Qualitative	Levels 2 & 3
		Administrative &/or unit routine data sets	Quantitative	
Workforce productivity	2.1 Increased number of consumers managed through the ESOP-NED in each of the implementation sites	Administrative &/or department routine data sets	Quantitative	Levels 2 & 3
Sustainability	2.2 Conditions for sustained implementation in place	Semi-structured interviews with senior managers to ascertain	Qualitative	Levels 2 & 3

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
		their perceptions of project sustainability Semi-structured interviews with ESOP-NED personnel		

4.4.3 Explanatory notes

KPI 1.1 and 1.2 There is no consistent training pathway that is applicable to every ESOP-NED project as the projects are all different. Unlike sub-projects where there is a lead site that has developed an agreed training pathway, each project is able to customise the training required to achieve the expanded scope of practice to suit organisational needs. This makes a standardised summative assessment of competence challenging. What can be consistently captured across projects are the number of structured learning sessions/modules that are developed and/or provided as part of the ESOP-NED project to health care professionals working within the ED. In addition the attendance patterns or records of ESOP project related personnel that participated in these required training activities (which may be seminars, in-services, lectures, tutorials, and supervised practice) can be recorded. Those being trained in the 'expanded scope of practice' role should undergo some form of summative assessment of competence and evidence of this attainment should also be recorded on a program by program basis. For example one ESOP-NED project intends to develop a two hour training session that can be delivered through a combination of face to face and on-line methods. Every Registered Nurse in the ED will be required to complete this training session and a corresponding competency assessment to show they have the capacity to implement the required practice change.

KPI 1.3 This KPI monitors the retention of personnel for the duration of the project implementation period. By measuring turnover of the nursing positions that are critical to the successful implementation of the project this rate can be compared with the turnover of nurses within the ED or wider Hospital. It has been raised that in some projects the only additional staff funded are the project personnel and they are working with existing nursing staff within the ED.

KPI 1.4 The ESOP-NED projects are aiming to change nursing practice within the ED. Again because of the diversity of projects it is important to capture the planned practice changes and whether or not they actually occurred. For example one rural project is planning to train nurses in suturing and advanced wound management as these nurses are based in isolated urgent care centres with medical support available on an 'on call' basis. Feedback about this KPI suggested that project sites would need to record not only the practice change that occurred but who changed practice, how effectively this change worked and the effect of the practice change on other members of the health care team.

KPI 1.5 Improvements in the achievement of the National Emergency Access Target, particularly the four hour rule, has been identified by several project sites as a core expectation of the project. The focus is on consumers assessed as Triage Category 3, 4 and 5. However this consumer group is not necessarily the focus for all ESOP-NED projects. For example a project focused on improved patient flow for mental health consumers may be more concerned with a consumer identified as a 'frequent flyer' and needing improved care coordination and referral. A range of feedback was received that

questioned whether it would be possible to demonstrate improvements in patient flow and productivity gains within the timeframe of the ESOP-NED projects.

KPI 1.6 There was general support for this KPI. The timing of administration of the consumer survey will be dictated by the nature of the ESOP-NED project, however where possible should be administered immediately on conclusion of the ED visit. The consumer survey will be collected for a snapshot period later in the implementation phase of the project. For some groups of consumers focus groups were seen as a preferred method to explore consumer experience of the expanded scope of practice service. Each project should determine their preferred data collection method based on the nature of their project and their resources available for evaluation.

Several sites expressed interest in conducting a follow-up telephone survey post ED presentation, for example, to find out why consumers 'Did not wait' for treatment. Other implementation sites may wish to also conduct a telephone survey as a snapshot data collection for a defined period.

Project sites may also choose to complete several patient journey analyses of a high volume procedure, pre and post implementation of the ESOP nurse role. This will provide richer detail of the consumer experience, particularly the time spent in each stage of the patient journey and the member of the health care team involved. These patient journeys may produce a suitable subject for the development of a case study by the National Evaluation Team.

KPI 1.7 A staff survey will be completed to gather the views of related members of the health care team working within the ED to ascertain their level of acceptance for and satisfaction with the ESOP nurse role and expanded scopes of practice project. This on-line survey will be developed in Survey Monkey and provide information on the perceived impact of the role on other members of the health care team. It is recommended that the staff survey is collected for a snapshot period later in the implementation phase of the project.

KPI 1.8 Perceptions of the impact of the expanded scope of practice role on other key stakeholders will be obtained through conducting semi-structured interviews with key stakeholders. These interviews will be conducted by the National Evaluation Team.

KPI 1.9 Safety and quality outcomes are routinely monitored in hospitals with data collected relating to consumer complaints and adverse events. It was noted that the outcomes measured should be comparable across project sites. It was suggested that the number of re-presentations of consumers treated for the same health care problem should be monitored. Some facilities monitor consumers who re-present to the ED within 96 hours whereas others monitor re-admissions within 28 days; each project site will need to advise on what metric is routinely collected in their hospital. Other safety and quality outcomes include the number of adverse events; number of consumer complaints; the number of consumers who 'Did not wait' and the number of consumers who left against medical advice were all identified as important indicators.

KPI 2.0 This KPI aims to capture the increased capacity of medical staff to manage more complex ED consumers. It was suggested that this could be measured by looking for changes in the number of Category 4 and 5 triage presentations compared with Category 1 to 3 triage presentations seen by senior medical staff during the time that the ESOP nurse is within the ED as well as the time from triage to treatment for Category 1 to 3 presentations. This information is easily captured in the routine ED administrative dataset so can be analysed. The limited resources for the ESOP projects are likely to result in a negligible impact on the workload of senior medical staff due to the high volume overall of ED presentations in many project sites.

KPI 2.1 No changes were suggested to this KPI – it was seen as a basic throughput measure.

KPI 2.2 HWA wishes to understand the factors that support sustainability of the ESOP projects. The National Evaluation Team will conduct semi-structured interviews with senior managers to ascertain their perceptions of project sustainability at intervals throughout the implementation period. It was also suggested in feedback received in relation to this KPI that there was value in interviewing ESOP-NED personnel to explore issues relating to career pathways and succession planning for ESOP roles. It may also be useful to consider the external links or relationships required to support the sustainability of some projects.

4.5 Extending the Role of Paramedics

4.5.1 Evaluation issues

The Extending the Role of Paramedics (ERP) project has five implementation sites.

The objectives of the sub-project are generally: to expand the competencies of paramedics and improve staff retention; support health care within the consumer's usual place of residence thereby minimising disruptions to both consumers and carers; and to decrease associated costs to the broader health system by reducing admissions to hospital, inter-hospital transfers and early entry into residential aged care facilities. Linked data across paramedic, hospital and aged care facilities is not available to map these impacts. The model is based on involvement with the consumer's usual GP and aims to be complementary to the primary health care delivered by GPs. It will be important to assess the impact of the ECP role on other members of the health care team. For the paramedic project we are particularly interested in the potential for reduction in hospital transfers and subsequent admissions.

Examples of some of the areas that the evaluation will address are listed below:

- Improved client satisfaction through a qualitative survey
- Savings to the health care system through provision of paramedic expanded scope of practice in the community and reductions in hospital attendance and readmissions
- The safety and quality of ECP interventions to ensure continuous quality improvement
- Impact on existing relationships with other health professionals and or networks (e.g. Medicare Local) – how it complements existing primary health care strategies
- Capacity of the program to reduce risk for consumers who do not wish to leave their home/do not result in transport;
- Impact on transport of low acuity consumers to local hospitals
- Impact of having an ECP model on the host ambulance service

The evaluation approach will be different to the nursing ED sub-projects in that the amount of heterogeneity in the scope of activities can be expected to be less and hence the focus will be more on the variability to be examined in the settings where the model is to be implemented. It should be noted however that HWA did not prescribe what the role of the ECP in the community would be and that HWA is not enforcing use of the South Australian Ambulance Service (SAAS) ECP training curricula. It has required all project sites to map their existing curricula requirements against the SAAS ECP model. Similarly, whilst HWA has determined that each project should have a medical mentor; it has not defined how this should occur. An evaluation issue of interest is the extent to which the SAAS ECP training program proves useful and/or how it is modified to meet the training needs of different sites.

The over-arching evaluation will need to take into account the fact that the SAAS is well advanced in its planning and implementation and has developed an evaluation methodology of its own which may

provide useful insights and comparative sources of information for other projects, particularly those based in SA.

4.5.2 KPIs

A range of KPIs are provided in Table 6 below. These KPIs have been developed through reviewing the proposed KPIs by each project provided in their response to the Request for Proposal and/or Project Plan. They have been refined through consultation at the initial sub-project workshop, through site visits and discussion with the Project Reference Group.

It is intended that every project site collects the KPIs listed below for a minimum of twelve months. Through monitoring these KPIs project teams will gather information that will assist them to evaluate the achievement of their project objectives at the end of the implementation period. The process of monitoring also supports formative evaluation through providing early indication of risks, allowing corrective action to be taken. Other methods of data collection conducted by the National Evaluation Team will further support the interpretation of the information arising from the KPIs.

Table 6 *KPIs for ERP Sub-project*

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
Workforce capacity	1.1 Increased number of ECPs who have completed the agreed training pathway through the ERP projects	Record of completion (including evidence of attainment of competency) by the ERP against the agreed training pathway	Quantitative	Level 2
	1.2 Turnover rate of recruited ECPs during the funded period of the expanded scope of practice project	Record of staff employment for the duration of the project		
Effectiveness	1.3 Increased number of extended role paramedic cases undertaken by the ECPs in each of the implementation sites	Administrative &/or department routine data sets ECP Case codes Clinical audit to identify practice changes	Quantitative	Levels 2 & 3
Effectiveness	1.4 Decreased number of consumers transported to ED subsequent to ECP attendance	Administrative data sets ECP Case codes	Quantitative	Level 3
Effectiveness	1.5 Decreased number of inter-facility transfers (as applicable)	Administrative data sets	Quantitative	Level 3
Efficiency	1.6 Average number of consumers seen per shift by the ECP (including triage category, time spent on call, call out ratios, break number metrics etc.)	Administrative data sets ECP Case codes	Quantitative	Level 3

HWA Domain of Inquiry	KPI	Method	Data Type	CHSD Evaluation Framework Level
	<p>1.7 Average waiting time from 000 call to the time the ECP arrived at the scene of the consumer</p> <p>1.8 Number of ECP consumers treated in their 'usual residence'</p>			
Consumer outcomes and experience	1.9 High level of consumer satisfaction/experience with the ECP role	<p>Consumer survey</p> <p>Patient journey analysis pre and post implementation</p>	Qualitative	Level 1
Provider outcomes and experience	<p>2.0 High level of staff satisfaction and acceptance of the ECP role</p> <p>2.1 Perceptions of the impact of the expanded scope of practice role on key stakeholders</p>	<p>Staff survey (other members of the health care team)</p> <p>Key stakeholder interviews</p>	<p>Quantitative</p> <p>Qualitative</p>	Level 2
Safety and quality	<p>2.2 Consistent or improved unit safety outcomes pre and post introduction of the ERP initiative e.g. number of re-contacts with the 000 service by consumers treated by the ECP for the same health care problem ; number of adverse events; number of complaints</p> <p>2.3 Number of ECP cases deemed 'out of scope' by the ECP</p> <p>2.4 Number of consumers refusing treatment by the ECP</p>	<p>Administrative &/or unit routine data sets</p> <p>Clinical case audit</p>	Quantitative	Level 1, 2 & 3
Workforce productivity	<p>2.5 Increased capacity of medical staff to manage more complex ED or primary care consumers in a more timely fashion</p> <p>2.6 Number of consumers referred to the ECP model by other health care providers (source of referral)</p> <p>2.7. Strengthened partnerships developed between other aged care and primary care service providers and the ECP service</p>	Semi-structured interviews with other members of the health care team to ascertain their perceptions of any changes in workflow	Qualitative	Levels 2 & 3
Sustainability	2.8 Conditions for sustained implementation in place	Semi-structured interviews with senior managers to ascertain their perceptions of project sustainability	Qualitative	Levels 2 & 3

4.5.3 Explanatory notes

KPI 1.1 Different training pathways have been developed by each project site to meet the local context of the ambulance service. Paramedics who complete the agreed training pathway will be assessed at multiple stages along the training pathway using a variety of methods. Whilst ideally each ECP will complete the training pathway this may not be the case and it is important to capture how far along the pathway each paramedic progresses within the funding period. Feedback suggested that phased confidence rating scales may also be a useful tool to assess workforce capacity in addition to reflective clinical case audits.

KPI 1.2 This KPI monitors the retention of personnel for the duration of the project implementation period. Measuring turnover of the trainee cohort in comparison with turnover of paramedics within the ambulance service locally will provide an indication of this. In addition retention of ECP trained paramedics in the localities they have come from is also of interest, particularly in regional sites where job satisfaction and retention have been identified as challenges.

KPI 1.3 Several sites have commented on the difficulty of anticipating the number of patients/consumers per shift that is likely to be a realistic workload for the ECP as this is affected by local issues. This is a metric that needs to be monitored. One site noted that this calculation needs to account for any emergency response cases where the ECP is called away from an ECP case. Careful assessment of cases will also be required to assess the extent of practice changes. This may be monitored through the use of a common set of classification codes by ECPs working in the field and/or by clinical audit.

KPI 1.4 and KPI 1.5 aim to capture key indicators of effectiveness that relate to the project objectives of decreasing the number of consumers transported to ED (and subsequently admitted) and in the case of project sites where there are several smaller hospitals linked to a base hospital, decreasing the number of interfacility transfers. Administrative data sets should also include the referral actions taken by the ECP so an analysis of where consumers were treated or referred can be completed.

KPI 1.6, KPI 1.7 and KPI 1.8 address a range of efficiency measures including the average number of consumers seen per shift and the average waiting time prior to the commencement of assessment. The average treatment time for ECP consumers was considered as a KPI, but feedback suggested that the ECP may in fact take longer to treat each consumer as their aim is to effectively assess, treat and if necessary refer the consumer so that immediate transport is not required.

KPI 1.9 There was general support for this KPI. Most comments related to methodological issues. For example, the consumer survey could be administered immediately on conclusion of the ECP attendance or via a mail survey 7 days later. The consumer survey will be collected for a snapshot period later in the implementation phase of the project when the ECPs have completed their training pathway. The applicability of the annual Council of Ambulance Authorities Patient Survey was raised as it is a national survey, however the small number of surveys collected from each State and Territory suggest it is unlikely that many responses would be returned from ECP cases. It has been possible to review the survey tool that is used by CAA and identify several questions that can be used in the ECP consumer survey, which will allow comparative analysis with these questions from the CAA Patient Survey.

Project sites may also choose to complete several patient journey analyses of a high volume cases, e.g. patient fall, pre and post implementation of the ECP role. This will provide richer detail of the consumer experience, particularly the time spent in each stage of the patient journey and the

member of the health care team involved. These patient journeys may produce a suitable subject for the development of a case study by the National Evaluation Team.

KPI 2.0 A staff survey will be completed to gather the views of related members of the health care team working within the ambulance service and possibly from related health professionals, e.g. GPs or local ED personnel to ascertain their level of acceptance for and satisfaction with the ECP role and expanded scopes of practice project. This on-line survey will be developed in Survey Monkey and provide information on the perceived impact of the role on other members of the health care team. It is recommended that the staff survey is collected for a snapshot period later in the implementation phase of the project.

KPI 2.1 Perceptions of the impact of the expanded scope of practice role on other key stakeholders will be obtained through conducting semi-structured interviews with key stakeholders. These interviews will be conducted by the National Evaluation Team.

KPI 2.2, KPI 2.3 and KPI 2.4 Safety and quality outcomes are routinely monitored in paramedic services, particularly consumers who recontact the 000 number in a specified timeframe. Data should be captured on consumer complaints (including refusals to be treated by the ECP) and adverse events, including deaths within the 28 day period following treatment by an ECP. It was noted that the outcomes measured should be comparable across project sites. It was suggested that the number of re-presentations of consumers, i.e. those who call 000 again within 24 – 48 hours of their original call for the same health care problem should be monitored, (however the adverse event needs to be related to the expanded skills of the ECP as opposed to standard practice). Several services indicated their desire to complete clinical audits of all ECP cases to ensure that appropriate care was provided and within the scope of practice of the ECP. Consumer refusals to be treated by the ECP should also be monitored.

KPI 2.5 and KPI 2.6 This KPI aims to capture the increased capacity of medical staff to manage more complex ED consumers or primary care consumers. This is challenging to capture in the absence of linked data sets consequently a qualitative approach is proposed. Some of the information captured under the efficiency KPIs is also relevant to assessments of workforce productivity, e.g. call out ratios, etc. The number of consumers referred to the ECP model by other health care providers has also been suggested as a useful indicator of the impact of the project on other health care providers.

KPI 2.7 focuses on the key strategic partnerships that are developed or enhanced in local communities through the ESOP-ERP initiative. These relationships may be monitored through use of appropriate Partnership Analysis Tools.

KPI 2.8 HWA wishes to understand the factors that support sustainability of the ESOP projects. The National Evaluation Team will conduct semi-structured interviews with senior managers to ascertain their perceptions of project sustainability at intervals throughout the implementation period. Feedback provided suggested that issues relating to fee for service should also be explored as a factor that is likely to influence sustainability.

5 SOURCES OF DATA

Obtaining data from a variety of sources will be critical to the conduct of evaluation. This section synthesises our approach to the various data collection activities and outlines the principles we will apply to ensure that appropriate data are available. The evaluation process will access data from existing sources wherever possible. It will also be necessary to collect additional data in order to meet our core requirement to develop a robust evidence base with which to conduct evaluation activities for each of the sub-projects and to evaluate the ESOP as a whole.

The approaches taken for each element of the data collection will vary depending on the nature of the information required. The method of data collection will be tailored to reflect the context in which data are required and to meet the different requirements associated with the four key components of the evaluation. A range of quantitative and qualitative data has been incorporated into our overarching data collection strategy. This is more fully documented in the Compendium of Data Requirements and Evaluation Tools.

Quantitative data will be required to evaluate the extent to which each project meets its core objectives, an important component of which will comprise the agreed KPI data to be collected by each sub-project. Whilst the primary use of the KPI data will be at the sub-project level, we will work with each project to ensure that the KPI's incorporate data requirements and performance metrics that enable comparison across projects and contribute to a summative analysis of the ESOP. A data specification has been developed for each sub-project that outlines the core data items required to ensure effective quantitative analysis of the available administrative datasets (refer to the Compendium). A range of qualitative data collection methods, such as stakeholder interviews, will also be undertaken to ensure that we develop a comprehensive and accurate understanding of the issues that emerge in the course of the ESOP.

We recognise that the data collection issues between each of the four sub-projects differ as a consequence of their varying objectives, stages of development and service delivery settings. We have and will continue to assess the availability, accessibility and usefulness of existing systems as we progressively complete the scheduled site visits. The data specification has been developed to reduce any potential for duplicate data collection and maximise the use of existing data sources.

At this stage, we have identified an important need to:

- strike a balance between minimising the burden placed on each project whilst ensuring that a sufficient critical mass of information is available to answer the key evaluation questions;
- dovetail national evaluation data requirements with data collection being undertaken by projects as part of their local evaluation or additional research studies;
- access information through routine clinical and administrative data collection processes wherever possible; and
- standardise data collection requirements between lead and implementation sites within sub-projects, and also across the four sub-projects wherever possible.

A general overview of each potential data source is provided below, together with a brief discussion of how we anticipate each data source will contribute to the evaluation process.

5.1 *Routinely collected clinical and administrative datasets*

A detailed review of the capacity to access data from routine systems has been a key activity in the early stages of the evaluation and will continue to be a focus of the first round of site visits with lead

organisations and implementation sites. For many aspects of the evaluation, we anticipate being able to access routinely collected data from a range of clinical, service utilisation and administrative data sources. However, the availability of routinely collected data will vary by jurisdiction and also by service delivery setting. Most notably, we note that routine data collection systems differ significantly between inpatient settings, emergency department settings and community based settings. These administrative data sets provide an efficient way of establishing a baseline for the evaluation of each sub-project. They will be used to conduct pre and post analyses of changes in clinical practice for each ESOP project.

Potential sources of routinely collected data are outlined below under broad categories. We would note that we expect that specific data sources are likely to evolve as the evaluation progresses.

Admitted patient data collections:

This standard data collection occurs in all Australian hospitals and includes demographic and episode related data on all inpatient separations. This data source will only be relevant to the Expanded Scope of Practice - Advanced Practice in Endoscopy Nursing sub-project and only in participating hospitals where consumers receiving endoscopy services are treated on an admitted inpatient basis. In these cases, it will provide an important source of data not only on consumers treated by nurse endoscopists, but also on overall activity levels within these units. In cases where Endoscopy Units treat consumers on an outpatient basis, we will work with each site to develop an equivalent data collection specification that meets the evaluation requirements.

Emergency Department data collections:

Emergency Department data will represent a critical source of data for the two sub-projects providing expanded scopes of practice in this setting. All Emergency Departments in Australian hospitals routinely collect demographic, triage and presentation details on Emergency Department attendances. Although the information systems used to store these data vary by jurisdiction and also by hospital size, there are a relatively small number of systems in use around the country. We have developed a data specification that clearly outlines our Emergency Department data requirements. It consists of items that are already routinely collected. As part of this process, we will work closely with relevant staff at each site to determine how easily the required data can be extracted from their information systems. We have already discussed the potential to flag ESOP project patients/consumers in their existing systems for the duration of the evaluation.

Hospital based costing data collections:

The availability of appropriate financial data will be important for the economic evaluation and the assessment of training costs. At this stage, we expect that most of the financial data will need to be accessed by working with relevant staff at lead organisations and implementation sites over the course of the evaluation. Again, here we will develop a data specification that clearly outlines our data requirements. There are a number of routine cost data collections that operate at a state and national level (such as the National Hospital Cost Data Collection) that may provide relevant cost data, but the scope of these is primarily limited to admitted inpatient services.

Ambulance Service clinical and administrative data collections:

All Australian ambulance services routinely collect demographic and clinical data on ambulance attendances or 'cases'. In most instances, standard systems operate at a state level and these are a critical source of data for the Extending the Role of Paramedics sub-project. We expect that these routine systems will provide some of the core data required for paramedic services KPI data. We will continue to work with relevant staff at each site to determine the extent to which data from these systems can meet the relevant evaluation requirements. Again, we have developed a preliminary data specification that clearly outlines our data requirements for these services.

Site specific routine data collections:

Some participating clinical units will routinely undertake data collections that include data that will be required for evaluation purposes. In some cases, these systems will be modified to include KPI data required as part of sites' ESOP reporting processes. For example both lead Physiotherapy in ED sites have already developed a database to capture key data items that reflect the expanded scope of practice changes. These systems represent an important data source that we have reviewed and will work to incorporate into our reporting requirements in the early stages of the evaluation process.

5.2 One off data collection activities

Where it is not possible to obtain data from routine sources, it will be necessary for participating services to undertake one off evaluation related data collection activities. In these cases, we will work closely with services to ensure that any data collection impost is minimised and that the timing is practical for each site. These one off data collection activities are for 'snapshot' periods and focus particularly on consumer and survey provider satisfaction and experience. Further information on these data requirements are included in the 'Compendium of Data Requirements and Evaluation Tools'.

Our view is that any one off clinical data collections are likely to yield the greatest benefit if they occur in the later stages of a project's implementation when training requirements have been mostly completed. This will provide an opportunity for site's to 'bed down' the clinical changes associated with their sub-project and therefore maximise the opportunity for the evaluation to detect any practice changes that result from its implementation. We expect that this approach will also allow our economic evaluation to more easily assess long term cost implications at each site.

Financial data

One area where a one off data collection will be required relates to financial data. To inform the economic evaluation, we will ask each site to provide financial a breakdown of expenditure across the ESOP project. Where expenditure relates to salary costs, we will require relevant establishment and salary levels of staff employed on ESOP projects. For non-staff costs, we will require a basic summary of how project funds were allocated across expenditure items. We will also require details of any expenditure that occurred on ESOP activities that were not funded by HWA. Some additional financial data may also be required from individual sites depending on the particular ESOP model being implemented. Specific financial information relating to the costs of training provided as part of the ESOP project is also required. Details of these requirements, and the timeframe and format of the required data will be negotiated with each site.

5.3 Tools developed specifically for the national evaluation

At the sub-project level, we will use specific tools to address key components of our evaluation framework including sustainability, capacity building, dissemination and generalisability (or scalability). In addition specific tools are required to support thematic areas such as the training evaluation.

We have found that the use of such tools has been valuable in the conduct of previous national evaluations. For this reason, we are progressively identifying existing tools with both lead and implementation sites and from previous national evaluation projects, to ensure that they are context specific, where possible validated and are tailored to reflect the unique characteristics of the ESOP Program. We will continue to discuss the proposed tools with each site to obtain feedback on their suitability and to ensure that each site has a clear understanding of their content. The tools, their use and the responsibility for subsequent data analysis are included in the Compendium.

5.4 *Evaluation methods and metrics developed specifically by project sites*

Some sites have existing evaluation processes and related data collection activities in place. In some cases, these have been or will be established as part of a local evaluation, whilst in other cases they relate to previously funded activities. Several sites have already indicated their interest in conducting specialised data collection at their local level to explore issues that are of particular importance to them and their organisation. As the projects progress we will continue to discuss opportunities to utilise any relevant data and liaise with individual sites to ensure that the national evaluation data requirements dovetail with existing local data collection activities wherever possible.

5.5 *Project progress reports*

Each lead organisation and implementation site is required to submit progress reports approximately quarterly over the implementation period. The first progress report for the ESOP-APEN, ESOP-PED and ESOP-NED projects was submitted in late September 2012. These reports will be reviewed by the evaluation team and will represent an important source of data for the evaluation. A key aspect of our review will be to ensure that the agreed data collection activities are occurring in accordance with the evaluation framework and that data quality is acceptable and 'fit for purpose'.

5.6 *Site visits*

The site visits represent a useful source of qualitative data to feed into the overall evaluation. Two site visits are planned for each project site during the evaluation. The first site visits are underway and scheduled for completion within three to six months of the first sub-project workshop. Priority has been given to lead sites as they are likely to be more advanced in their planning. Several sites have requested early site visits to assist them with evaluation planning with more than a third of 'first site visits' already completed. Project and/or implementation plans are important sources of documentary information. Prior to contact at the workshop, telephone calls were made by the National Evaluation Team to virtually all project sites to introduce evaluation team members and address any early queries.

The second site visit will occur in the final three to six months of each project. This will provide an opportunity to obtain key evaluation data that reflects the site's experience over the life of the project. It will also allow us to provide support to sites in the planning and preparation of their final report. Site visits to each funded organisation are used to review onsite evaluation processes and to provide an opportunity for qualitative data collection. Each site visit is documented and key findings communicated in the interim progress reports. A summary of the quantum of proposed site visits is provided in Table 7.

Table 7 *Summary of site visits*

Sub-project	Number of site visits per organisation#	Number of site visits per sub-project
Expanded Scope of Practice-Advanced Practice in Endoscopy Nursing	5 organisations (including 2 lead organisations who are also implementation sites with 5 implementation sites) a total of 7 project sites	14
Expanded Scope of Practice-Physiotherapists in the Emergency Department	9 organisations (including 2 lead organisations who are also implementation sites with 9 implementation sites) a total of 11 project sites	22
Expanded Scope of Practice-Nurses in the Emergency Department	8 organisations (with 13 implementation sites) a total of 13 project sites	26
Extending the Role of Paramedics	4 organisations (with 5 implementation sites) a total of 5 project sites	10
Total Site Visits		72

5.7 *National workshops*

There will be multiple workshops conducted over the course of the evaluation. These workshops will provide an important opportunity to discuss the progress of each sub-project including their experiences in relation to evaluation activities. They will also provide an important sharing of information across projects. The evaluation team members allocated to each sub-project will conduct each site visit and participate in each sub-project's workshops.

Across the life of the ESOP a minimum of three workshops are planned for each sub-project. In addition all projects will be expected to participate in the national Collaborative Expanded Scopes of Practice Workshop that draws all stakeholders together to be conducted at the end of the project that will be facilitated by Professor Kathy Eagar. To date the first series of four sub-project workshops has been conducted with the National Evaluation Team active contributors.

A summary of the schedule is shown in Table 8.

Table 8 *Summary of workshops*

Sub-project	Total number of workshops
Expanded Scope of Practice Advanced Practice in Endoscopy Nursing#	4
Expanded Scope of Practice Physiotherapists in the Emergency Department#	4
Expanded Scope of Practice Nurses in the Emergency Department#	4
Extending the Role of Paramedics#	3
Collaborative Expanded Scopes of Practice Workshop drawing all stakeholders together to discuss common themes (March 2014)	1
# Note <u>a</u> ll projects will be required to attend this national workshop.	
Total Workshops	16

5.8 *Stakeholder interviews and surveys*

Stakeholder interviews are another critical source of qualitative data for both the formative and summative components of the evaluation. We propose to conduct a series of stakeholder interviews at various points throughout the evaluation. At this point, we envisage that the key stakeholders to be interviewed will include representatives from HWA, lead organisations, implementation sites and some members of each sub-project's Project Advisory/Reference Group. We also expect to identify other external stakeholders. A rigorous methodology will be applied in the interview process that will include timely writing up of interview transcripts, a thematic assessment and cross checking of results.

We will also collect data through the use of survey instruments where it is necessary to obtain a greater volume or different type of data than is practical through stakeholder interviews. Here, we will apply relevant survey design principles to ensure that high quality information is collected. Our preference will be to use web based survey techniques but will ensure that paper based forms are made available if required.

5.9 *Sampling*

In the process of developing data collection methods for each of the data sources described above, we will apply relevant sampling techniques wherever required. In some cases, sampling will not be required as data on the entire population under study will be obtained. In other cases, either probability or non-probability sampling techniques will be used depending on the context in which data are required.

For example, we will use non-probability sampling to select a relatively small sample of key individuals to participate in stakeholder interviews recognising that the results may not represent other characteristics of the population. Here, we will draw on our own knowledge of subject matter to assess the applicability of information to a broader context. In other cases, such as when analysing KPI data, we may compare consumers in the ESOP Program with those not part of the intervention. In this case, we would use random sampling so we can make inferences about the patient or consumer population.

The methods of sampling will be refined through subsequent iterations of the evaluation framework. Our overall approach will be to strike an appropriate balance between the level of precision required to answer a particular question of interest and the corresponding level of data collection effort required for this to occur.

5.10 *Ethics and confidentiality*

Ethics approval has been obtained from the University of Wollongong and Illawarra Local Health District Human Research Ethics Committee, (a lead HREC), for the conduct of the ESOP national evaluation. Project sites have been encouraged to seek advice at a local level about ethical approval within the context of their project scope and organisational requirements.

6 PROGRAM EVALUATION REPORTS

6.1 *Progress reports*

We will produce three progress reports during the ESOP evaluation, referred to as 'Summary of Progress Reports'.

Summary of progress reports will be provided to HWA in accordance with the requirements of our Contract and as required to support the project timeline.

Whilst these reports will draw together and present preliminary information and data findings, they will of necessity be formative – providing a view of the progress and development of individual projects and the sub-projects.

All reports will be structured in relation to the overall objectives of the ESOP. The first 'Summary of Progress' report is scheduled for late February 2013. There needs to be adequate time to review and assimilate the lead and implementation site project reports into the evaluation 'Summary of Progress' reports. The schedule of reporting is as follows:

- Progress Report No. 1 by 28 February 2013
- Progress Report No. 2 by 15 June 2013
- Progress Report No. 3 by 30 December 2013

6.2 *Final report*

We will produce a Draft Final Report and a Final Report, due on 30 June and 30 September 2014 respectively, which will comprise of four sub-project reports and a collaborative ESOP Program report. The sub-project and collaborative ESOP evaluation reports will be structured with reference to the overall objectives of the Program. The final reports will also address the overall impacts and outcomes identified in the evaluation framework. The content, analysis and recommendations of the sub-project and project evaluation reports will bring together the key formative and interim-summative findings across the life of the initiative. In addition, the development of these documents will be purposefully used as a mechanism for reflection and further consultation with key stakeholders and the National Evaluation Team. This will occur through the final Collaborative Expanded Scopes of Practice workshop.

The Collaborative Expanded Scopes of Practice workshop provides an important opportunity to examine the lessons from projects that have faced significant challenges. We expect that our contribution will emphasise both the formative and the summative findings from the evaluation. We would also aim to present a consolidated view on what can be achieved by using collaborative research practice in workforce reform. The collaborative workshop will also provide an opportunity for networking between the projects and other industry interests so that the lessons for the health sector can continue to develop beyond the life of the ESOP Program. The aim of using this feedback in the final stages is to develop a more inclusive and 'richer' view of what has taken place, the impacts, outcomes, learning, unintended consequences, etc.

Currently several project site final reports are due on 31 May 2014. These reports will need to be provided promptly to the national evaluation team to ensure their synthesis and analysis informs the evaluation draft final report which is due 30 June 2014.

In summary, our role as evaluators is to present the evaluation findings in such a way as to facilitate the translation of those findings into future policy decisions and actions.

7 EVALUATION RISKS

7.1 *Managing risks*

The process of risk management for each sub-project will be managed by the HWA Liaison Officer. They will monitor and review any potential and actual risks and provide regular updates back to the CHSD team so that they are aware of any risks when undertaking site visits.

The CHSD evaluation team will support this risk management process by forwarding any potential or actual project risks identified on to HWA. The CHSD evaluation team will contribute identified evaluation risks to the HWA risk register.

7.2 *Evaluation risks*

The effective management of project risks is an integral part of best practice project management and indeed best practice program evaluation. There are varied ways that risks can be classified; our focus is on "Project Risk", the factors which could cause a project to fail. In the context of the ESOP Program this is more accurately expressed as "Program Risk", consequently our interest is in managing risks that could affect the progress of the national evaluation.

In the initial stage of a program evaluation, the key risks to be managed customarily relate to stakeholder engagement, particularly establishing an honest and open relationship with the organisation that has engaged the evaluation team but also the key stakeholders likely to be involved and/or affected by the evaluation. For example, another common risk may be difficulty in accessing the requisite documentation that provides essential context and background for the evaluation, often there may be some sensitivity in releasing certain documents or there simply may not be one repository for large banks of information that have built up over time.

As the program evaluation progresses, 'high risk' factors will be identified. As the program evaluator it is our role to monitor these factors, implementing proactive risk reduction strategies as necessary, and addressing emerging risks if and/or when they arise. For each risk, the likelihood of it arising and potential consequences will be rated. In addition, a mitigating strategy will be formulated. The monitoring will typically occur during the normal project tracking and review meetings throughout the evaluation.

From our experience in implementing similar scale program evaluations to the ESOP and the experience of other evaluators, as identified in published literature, we discuss five key evaluation risks. The purpose of describing these risks is not to suggest that they are in evidence in the ESOP Program evaluation, but to ensure their prompt recognition should they arise.

7.2.1 *Attribution and contribution*

In evaluating the ESOP Program and its sub-projects, an important issue is that of attribution. In this context, attribution can be considered as an effort to measure 'causality' or the extent to which outcomes are the result of particular activities. Frequently multiple service providers and funders are seeking to achieve the same objective consequently there may be several interventions in train that could impact on indicators that are monitored throughout the course of the Program, e.g. ED performance in relation to the national four hour rule.

There has been discussion and possible confusion between the terms attribution and contribution. Several authors make a useful distinction between these terms (Patton, 2008; Stern et al., 2012). In much of the literature, attribution is used to both identify with finding the cause of an effect and with

estimating quantitatively how much of the effect is due to the intervention. The term contribution may be used in the following way: in light of the multiple factors influencing a result, has the intervention made a noticeable contribution to an observed result and in what way? (Mayne, 2012).

The Centers for Disease Control and Prevention (1999) suggest that a more realistic approach to measuring program effectiveness is to measure the extent to which a program has made a 'contribution' towards achieving long term goals. Here, the aim of the assessment is to make an informed and evidence-based judgement about the overall contribution of a program or project to a long term objective. In this context, the aim becomes to ensure that the evaluation framework, the performance indicators and the related data collection provide a sufficient picture of the achievements of a project to make an informed judgement. If data are collected in accordance with an agreed data protocol, and the subsequent data analysis indicate that a project has met its performance indicators, it becomes reasonable to conclude that the project has made a 'contribution' to achieving the program's overall aims and objectives.

Robust and practical performance indicators or measures to meet the needs for program improvement and accountability are the most useful risk mitigation strategy. Program evaluation complements the insights generated by performance measurement. Whereas performance measurement answers the question of "what?" was accomplished or achieved, program evaluation addresses more complex questions of "how?" and "why?" (Hatry, 1997).

In our view, the ESOP Program fits within a model where it is reasonable to measure 'contribution' rather than 'attribution'. On this basis, we propose that this approach underpins the evaluation.

7.2.2 Evaluation anxiety

The HWA has engaged the CHSD to conduct the ESOP evaluation. In the past, the organisations responsible for implementing the key projects that comprise the ESOP Program, may have directly engaged an independent evaluator. It should be recognised that this national evaluation may generate anxiety and concerns for major stakeholders. Most people experience anxiety when their behaviour or achievements are being evaluated. The experience of being evaluated, critiqued, or judged commonly results in an emotional reaction of uneasiness, uncertainty, or apprehension. The fear of the prospect of a negative evaluation is probably inherent to being human. This is a phenomenon recognised in the literature and can adversely impact upon the evaluation if it is not effectively managed (Rose and Jason 1988; Donaldson, Gooler et al. 2002).

If stakeholders are not engaged the consequences may include: lack of access to data and information; co-operation problems, reduced utilisation of evaluation findings etc. It has also been reported that excessive evaluation anxiety can lead stakeholders to behave in ways that undermine the credibility of the evaluation findings (Donaldson, Gooler et al. 2002).

Resistance to evaluation can be based on factors other than anxiety. Donaldson et al. (2002) discuss both dispositional and situational sources. Examples cited of dispositional sources include negative past experiences with program evaluation and/or lack of experience with program evaluation. Situational sources may include a failure by the evaluator to highlight program accomplishments, or possibly role ambiguity amongst the evaluators and stakeholders which leads to disputes.

From our experience the major mitigating strategies include allowing stakeholders to discuss and affect the evaluation. It is particularly important to clarify the specific purposes of the evaluation with the funding body. If stakeholders are critical about the evaluation design, these criticisms need to be heard and those found to be valid addressed. The use of a Project Advisory/Reference Group is often an effective way to manage this issue.

7.2.3 Program fidelity

Program fidelity refers to consistency in program implementation. When an initiative is being implemented in multiple sites and is reliant on multiple practitioners there is a risk that practitioners may alter programs in a manner more conducive to their immediate needs, which may adversely affect program outcomes (Melde, Esbensen et al. 2006). In health promotion interventions program fidelity is often referred to as 'process evaluation' (Hawe, Degeling et al. 1990).

Melde et al (2006, p. 716) provides the following definition:

'A process evaluation allows one to verify what is actually being delivered to the program audience, as well as the degree to which it resembles the intended delivery of the program, otherwise referred to as program fidelity...In other words, a process evaluation helps confirm the results of an outcome evaluation by documenting the dosage level of the treatment delivered and its relationship with the observed response of the recipient.'

This evaluation risk is best managed through documenting program (including project) implementation. This can occur for example, through a combination of provider descriptions of implementation and direct observations. The major rationale for addressing this risk is the link between program implementation and program effectiveness. Data on program fidelity can be used to complement outcome analyses so more informed conclusions can be made about the efficacy of a given program. According to Melde et al. (2006, p. 737), program implementation failure is a viable, if not probable, explanation for a lack of program effect.

7.2.4 Mixed results

Funding bodies usually want a clear answer to their evaluation questions. Often this is because future policy and funding decisions may hinge on the results of the evaluation. In our experience, rarely do program evaluations provide unequivocal findings. Rogers (2001) discussed the absence of dichotomous answers in evaluations noting that - programs are often neither a complete success nor a complete failure. This is particularly so when the intervention is complex and has multiple strategies, delivered in various settings and to multiple target groups. In the case of the ESOP Program we have already identified that the Victorian Department of Health is working actively on a range of systems issues to improve the sustainability of expanded scope of practice initiatives within this State. It is unlikely that it will be possible to 'unpack' the impact of this jurisdiction's work particularly in establishing pre-conditions for sustainability upon ESOP projects funded by HWA.

Rogers (2001, p. 434) cautions that instead of asking 'Does the program work' program evaluators should seek to understand: 'For whom, in what ways, and under what circumstances does it work?' In our experience, understanding the context unique to individual initiatives or projects is an important step in managing this evaluation risk. Rogers (2001) also points to the need for evaluation reports to clearly state their limitations in terms of focus and evidence, this is another way to improve the interpretation of mixed results.

7.2.5 Scope creep

Another common issue is defining the scope of the evaluation and ensuring the evaluation methodology aligns with the allocated resources and that 'scope creep' does not occur. One of the strengths of HWA's approach to the ESOP Program is their desire to be inclusive and to harness the input of a wide range of stakeholders. For example each sub-project has a Clinical Adviser and Project Advisory/Reference Group. In the course of discussing the evaluation framework a diverse range of issues has already arisen which are of interest to various stakeholders. Many of these issues are not within the scope of the evaluation. Inevitably some stakeholders will be disappointed when questions they hoped the evaluation would address, remain unanswered. In addition, the evaluation

design must be 'doable' given the availability of data and information, which often becomes clearer once the evaluation is under way.

7.2.6 Conclusion

As noted in the opening paragraphs about evaluation risks, the purpose of describing these risks is not to suggest that they are in evidence in the ESOP Program evaluation, but to ensure their prompt recognition should they arise. As the evaluation unfolds, additional risks may be identified that will need to be controlled through the collective contribution of the National Evaluation Team and major stakeholders.

8 STAKEHOLDER MANAGEMENT PLAN

8.1 *Who are the stakeholders?*

Program evaluation stakeholders fall into one or more of three groups:

- Those involved in the management of the ESOP, that is staff within HWA;
- Those involved in the operation of the sub-projects, that is the lead organisations and implementation sites;
- Those served or affected by the broader project, including State and Territory Health Departments or Ministries; professional and provider organisations with a 'stake' in expanded scopes of practice etc.

We expect that our primary focus will be working with the first two groups but we maintain a keen interest in the third group. Working with stakeholders can be considered as a series of feedback loops - stakeholders are a vital source of information for both the formative and summative components of the ESOP evaluation and by communicating and liaising with stakeholders the evaluation team can inform the various stakeholder groups and the development of the Program.

There are a number of strategies we will use to facilitate and maintain stakeholder engagement and consultation.

8.2 *Communication with HWA*

The CHSD evaluation team will communicate regularly with the HWA staff. This will mainly be conducted through emails and monthly teleconferences. In addition, members from the CHSD evaluation team will meet with HWA staff on a face-to-face basis at least once per year (or more often if required).

For project sites, their first point for general enquiries should always be the relevant HWA Liaison Officer. Evaluation issues will be referred by HWA to the appropriate CHSD team member. As the projects develop, it is likely that direct contact between project sites and the National Evaluation Team occurs.

Members of both HWA and CHSD project teams will work together to ensure 'consistency of messages' when dealing with project sites. The CHSD evaluation team will inform HWA of any contentious issues, difficulties or problems as they arise and contribute to project risk registers.

9 Communication with projects

The CHSD evaluation team will aim to develop a working relationship with each individual sub-project organisation. This will be mainly achieved through the following four strategies.

Nominated contact staff member

Each individual sub-project organisation will have a designated evaluation team member to liaise with for the duration of the Program. The designated team member will assist each organisation with evaluation issues that may arise. A second team member will also be available in a back up capacity and as a link across the sub-projects.

Telephone / Webinar and email

The CHSD evaluation team will initiate and maintain regular contact with each sub-project organisation through email and telephone/webinar and will be readily available to address any issues that may emerge.

Site visits

Site visits are both a communication and an evaluation activity. They provide an opportunity to communicate face-to-face and in depth with each project about issues relating to the evaluation as well as provide an opportunity to conduct evaluation activities. At least two site visits will be conducted for each lead organisation and implementation site during the life of the ESOP.

Sub-project reports

Each sub-project organisation is required to submit progress, interim and final reports to HWA which will then be forwarded to the CHSD evaluation team. We will liaise with HWA and each organisation after reviewing their reports to discuss issues relating to the data collection and evaluation activities.

The CHSD evaluation team will work with HWA to facilitate communication between and across projects and sub-projects. Our focus of communication will be on evaluation and to encourage a sense of operating within an overarching Program. This will principally occur through the sub-project workshops scheduled throughout the implementation period.

9.1 *Communication with Project Advisory Groups and Clinical Advisers*

A Project Advisory/Reference Group, with defined terms of reference, has been established for each of the four sub-projects.

The Project Advisory/Reference Groups provide an important mechanism for seeking expert advice and for managing stakeholders. Members have been invited and/or nominated by the professional body they represent. The Advanced Practice in Endoscopy Nursing and Expanded Scope of Practice Physiotherapists in the ED and Nurses in the ED Project Advisory Groups include representatives from two jurisdictions. The Extending the Role of Paramedics Project Reference Group does not have jurisdictional representatives but includes representatives from the Council of Ambulance Authorities and Paramedics Australasia. The Council of Ambulance Authorities Inc (CAA) is the peak body representing the principal statutory providers of ambulance services in Australia, New Zealand and Papua New Guinea. Paramedics Australasia is the peak professional representative body.

The role of the Project Advisory Group is likely to evolve as the ESOP Program progresses. Members are important stakeholders in the evaluation process and the evaluation framework has been presented to each Project Advisory Group for their comment and feedback. The CHSD National Evaluation Team will look to consult with these groups, and obtain feedback on evaluation issues.

For consistency, our dedicated team members allocated to each sub-project will similarly be assigned to liaise with each of these groups.

In addition HWA has employed clinical advisors for each sub-project who will contribute to the Project Advisory/Reference Group and be a source of expert advice as required. It is anticipated that the Project Advisory/Reference Groups will meet quarterly with alternating teleconferences and face-to-face meetings.

9.2 *Communication with Jurisdictions*

HWA has identified the importance of maintaining engagement with jurisdictions. This may be to ensure that activities occurring in parallel that could impact upon the ESOP Program are well understood or to keep jurisdictions without funded ESOP projects engaged and informed to support future national roll-out of successful ESOP initiatives.

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Appendix 1 Evaluation Framework

HWA Domain of inquiry	Key evaluation question	Primary evaluation component	Links to CHSD evaluation framework	Supporting evaluation questions
Workforce capacity	Has there been a demonstrable increase in workforce capacity as a result of ESOP?	Training	Level 2 delivery and impact; capacity building	Were selection criteria for trainees appropriate? Did training curricula meet competency requirements and/or accreditation standards? Did training methods meet established standards of good practice? Have the knowledge, skills and confidence of trainees improved? What factors appear to promote achievement of competencies (comparing different sites within the same sub-project)?
Workforce capacity	What organisational supports exist for trained staff to use their new skills?	Implementation	Level 3 impact; capacity building; change management; sustainability	Identify change management strategies and barriers to change.
Effectiveness	Were projects implemented as intended within organisations?	Implementation	Levels 1, 2 & 3 delivery	How did the presence of lead sites influence implementation sites? How did implementation activities differ from site to site and what were common elements?
Effectiveness (Consumer perspectives and experiences)	Is the ESOP approach acceptable to consumers?	Requirements for national implementation	Levels 1 & 2 impacts, capacity building, sustainability	Has consumer access improved (endoscopy waiting time, ED 4 hour rule)? What is the impact of the new work practices on "patient journeys" (experiences, satisfaction)?
Effectiveness (Provider perspectives and experiences)	Is the ESOP approach acceptable to staff?	Requirements for national implementation	Levels 1 & 2 impacts, capacity building, sustainability	Are clinicians willing and able to continue with the new work practices? What is the impact of the new work practices on other service providers (experiences, satisfaction, career paths, retention)?
Effectiveness (Safety and quality of care)	Does the ESOP deliver safety and quality outcomes for consumers <i>as good as or better than</i> standard care?	Implementation and economic	Levels 1 & 3 impacts	Have waiting times (response time with paramedics) and/or other objective indicators changed? Have consumer clinical pathway (outcomes) changed? Was the change appropriate? What impact could this be expected to have on consumer morbidity and mortality? Has there been any change in the rate of adverse

HWA Domain of inquiry	Key evaluation question	Primary evaluation component	Links to CHSD evaluation framework	Supporting evaluation questions
				events? Is net clinical benefit expected to increase given joint consideration of expected harms and benefits?
Efficiency/Cost	What is the direct cost of the program? Did the program substitute for other service costs? Is the ESOP cost-effective compared with previous practice? Have sites been relatively efficient?	Economic	Level 3 impact	Are there any cost offsets associated with incremental effects of the programs (e.g. reduced rate of transports to hospitals and subsequent admission)
Workforce productivity	Have work practices changed as a result of the ESOP?	Implementation and economic	Level 2 impact	Has productivity (labour cost per case adjusting for price and complexity – e.g. paramedic attendance) of the implementation sites changed??
Workforce productivity	Have there been demonstrable improvements in workforce productivity as a result of ESOP?	Economic	Level 3 impact	What workforce shifts (proportions and amounts) have occurred within sub-projects and their sites?
Sustainability	What conditions and contexts are most conducive to supporting implementation and sustainability of the ESOP approach?	Requirements for national implementation	Sustainability, change management	What factors (e.g., policies, practices, training, funding, initial expertise, staff selection, size etc) are associated with variation across sites in terms of effectiveness, efficiency, consumer and provider outcomes?
Sustainability	What linkages have developed among sub-projects and sites and across the program?	Requirements for national implementation	Partnership building, dissemination	What supports and communication strategies are required to sustain and disseminate outcomes from the program across states, health districts and organisations? Have any improvement networks or communities of practice developed?
Generalisability/Scalability	Do the results indicate one or more preferred models for training and/or implementation of ESOP in the four clinical areas covered by the program?	Requirements for national implementation	Levels 1, 2 & 3 impacts	How do sub-projects and sites differ in effectiveness, efficiency and other outcomes and is it possible to identify the most promising models for national rollout?
Generalisability/Scalability	What are the training and resource implications of a national roll-out of ESOP?	Requirements for national implementation	Generalisability, change management	What issues emerge when working across jurisdictions? What barriers exist and how can they be addressed?

HWA Domain of inquiry	Key evaluation question	Primary evaluation component	Links to CHSD evaluation framework	Supporting evaluation questions
	Will the ESOP models work in other locations?			<p>What are the implications for policy, relevant legislation and funding mechanisms?</p> <p>What are the implications for tertiary education, training and ongoing professional development for the professions involved in ESOP?</p> <p>What communication and stakeholder management strategies are likely to be effective in managing workplace reform relating to ESOP?</p>

Appendix 2 Lead and implementation sites and proposed workshop locations

Lead Site	Location	Implementation Site	Location	Site Visits	Workshop 1	Workshop 2	Workshop 3	National Workshop
Expanded Scope of Practice Physiotherapists in the Emergency Department					ADELAIDE	TBA	TBA	ADELAIDE
Alfred Health	Melbourne VIC			2				
		Alfred Health - Sandringham Hospital	Melbourne, VIC	2				
		Alice Springs Hospital	Alice Springs, NT	2				
		St. Vincent's Hospital	Melbourne, VIC	2				
		Ballarat Hospital	Ballarat, VIC	2				
		Southern Health – Dandenong Hospital	Melbourne, VIC	2				
		Southern Health – Casey Hospital	Melbourne, VIC	2				
ACT Health	Canberra, ACT			2				
		Flinders Medical Centre	Adelaide, SA	2				
		Gold Coast Health Service District – Robina Hospital	Gold Coast, QLD	2				

Lead Site	Location	Implementation Site	Location	Site Visits	Workshop 1	Workshop 2	Workshop 3	National Workshop
		Cairns Base Hospital	Cairns, QLD	2				
Total				22				
Expanded Scope of Practice Nurses in the Emergency Department								
		Kilmore and District Hospital	Kilmore, VIC	2	ADELAIDE	TBA	TBA	ADELAIDE
		Prince of Wales Hospital	Sydney, NSW	2				
		Murrumbidgee Local Health District – Four individual sites	Wagga Wagga & environs, NSW	8				
		Royal Prince Alfred Hospital	Sydney, NSW	2				
		Sunshine Hospital	Melbourne, VIC	2				
		Royal Children's Hospital	Melbourne, VIC	2				
		Eastern Health Victoria	Melbourne, VIC	6				
		Illawarra Shoalhaven Local Health District – Wollongong Hospital	Wollongong, NSW	2				
Total				26				

Lead Site	Location	Implementation Site	Location	Site Visits	Workshop 1	Workshop 2	Workshop 3	National Workshop
Expanded Scope of Practice - Advanced Practice in Endoscopy Nursing					ADELAIDE	TBA	TBA	ADELAIDE
Austin Health	Melbourne VIC			2				
		Austin Health – Austin Hospital	Melbourne, VIC					
		Austin Health – Heidelberg Repatriation Hospital	Melbourne, VIC	2				
		Alfred Health	Melbourne, VIC	2				
		Southern Health – Monash Medical Centre	Melbourne, VIC	2				
		Western Health – Western Hospital	Melbourne, VIC	2				
		Western Health – Sunbury Hospital	Melbourne, VIC	2				
Logan & Beaudesert Hospital	Logan, QLD			2				
		Logan & Beaudesert Hospital (Logan site)	Logan, QLD					
Total				14				

Lead Site	Location	Implementation Site	Location	Site Visits	Workshop 1	Workshop 2	Workshop 3	National Workshop
Extending the Role of Paramedics					ADELAIDE	TBA	TBA	ADELAIDE
		Ambulance Tasmania	Greater Launceston TAS	2				
		SA Ambulance	Limestone Coast, SA	2				
		SA Ambulance	Port Lincoln, SA	2				
		St John Ambulance (NT)	Darwin, NT	2				
		ACT Ambulance Service	Canberra, ACT	2				
Total				10				
Grand Total				72				

