September 2014

Sustainability Plan Case Study

for Inter-Professional Simulation Based Education and Training (IPSBET)

Table of contents

List of tables

Table of figures

Overview

Purpose and scope

This Sustainability Plan comprises background information, objectives, strategies and actions to ensure organisational and project goals relating to a metropolitan Melbourne Health Service's Inter-professional Simulation Based Education and Training (IPSBET) project are achieved.

It provides a comprehensive review of the current operating structure and financial status of the project, internal strengths and weaknesses and key external forces that may impact the project's sustainability. It additionally proposes a series of strategies and actions to warrant on-going value and optimise the use of physical assets and other resources initially acquired by the project, including: strategic actions that focus on improving internal systems and capabilities, and improving the ability to respond to changing conditions; strategic initiatives to optimise cost and enhance revenues for the project; and, an implementation plan to give effect to the strategies.

The information provided in this document has been de-identified for the purposes of distributing this case study to assist other organisations and projects undertaking a full sustainability review. This document is based on an actual case study and while the information has been de-identified the insights, strategies and impacts are authentic.

Plan development

The Sustainability Blueprint was developed by Evans & Peck in conjunction with the Health Service (HS) and the Department of Health (the department), using the department's Sustainability Blueprint as the basis for planning. Planning occurred over a three week period, involving key people from the department, HS and the IPSBET project team.

The process comprised review and analysis of project data and other relevant project information, meetings with key stakeholders and two collaborative planning workshops, employing all the tools from the department's Sustainability Blueprint. The first workshop was convened to assess the project's sustainability beyond the HWA funding period. The second to generate and test cost optimisation and revenue enhancement ideas. This report documents the key findings and actions arising from these workshops and the broader planning process.

Outcomes

The Plan proposes six key cost optimisation and revenue enhancement (CORE) strategies to improve the project's long term service and financial viability. These include:

- Strategy 1: Rationalise staff and positions required to deliver IPSBET
- Strategy 2: Offer a Summer School Program for students who didn't do clinical placement at HS & students wanting extra training to gain a competitive advantage
- Strategy 3: Introduce an E-Learning product to complement the existing IPSBET training
- Strategy 4: Subcontract HS's IPSBET program and resources to smaller hospital and universities without the in-house capability to deliver similar training programs.
- Strategy 5: Introduce SLE training fees and generate greater demand from existing University partners by communicating the value of the simulated activities through marketing
- Strategy 6: Use the SLE centre to undertake process simulation testing for internal partners at HS to identify issues and constraints that may impact patient care and safety which could be identified and resolved before an 'actual' event occurs.

Initial modelling has shown that these strategies are likely to contribute considerably towards improving financial viability, but are not sufficient to meet the total cost of providing the service. Notwithstanding projected annual revenue of nearly $200,000 there remains a shortfall of $29,426.

While there is still a considerable funding deficit for the project, the strategies outlined in this plan are estimated to have a significant impact in a number of areas, including:

- More than a doubling of overall utilisation, from 28% to nearly 80%.
- A reduction in costs per student hour of training hour of nearly $100, owing mostly to an increase in overall student numbers
- A nearly threefold increase in users.
- A reduction in costs per user by $380 dollars as a consequence of increased student throughput.

It is intended that, following the implementation of the strategies in this plan, further work will be undertaken to address the funding deficit.

The figure below illustrates the changes in the financial position of the project between the current state and modelled future state. These results are based on the assumption that each of the strategies is successful and estimates of cost and revenue are sound.

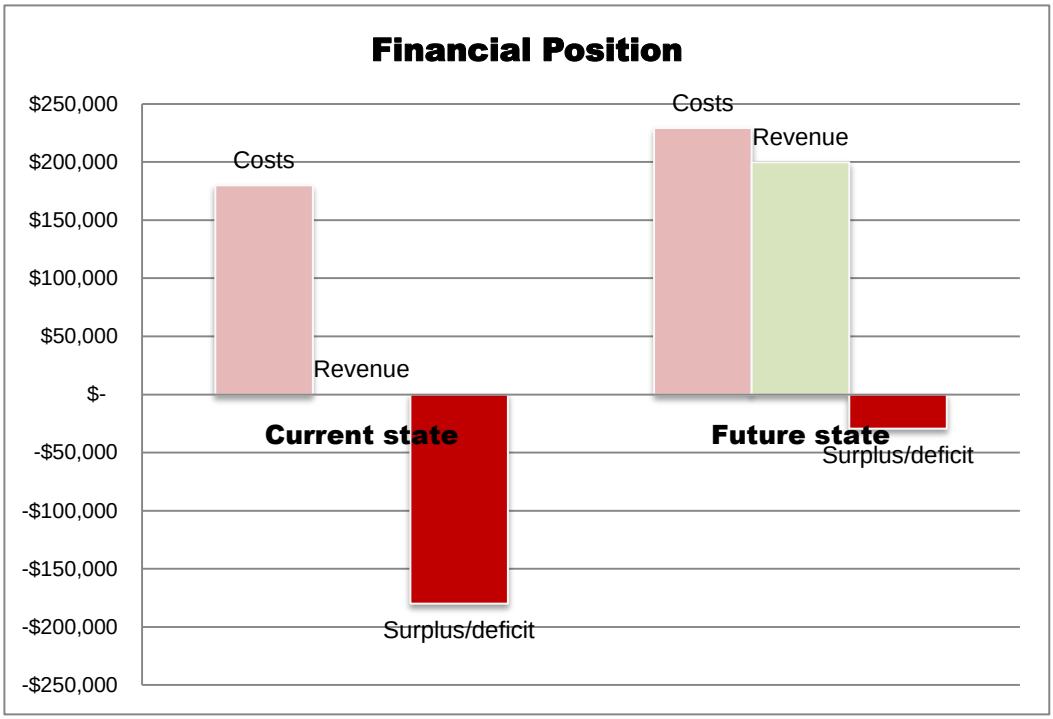

Figure 1: Comparison of current and project financial position

Chapter 1: Internal environment

1.1 Current situation

An audit of the project's internal environment was undertaken to provide a clearer picture of the way things will look beyond the HWA funding period based on the current situation. A key output of this exercise was a clearer understanding of the project's expected financial position beyond December 2014, as well as strengths and weaknesses likely to impact sustainability.

1.1.1 Organisation and organisation mission

HS includes three acute public hospitals located at in metropolitan Melbourne, a day hospital and a transition care facility.

HS works collaboratively to provide quality health and well-being services for the people of the community. The core values which underpin the service offering of HS are:

- Excellence
- Safety
- Compassion
- Respect
- Accountability

1.1.2 Project purpose and performance

HS received two rounds of funding from HWA to deliver clinical training and simulated learning activities to professional entry students and early graduates to increase skills, knowledge and confidence in the following areas:

- Patient safety
- Multi professional collaboration in the initial assessment and management of the onset of delirium in acute health care setting
- Communication and team work across disciplines
- Inter-professional collaboration
- Recognition and escalation of deteriorating patients.

The initial IPSBET project Stage 1 & 2 was developed and delivered by HS in 2012 & 2013. This program *Inter-professional Simulation Based Education and Training* was termed (IPSBET) and was targeted at undergraduates and new graduates from medicine, nursing, physiotherapy and social work health care disciplines.

72 undergraduates participated in 9.5 hours of simulation in IPSBET Stage 1 and 66 new graduates participated in 2.5 hours of simulation in IPSBET Stage 2 throughout the life span of the IPSBET project 1 & 2.

The current IPSBET 3 project was funded in 2013 and evolved from the original project following evaluation of the program. Disciplines were changed to nursing and physiotherapy undergraduates and new graduates. The IPSBET 3 program consists of simulation sessions of 3.6 hours duration with 16 nursing and 4 physiotherapy students participating per session. 8 sessions have been delivered to new graduates from nursing and physiotherapy and 12 sessions to be delivered to undergraduates from the same profession by December 2014.

Since inception the program has provided 619.2 training hours to 172 students and is targeted to deliver a further 205.2 training hours to 57 students by December 2014.

All IPSBET projects 1, 2 & 3 supports the broader mission of HS by ensuring students and new graduates are well placed and well prepared to successfully fulfil their professional responsibilities in addition to instilling an inter-professional approach to patient care.

The specific deliverables of the IPSBET project which have been achieved or are currently on track to be achieved include:

- Literature review on inter-professional simulation to provide guidance for content team
- Ethical approval for quality assurance – focus groups
- Development of content and material for IPSBET Manual Stage 1, 2 & 3
- Recruitment of IPSBET delivery team, including Simulated Patients
- IPSBET Train the Trainer program to HS staff and observers from the CTN
- Delivery of IPSBET Stage 1 & 2 to undergraduate students from Nursing, Medicine & Allied Health (9.5 hours of simulation in total per student for 72 students in 2012)
- Evaluation conducted at the end of each session by participants
- Focus groups conducted to explore undergraduate students' experience of the Inter-Professional Participation, Simulation for Work Preparation, Patient Safety
- Review of focus group feedback
- Intention to write up and publish the results of the focus group as qualitative research
- Review and revision of IPSBET manual for adaption to Stage two for graduate workforce
- Deliver 4 programs of IPSBET Stage two before 30th June 2013 (2.5 hours of simulation in total per student for 66 new graduates in 2013)

The IPSBET programs delivered to date have met the desired objective of improving inter-professional care and ensuring professionals are well placed to undertake their professional duties.

1.1.3 Constraints

Current HWA funding contracts have required priority be given to professional entry students, and that some assets be made available for their exclusive use. It is anticipated that these constraints will cease, along with funding for the program, at the end of the 2014 calendar year.

1.1.4 Users and beneficiaries

The users and beneficiaries of the IPSBET program can be classified into two broad groups including the higher education provider partners and students from the education providers. Attributes of the users and beneficiaries include:

- Users are from the nursing and physiotherapy disciplines and predominantly from two Melbourne based higher education providers.
- Generally the students are on clinical placement at HS and HS provides simulated learning as an adjunct to their clinical placement.

Students participating in the training program offered by HS appear to value the offering this is evidence by consistent positive feedback from students participating in the training. HS undertakes regular surveys and seeking feedback from students. This is feedback is used to modify the training program and continuously improve the offering for the users. The students value the following characteristics of the offering:

- Emulation of the real environment
- Quality of the resources used in the simulation
- Setting of the simulation being in a hospital
- Quality of the educator providers

Despite HS receiving consistent positive feedback from students, there appears to be a disconnect between the value the education providers perceive to be generated from the offering. It is thought that the education provider partners do not necessarily see the value in the offering or consider it a priority until they attend the program personally and witness the testimonies from the students.

1.1.5 Key Partnerships

HS developed key partnerships with two higher education providers. These partnerships are the mechanism through which HS communicate with the students and the education providers. Maintaining these partnerships is critical to HS continuing to deliver simulated learning activities to students, as a large proportion of Victorian nursing and physiotherapy students graduate from these higher education providers.

1.1.6 Resources

HS delivers the IPSBET program from a multi-million dollar Research and Education Facility located at the HS's main hospital campus. IPSBET is one of a number of programs delivered from the facility and as such a proportion of the facilities' resources are required to successfully deliver the IPSBET training program. Details of the operating and capital resources required to deliver the program are detailed below.

Operating resources

The IPSBET program utilises the operational resources outlined in the below table to deliver the training program:

Table 1: Operating resources

Resource	Description
0.2 FTE Project Manager	Responsible for the overall coordination of IPSBET training programs. The person holding this position spends 0.6 FTE managing other projects within the broader program of which IPSBET is a part.
0.2 FTE Simulation Educator	Responsible for coordinating and delivering the IPSBET program in collaboration with the simulation faculty and project team. This resource is also responsible for identifying trainer requirements and the recruitment of trainers to deliver the program as well as liaising with internal and external stakeholders.
0.1 FTE Project Advisor	Provides assistance and support to the Simulation Educator and Project Manager to ensure the successful delivery of the programs, particularly regarding quality and evaluation of the project.
Technical resource	This resource attends the training session to operate the specialised simulation equipment required as part of the program e.g. Manikins and AV equipment
IPSBET trainers	Trainers are responsible for delivering the curriculum to the students, drawn from a wide pool of educators from HS
Simulated patients	Attend the training session to play the patient role in the scenarios undertaken as part of the training.

Capital Resources

The IPSBET program utilises the following capital resources to deliver the training program. All of these resources were funded as part of the HWA program, except the facility space of which the project makes use.

Table 2: Capital resources

Resource	Description
3 x Basic manikins	These manikins will be used as part of the simulated training; the actual use of the manikin will be dependent on the scenario selected for the particular class
1 x SimMan 3G Manikin	This resource is used interchangeably with simulated patients and plays the patient role in the scenario undertaken.
AV and microphone equipment	This equipment is for communication between instructors/simulation operators and students, and the recording of simulations.
4 rooms at the Research and Education Facility	The space where simulation training is delivered and debriefs held.

The project has thorough records with respect to maintenance of capital assets including a maintenance plan, warranties from their key supplier (Laerdel) which covers preventative maintenance and capital repairs to the assets utilised by the Project and a database of all assets.

Capital replacement costs have been included in this case study for completeness. A decision on how to manage and address capital replacement costs in the current and future state calculations will need to be made by both the IPSBET program team and HS. The organisation may determine that capital replacement costs are dealt with outside of the IPSBET program and should not be included in the financial sustainability calculations.

Under current financial management structures at HS, the IPSBET program is unable to set aside funds on a year to year basis, to address capital replacement costs. Strategies for addressing capital replacement costs for IPSBET will need to be considered by the organisation in consultation with the IPSBET program team.

1.1.7 Suppliers

HS procures capital resources such as manikins, technical services and consumables required to deliver the simulated activities from a small number of suppliers in Australia. Owing to the relatively small number of firms supplying simulation equipment, with significant barriers to entry of other firms, HS has limited ability to negotiate rates and service expectations from key suppliers.

1.1.8 Utilisation

It is estimated that over the last year the project used 28% of its available capacity to deliver training.

Utilisation was calculated by dividing the total number of student hours delivered over the year by the maximum capacity of the project to deliver student training in that year.

Capacity was calculated as follows:

- Multiplying the number of hours of training that able to be delivered in one week by the number of weeks that the project is in operation.
- Multiplying the total operating hours by the maximum number of students able to be taught in one hour (i.e. by multiplying the maximum class size by the number of classes that can be delivered concurrently in one hour).

Capacity for the project is constrained by availability of the Simulation Educator, who is available to oversee training delivery for approximately 5 hours per week for 48 weeks (i.e. 60% of 0.2FTE). As

such, the project is able to deliver approximately 230 hours of training per year, which equates to a total of around 6,300 student hours, based upon 20 students being able to be trained in one hour.

Figure 2 below depicts the estimated utilisation rate for 2013 on a month by month basis. It clearly shows peaks in usage, that reflect the months when the IPSBET program was delivered. Utilisation during these months ranged from 78% in March to 13%, with an average of around 50%. The IPSBET program was not delivered for 6 months of the year. This is largely a consequence of higher education provider curriculum, which dictates when students are available for placement and hence SLE training.

During this time, 316 students went through the IPSBET program, averaging 26 per calendar month.

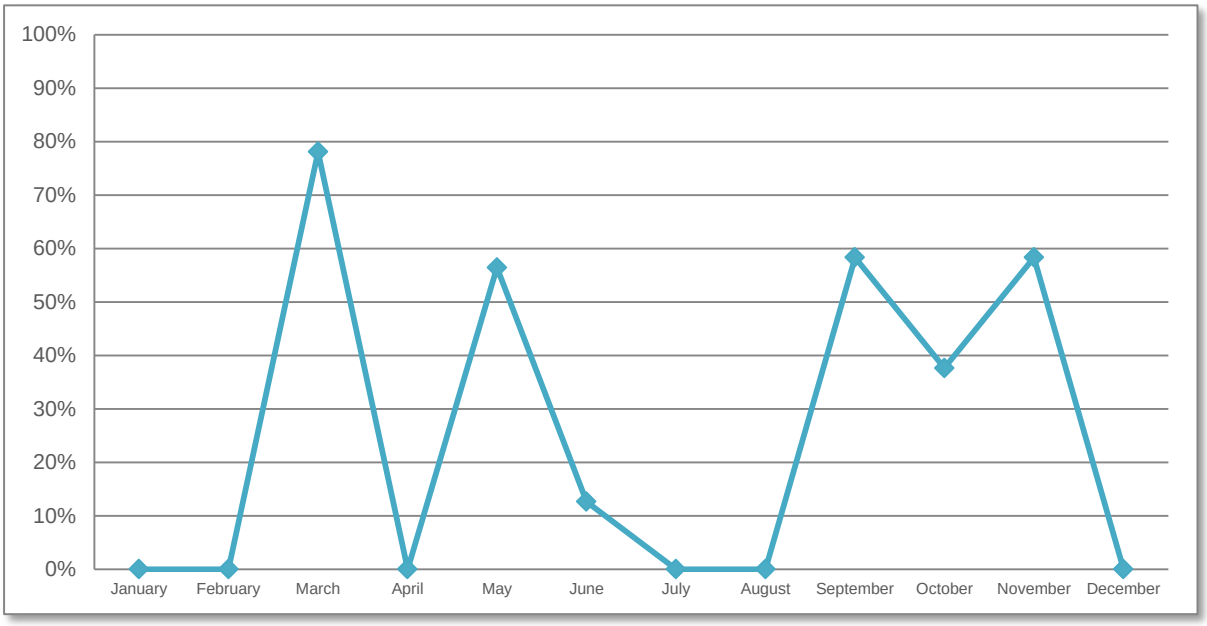

Figure 2: Estimated current utilisation

1.1.9 Costs

Based on its current operating configuration (i.e. the service architecture), HS incurs annual operating costs of just over $200,000 to deliver the IPSBET training program. This equates to a cost of approximately $870 per hour of time that the operation is available for teaching and training. The cost of training per user, based upon student numbers for 2013, is $554. Given that the average training time per user is 4 hours, the cost per hour of training for each user is $138.

Operating costs can be broadly categorised as follows:

- Costs relating to staff salaries;
- Cost relating to capital replacement of physical assets;
- Costs relating to administering the project/service;
- Costs relating to warranties;
- Costs relating to consumables used during training; and,
- Costs associated with marketing the project/service.

Figure 3 below illustrates the proportion that each of the cost categories contributes to the overall cost of delivering the service. By far the greatest costs relate to staff salaries and the cost of replacing capital equipment, accounting for around 80% of total annual costs

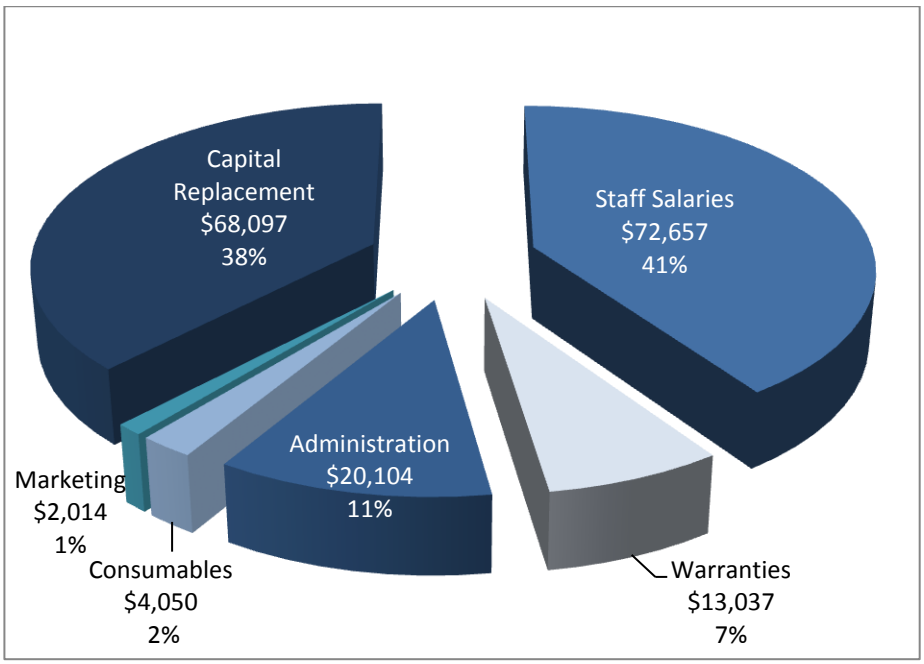

Figure 3: Breakdown of costs by category

Table 3 below shows a breakdown of the annual operating costs for the IPSBET project, which includes annual capital replacement costs of nearly $70,000.

Table 3: Operating costs

Cost item	Annual cost	Monthly cost
Capital replacement	$68,097	$5,675
Project Manager (0.2 FTE)	$20,488	$1,707
Simulation Educator (0.2 FTE)	$20,800	$1,733
Simulation Project Advisor (0.1 FTE)	$11,232	$936
Simulated patients (actors)	$10,125	$844
IPSBET trainers	$10,012	$834
Consumables (props, linens, etc.)	$4,050	$338
SimMan warranties x 1 ($30K for 3 years)	$10,000	$833
SimMom warranty ($9K for 3 years)	$3,037	$253
Marketing/course promotion	$2,014	$168
Catering	$732	$61
Printing & Stationery	$3,152	$263
Data Storage	$2,000	$167
Corporate contribution (15%)	$14,220	$ 1,185
Total	$179,959	$14,997

1.1.10 Current revenue

HS receives a fee of $60 for each student that undertakes clinical placement training at HS from the higher education provider. HS does not currently receive any revenue specifically for the delivery of

the IPSBET program. However, $60 per nurse per day for placement is received from the education provider.

1.2 'Mission critical'

For HS to continue to be able to offer the IPSBET program beyond the life of the HWA funding, the organisation would need to commit to fund new roles to market and conduct the program.

In particular more engagement with educational partners regarding the value of the program would be required. The activities, resources and circumstances that are absolutely essential for day-to-day delivery of the service include the following:

- Dedicated trainers to deliver program.
- Simulated patients.
- Maintenance and upgrade of capital assets when required.
- Marketing role to support success of the program.
- Commitment to embed in hospital clinical placement.

1.3 Key areas of strengths and weaknesses

A workshop was held with the key individuals from HS involved in the delivery of IPSBET. The purpose of the workshop was to assess of the project's internal environment that would likely impact the future sustainability of the project. The workshop identified the strengths and weaknesses of HS's existing SLE operation and provided insight into areas of the offering in which HS are strongest and areas which could be tailored to improve the success of the program. The output generated from the workshop was based upon the Sustainability Assessment Tool, which helped to facilitate the discussion and ensure all aspects of the current operations relative to the Sustainability Framework outlined in the department's Sustainability Blueprint were considered and consequently assessed.

Overall the workshop identified that HS's strengths are in the areas of:

- cost management
- relevant and reliable infrastructure
- providing a valuable offering to the users.

The following were identified as focus areas to improve the sustainability of the offering:

- having diversified and stable revenue sources; and
- knowing and understanding the users and beneficiaries and what they value.

The following radar graph is a pictorial representation of the output from Sustainability Assessment undertaken by workshop attendees. It shows the Project's 'scorecard' for each of the five sustainability factor groups (Users and beneficiaries, Offering, Infrastructure, Costs and Revenues). These scores are aggregate scores, based on the results of five sustainability factors for each factor group, as outlined in the department's Sustainability Blueprint.

Scores at the higher end of the spectrum indicate areas of strength, whereas those at the lower end of the spectrum indicate likely weaknesses.

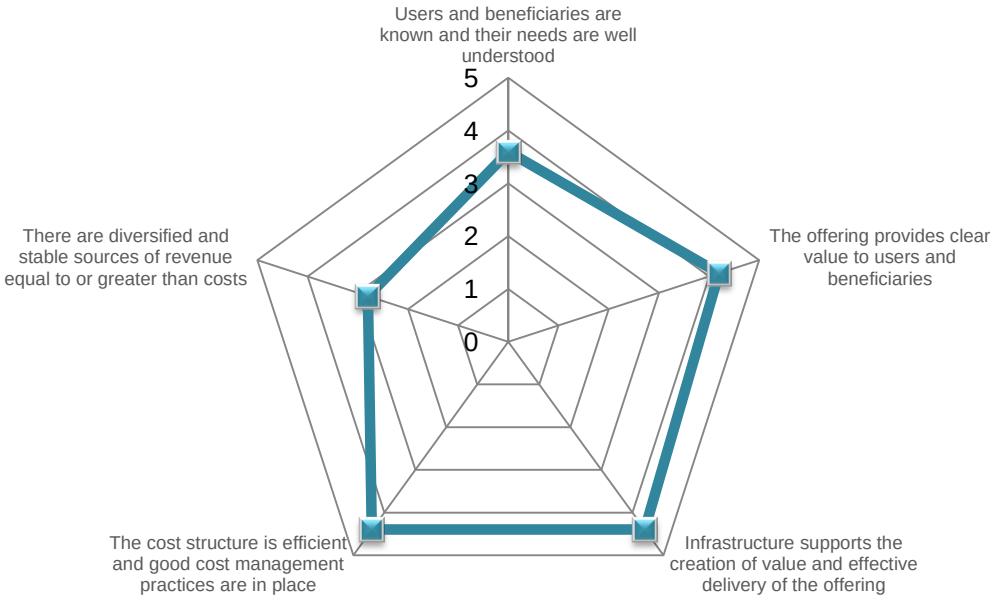

Figure 4: Sustainability measures of success

The detailed output showing the strengths and weakness associated with each of the five sustainability factor groups is outlined in Table 4.

Table 4: Strengths and weaknesses

Success Factor Group	Strengths	Weaknesses
Users and beneficiaries	• Good understanding of users and beneficiaries accessing the offering • Good relationships and communication channels with the users and beneficiaries • Feedback received from users and beneficiaries used to tailor the offering	• A lack of buy-in from education providers in relation to the offering until they physically see the training and hear the testimonies of students who have received the training
Offering	• Good alignment between the Project and the mission and offering of HS • Strong processes and interaction with users to ensure a quality offering is delivered • Assets and resources used in the offering meet the needs of the users	• Misconnect between the education provider understanding the value of the offering and getting their buy-in
Infrastructure	• Strong internal support and commitment from HS leaders • Strong organisational system supporting the offering and tracking its performance • The right level of skills and expertise to deliver the offering successfully	• HS has good relationships with two education providers however this is an area that could be reviewed • Limited suppliers in the market, HS have limited bargaining power

Success Factor Group	Strengths	Weaknesses
Cost structure	• Good understanding of the costs involved to deliver the training • Good controls around purchasing and inventory levels • Good record of assets and associated maintenance requirements	• Utilisation of resources could be improved
Revenue streams	• Continued buy-in and commitment from management including in-kind contributions	• Lacking consistent and stable revenue sources • Funds are not currently strategically invested in ways that could contribute to increased income • Lack of appetite from users and beneficiaries to pay for the offering.

Chapter 3: External environment

3.1 General environment

HS's external environment was analysed in the initial workshop with key individuals from the Project. The workshop focused on identifying external factors which were outside the control of HS but are likely to have an impact on the delivery of the IPSBET program.

The table below details the output from the workshop. This output was used to identify specific opportunities and threats that HS should address based upon an analysis of key political, economic, social, technological, legal and environmental aspects of the project's general environment.

Table 5: PESTLE analysis

Segment	Ref	Description	Type	Relevance	Impact
Political	1	State Government priority to improve health system and workforce capacity. People in Health initiative.	Opportunity	Medium	Medium
	2	Local government commitment to health outcomes in the community, including health workforce	Opportunity	Medium	Medium
	4	University fee structure is changing.	Threat /Opportunity	High	High
Economic	-	-	-	-	-
Social	5	Ageing population and increased prevalence of chronic conditions requires 'integrated' care models.	Opportunity	Medium	High
	6	Increasing focus on inter-professional training and working (IPL) – non-technical skills focus	Opportunity	High	Medium
Technological	7	Increasing levels of research into health care simulation and simulation technologies is providing an evidence base of benefits.	Opportunity	Low	Medium
Legal/regulatory	8	Growing focus on clinical risk management and compliance to improve patient care and safety (Accreditation Standard 9 National Care Standard)	Opportunity	High	High
	9	Funding may continue, with constraints to program users and beneficiaries.	Opportunity /Threat	Medium	High
	10	End of contract enables project to look at new users.	Opportunity	High	High
	11	SLE training not part of curriculum (i.e. seen as part of clinical placement)	Threat	High	High
Environmental	12	Cost of utilities has doubled year on year since 2012.	Threat	High	High

3.2 Immediate environment

Further to the external threats and opportunities, the following market conditions and trends have been identified as having an impact on the services delivered and future sustainability of HS's offering:

3.2.1 Demand conditions

Factors affecting or likely to affect demand for IPSBET, and SLE services more broadly include:

- Increasing number of students undertaking nursing and physiotherapy – this year there were two intakes at universities in response to the demand.
- Accreditation of SLE training and its inclusion in curriculum are key drivers of demand for SLE services.
- Lifting of HWA contract conditions opens up SLE to new user groups other than undergraduates.

3.2.2 Supply conditions

Factors affecting the cost and supply of goods and services that are crucial to the success of the project include:

- Supplier power is strong, which tends to keep prices relatively constant for the supply of simulation equipment, consumables and servicing.

3.2.3 Resource conditions

Factors that affect the availability of and access to key resource inputs for the project include:

- Relatively central location with good access owing to excellent road and public transport connections.
- Lack of technical skills, in SLE generally, which is exacerbated by limited capacity for career development. This leads to relatively high staff turnover for technical roles.

3.2.4 Competitive conditions

Factors that affect competition between SLE projects and services include:

- The presence of a considerable number of other organisations offering simulated training in the market, in particular universities (though the facilities and curriculum differ).
- Sustainability initiatives across the broader SLE program have the potential to create competition for a relatively small share of the 'paying' SLE market
- Other players in the market that could be a threat, or provide an opportunity for partnering, include:
  - Large Local Health Service 1
  - Large Local Health Service 2
  - Higher Education Provider 1
  - Higher Education Provider 2
  - Higher Education Provider 3

Chapter 4: SWOT analysis and strategic responses

4.1 SWOT summary

After considering the internal strengths and weaknesses of HS and the external environment in which they operate there are a number of strategic responses for HS to consider. This section focused on identifying the key strengths, weaknesses, opportunities and threats, which are summarised in Table 6:

Table 6: SWOT summary

Strengths	Weaknesses
• There is strong support within HS for the successful delivery of the IPSBET program. • HS regularly seeks feedback from universities and students around the delivery of the program and uses this information to tailor the offering. • HS has a good understanding of the costs involved with delivering IPSBET. Costs are budgeted, tracked and managed through a separate cost code within the broader HS finance system.	• IPSBET has limited control over the strategic investment of funds generated by the program. • To date there have been restrictions in place preventing a robust exploration of additional revenue sources. • Although the end users understand the value of the offering, there is currently limited appetite to pay for the offering.
Opportunities	**Threats**
• Increasing focus on inter-professional training and working (IPL) – non-technical skills focus • Growing focus on clinical risk management and compliance to improve patient care and safety (Accreditation Standard 9 National Care Standard) • End of HWA contract enables project to identify new users to take advantage of the training program which has been developed.	• Cuts to university funding expected. This will impact on the student fees and the structure of these fees. • SLE training not part of curriculum (i.e. seen as part of clinical placement) • Lack of suppliers in the market and small market is unlikely to attract other suppliers. HS has limited purchasing power.

4.2 Strategic responses

The following strategic responses have been identified in response to the above SWOT. The strategic responses identify initiatives that HS may consider implementing that may not have a direct connection with revenue enhancement or cost optimisation however indirectly could pave the way for creating a sustainable project. The initiatives should be prioritised, as it is likely they are longer term strategies which will underpin the ongoing success and sustainability of the offering.

The following strategic responses have been integrated into the revenue enhancement and cost optimisation initiative as detailed in section 5 of this report.

Table 7: Strategic responses

Strategic response	Description
Communicate positive feedback received from universities and students	Testimonies from the students and universities should be communicated more broadly than existing university partners to raise the profile of the SLE facility and the program delivered by HS. Given the success and testimonies of the program HS could contribute to the development of a business case to the Simulation Based Education Training Expert Advisory Group to facilitate a coordinated approach to having IPSBET based training included in the Universities' curriculum.
Communicate the benefit of SLE training in achieving accreditation and improving patient care and safety	HS has very good relationships with their users and a good process in place (i.e. seeking feedback from users) to ensure a high quality offering. With an increasing focus on risk management and compliance to improve care and safety in the external environment this creates an opportunity to promote and market how SLE training aligns with the hospitals accreditation and more broadly how it fits into the overarching objective of enhancing patient care and safety. Clear communication of this message paves the way for a broader use of SLE in the curriculum and education of current and future medical graduates.
Lessons learned and continuous improvement	The IPSBET program is into its 3rd iteration, a number of lessons learned have been developed along the way and fed back into the program to improve the offering. HS has significant IP pertaining to the program that has been developed in addition to a proven and established framework for training programs utilising SLE's. This IP could be packaged up and disseminated to other users for a fee, assuming that HWA would grant a licence for use by HS.
HS to run training programs currently delivered by universities for a lesser cost	Imminent funding changes within the education sector will impact the fees students pay for their education. This threat presents an opportunity for HS to engage with universities to validate and reiterate the value of the training programs provided by HS and identify other areas where it may be more cost effective for programs to be delivered by HS rather than the university.
Collective bargaining power	HS has a good understanding of the suppliers in the market and also other projects and organisations using the same suppliers. HS to use collective bargaining power to strengthen negotiations with suppliers.
Invest funding to develop alternative income streams	HS to allocate a portion of the annual budget to identifying and investing in areas to expand revenue sources. e.g. HS attendance/presentation at appropriate industry events to promote the SLE facility and training model. Hire/purchase a vehicle to transport students to training facility and charge a nominal fee for using the service
Flexibility to pursue new users and beneficiaries	End of the HWA contract provides flexibility for HS to identify alternative revenue sources such as contributions to the training program from students and universities. Users may be prepared to pay for the offering however they are very price sensitive, so HS would need to develop a price that users would be willing to pay.

Chapter 5: Cost optimisation and revenue enhancement

5.1 CORE ideas workshop

Following the assessment of the internal and external environment of HS a 2nd workshop with key stakeholders was used to identify cost optimisation and revenue enhancement ideas. The workshop was used to generate ideas to address the financial sustainability of HWA funded clinical training assets and their associated functions. The team considered the strategic responses from the initial workshop which were further developed and assisted in shaping specific cost optimisation and revenue enhancement options to be pursued. The key themes from the workshop were the identification of new markets which HS could approach and utilise their internal strengths to meet the needs of these markets. The workshop also focused on identifying excess resources and looking at cost saving initiatives from a group of SLE organisations. At the conclusion of the workshop, 8 cost optimisation ideas and 11 revenue enhancement ideas had been recognised.

5.2 CORE options

There were greater than 19 ideas identified at the initial workshop. However, in order to prioritise and focus on the initiatives with the most potential, the ideas were rated relative to one another in terms of IMPACT (High, Medium and Low), or the benefit or pay-off likely to result from pursuing the idea, and then in terms of how EASY it would be to pursue in terms of time, money or effort (Hard, Medium or Easy). At the conclusion of this exercise the team had identified 13 ideas to consider in further detail, the ideas further developed were:

Table 8: CORE options

Option	Description
Option 1	Rationalise staff and positions required to deliver IPSBET
Option 2	Substitute the use of manikins with actors and renegotiate rates with actors
Option 3	Create greater purchasing power and use this power to receive more competitive rates from key suppliers
Option 4	Discontinue purchasing the warranties for the SimMan and SimMom manikins and instead create a pool of shared technicians to service the manikins across Melbourne SLE organisations
Option 5	Rationalise the use of high value manikins with low value manikins when the manikins require renewal
Option 6	Offer a Summer School Program for students who didn't do clinical placement at HS & students wanting extra training to gain a competitive advantage
Option 7	Utilise the existing facilities and IPSBET training structure and framework and offer to General Practitioners
Option 8	Offer IPSBET to Universities beyond HS's existing higher education partners
Option 9	Introduce and E-Learning product to complement the existing IPSBET training
Option 10	Subcontract HS's IPSBET program and resources to smaller hospital and universities without the in-house capability to deliver similar training programs.
Option 11	Introduce SLE training fees and generate greater demand from existing University partners by communicating the value of the simulated activities through marketing

Option	Description
Option 12	Use the SLE centre to undertake process simulation testing for internal partners at HS to identify issues and constraints that may impact patient care and safety which could be identified and resolved before an 'actual' event occurs.
Option 13	Utilise the SLE facility, HS's status as a Registered Training Provider and the training framework in existence to provide accredited training programs to users.

5.3 Option assessment

5.3.1 Method of assessment

The Ease/Impact prioritisation method is a good tool to determine at a high level the likely size, scale and potential of the ideas generated. The refined list provided a manageable list of ideas with the greatest potential to be further assessed in terms of their specific attributes such as the potential benefits and risks, the timelines and resources requirements, and the financial payoff. This final filter provides a thorough analysis of the options and identifies ideas with not only a good financial benefit, but also considers how implementable they are and whether they are a good fit with the mission of HS and the organisational capability.

In order to prioritise the remaining 13 options the costs and revenue applicable to each option over and above the baseline (the existing IPSBET arrangement) were identified, following this exercise each of the 13 options were assessed against the criteria and using the scoring shown in Table 9. :

Table 9: Option assessment criteria and scoring

Criterion	Description	Score		
		1	5	10
Potential benefit	What is the scale of saving or revenue generated if the action is implemented?	$'00s	$'000s	$0'000s
User and beneficiary impact	What impact is this likely to have on users and beneficiaries?	Negative	No change	Positive
Time requirement	How long will it take to see the saving or income benefits?	>12 months	6-12 months	<6months
Length of potential benefit	How long are the saving or revenue benefits likely to last?	<6months	6-24 months	>24 months
Degree of organisational risk	Are there significant organisational changes required to deliver the initiative?	Significant changes required	Some changes required	No changes required
Degree of organisational capability	How capable is your organisation to deliver the change that the option requires?	There is no capability to implement	Some skills and resources are available	Skills and resources are readily available
Degree of operational risk	Is there a risk that the change will negatively impact your project to deliver its 'mission'?	High	Moderate	Low
Investment required	Does the option require a significant upfront investment?	$'0,000s	$'000s	$'00s

5.3.2 Results of assessment

Table 10 below depicts the outcome of this assessment and offers a weighting for each option. The options with a weighting greater than 5 are considered to generate a positive impact for HS and options with the highest weighting are considered to be the options with the greatest potential. This filtering process has identified the top 6 options with the greatest potential and for which an implementation plan has been developed.

Table 10: Results of option assessment

Criterion	Scoring of Options												
	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Option 11	Option 12	Option 13
Potential benefit	9	5	1	5	1	5	10	4	1	10	8	1	7
User and beneficiary impact	5	5	5	8	3	7	6	4	10	8	8	10	4
Time requirement	10	1	1	5	2	5	5	8	5	5	5	10	2
Length of potential benefit	10	5	10	10	10	5	8	8	8	8	10	8	8
Degree of organisational risk	1	5	5	1	5	5	4	5	10	7	8	10	4
Degree of organisational capability	8	8	5	5	7	8	5	8	4	8	8	10	4
Degree of operational risk	7	6	1	1	5	8	5	4	10	8	8	10	5
Investment required	1	5	8	8	7	8	2	5	8	4	5	1	4
Overall Score (score out of 10)	6.4	5.0	4.5	5.4	5.0	6.4	5.6	5.8	7.0	7.3	7.5	7.5	4.8

5.4 Proposed CORE strategies

The 6 cost optimisation and revenue enhancement strategies identified as having the greatest potential have been further developed in the section below. Each strategy has been developed to include; key attributes of the option, revenue assumptions, cost assumptions and provide an estimate of the likely cost saving or additional revenue to be generated from the option.

The table below summarises the projected costs and revenues for each of the strategies, and includes an annual in-kind contribution towards the cost of capital replacement by HS. The figures below have been rounded, so differ slightly from that used in the financial analysis discussed later.

Table 11: Summary of projected costs and revenues for CORE strategies

Strategy	Cost	Revenue
Rationalise staffing	-$30,732	nil
Summer School	$12,770	$18,000
E-learning	$7,900	$15,800
Subcontract SLE services	$13,870	$50,000
Introduce training fees and improve marketing	$23,910	$47,400
Process simulation	$500	$500
In-kind contribution towards capital replacement	$0	$68,097
Total	$28,218	$199,797

5.4.1 Strategy 1 - Rationalise staffing (Option 1)

Key Attributes:

This strategy will focus on rationalising the positions required to deliver the core IPSBET program. The initiative will identify the core skills and resources required to deliver IPSBET and identify areas of overlap and areas where skills are lacking or required. This strategy will also identify opportunities to substitute roles such as the project manager for a person with delivery support capabilities at a lower annual rate.

Key Assumptions:

- FTE Project Manager 0.1 allocated to IPSBET cost code for overall coordination of training programs and managing resources/educators to deliver the training, ensuring the facility is available to be used. This position would also provide additional functions previously done by the Simulation Project Advisor
- General administrative and project support is allocated to IPSBET as a proportion of the time the facility is utilised by IPSBET.
- Assumes current capacity of IPSBET program remains constant

Projected Revenue:

- Nil

Option Costs:

There are no costs anticipated with this initiative.

Total Saving:

The total staff cost saving is $30,732.00, which is the difference between the current cost for the Project Management resource and the anticipated cost.

5.4.2 Strategy 2 – Summer School (Option 6)

Key Attributes:

Introduce a summer school program for undergraduate students to take advantage of a third trimester where students have a large break and may be attracted by the ability to use this time to work towards their qualifications. This option will engage directly with undergraduate students who may be interested in the training which complements their degree and seek a competitive advantage against other students. This option also considers engaging with universities who may see the value in utilising the break to provide simulated training which will benefit the students and provide greater flexibility to the university around scheduling activities during the 12 week semester.

Key Assumptions:

- Nursing & physio undergraduates per year at partner education providers - 300 nurses, 300 physio per university = 1200 across both institutions
- Revenue per student to attend is $100
- HS - capture 15% of the current student market to participate in an annual Summer School
- Approximately 180 Summer school students are expected.
- Teaching and other resources would be required for 9 x 4 hour classes of 20 students each.
- Marketing costs of 8% of total revenue is expected.
- No additional resource to develop curriculum as the curriculum from IPSBET could be used.

Projected Revenue:

Project revenue is expected to be $18,000 per annum, based upon $100 per student for 180 students.

Option Costs:

Table 12: Summer School costs

Resources	Cost
Simulated patients (actors)	$3,400
IPSBET trainers	$3,400
Consumables (props, linens, etc.)	$2,340
Marketing/course promotion (8% revenue)	$1,400
Catering	$430
Printing & Stationery	$1,800
Total	$12,770

5.4.3 Strategy 3 – E-Learning (Option 9)

Key Attributes:

Offer E-Learning to complement the current simulated activities offered by HS, whereby students are provided with interactive learning support as part of the training program. As opposed to reinventing the product, discuss with education partners the opportunity to utilise the E-learning tool they have developed with the HWA funding.

Key Assumptions:

- Students would be charged an additional $25 to access the materials, on the basis that HWA grants a licence for HS to charge a small fee for the use of the materials.

Projected Revenue:

Revenue generated would be 632 students by $25 per student = $15,800.

Option Costs:

Cost to implement the option over and above the current costs would be 50% of revenue, comprising IT and content management services. Total cost per annum $7,900.

5.4.4 Strategy 4 - Subcontract SLE services (Option 10)

Key Attributes:

HS to subcontract SLE training services to smaller hospitals and universities to provide SLE services on behalf of the university or hospital. The offering could be similar SLE programs to IPSBET or the training process and curriculum of IPSBET could be utilised to tailor the program to the new setting/environment e.g. aged care. (HS has been approached by an education provider to offer VET training and also by a private hospital to identify graduates to undertake SLE training as part of their continuing professional development – a local public health service may also be interested in this initiative.

Key Assumptions:

- Approximately 108 hospitals in Melbourne and 10 organisations offering VET in health services.
- Of the 118 possible organisations training would be relevant to 40% of these hospitals. HS could capture 10% of the available market.
- Training charged at $10,000 per organization, for a class of 20 (i.e. $125 per hour for a 4 hour program - $500 per attendant)
- Costs include IPSBET trainer and marketing costs. The simulation educator would arguably have capacity to tailor curriculum within current time availability.

Projected Revenue:

Project revenue is $50,000 per annum, which is HS's estimated market (5 organisations) at $10,000 per organisation per training program.

Option Costs:

Table 13: Subcontract SLE costs

Resources	Cost
Simulated patients (actors)	$2,400
IPSBET trainers	$2,400
Consumables (props, linens, etc.)	$2,600
Marketing/course promotion (8% revenue)	$4,000
Catering	$470
Printing & Stationery	$2,000
Total	$13,870

5.4.5 Strategy 5 – Introduce training fees and improve marketing (Option 11)

Key Attributes:

Utilise relationships with existing universities (and identify new universities) to succinctly communicate and sell the value proposition that SLE creates for the university and the students. This messaging should be consistent with the introduction of fees which cover the cost of providing the training. The value created as part of the delivery of the program should be matched to the needs of the organisation being approached.

Key Assumptions:

- Current IPSBET student numbers are maintained (i.e. 312).
- Opportunity to introduce simulated training across 3 core subjects, increasing student numbers by 320.
- Revenue per student to attend is $75
- Additional IPSBET educations and Simulation educator to tailor curriculum. Additional actor costs.

Projected Revenue:

Project revenue is $47,400 per annum, based upon 632 students paying $75 per training program.

Option Costs:

Table 14: Introduce fees and improve marketing

Resources	Cost
Simulated patients (actors)	$6,000
IPSBET trainers	$6,000
Consumables (props, linens, etc.)	$4,160
Marketing/course promotion (8% revenue)	$3,800
Catering	$750
Printing & Stationery	$3,200
Total	$23,910

5.4.6 Strategy 6 - Process simulation (Option 12)

Key Attributes:

Use the SLE centre to undertake process simulation testing for internal partners at HS to identify issues and constraints that may impact patient care and safety which could be identified and resolved before an 'actual' event (e.g. design of hallways makes it timely/impossible for a patient bed on wheels to access theatre). While the costs and projected revenue of this option are not high, the integration and further imbedding of SLE within the operations of HS will have a positive impact on the visibility of IPSBET and the facility to the wider organisation.

Key Assumptions:

- 5 simulation process tests per annum.
- Cost $100 per simulation process test.
- Have assumed this option would be cost neutral for the IPSBET cost code.

Projected Revenue:

- The revenue for this option would be from HS departments utilising the offering. Estimated revenue is $500 per annum based on the above assumptions.

Option Costs:

- The costs for this option would be approximately $500 based on a proportion of the Simulator Educator's time.

5.5 Expected sustainability outcomes

High-level modelling of the project's future operational structure and financial position, after full implementation of the cost optimisation and revenue enhancement strategies, was undertaken against the current operational structure and financial position (assuming no further funding will be made available post 2014).

A central assumption to the model is that HS will take on the annual cost associated with capital replacement of assets. It also assumed that all initiatives are successful and that the cost and revenue assumptions correct. Ideally, detailed modelling should be undertaken and include sensitive analysis.

The modelling has shown that the sustainability initiatives proposed go a significant way towards improving financial viability, but are not sufficient to meet the cost of the service. Notwithstanding an expected annual revenue of close to $200,000 (which includes $68,097 of in-kind support from HS for capital replacement costs), there remains a deficit of $29,426. It is intended that, following the implementation of strategies in this plan, further work will be undertaken to address this shortfall.

The figure below illustrates the changes in cost and revenue between the current situation and future state. Clearly this is based on the assumption that each of the strategies is successful and the cost and revenue expectations are sound.

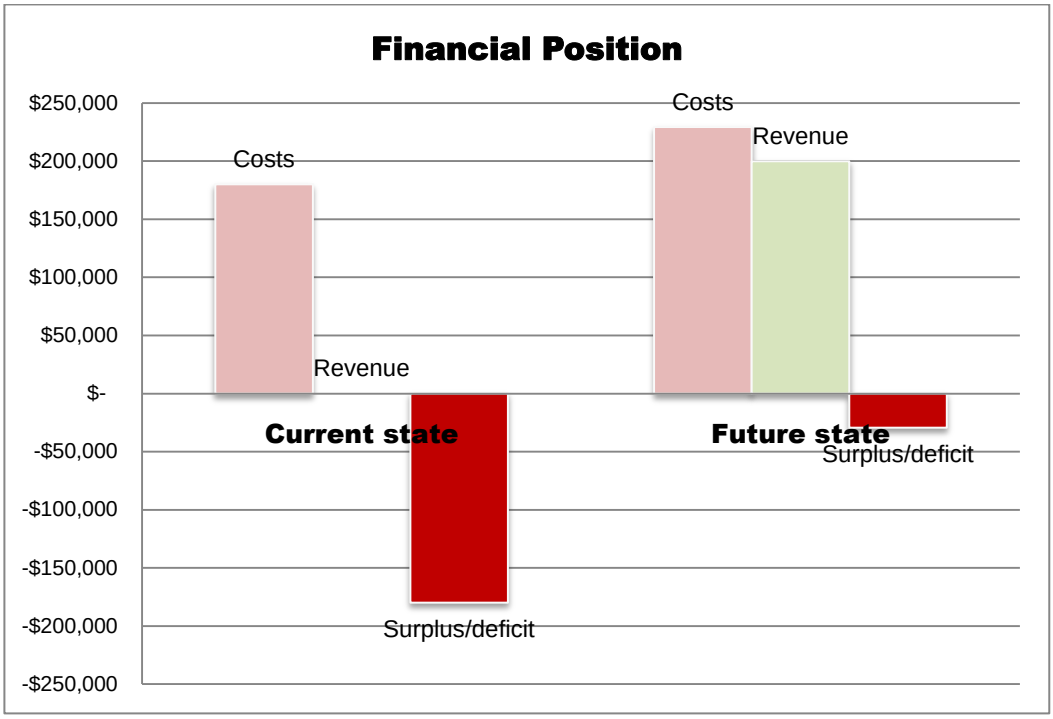

Figure 5: Comparison of current and project financial position

While there remains a considerable financial deficit for the project, the strategies outlined in this plan are estimated to have a significant impact in a number of areas, including:

- More than a doubling of overall utilisation, from 28% to nearly 80% (as shown in Figure 6 below)
- A reduction in costs per student hour of training hour of nearly $100, owing mostly to an increase in overall student numbers
- A nearly threefold increase in users.
- A reduction in costs per user by $380 dollars as a consequence of increased student throughput.

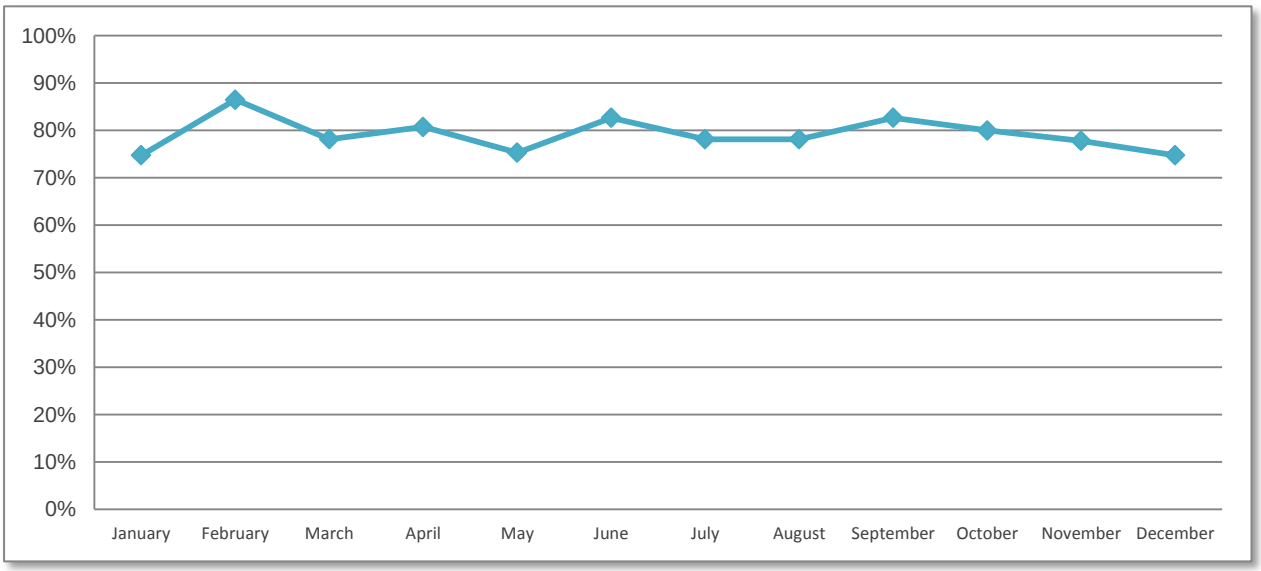

Figure 6: Projected future utilisation

A summary table of the key metrics and outputs from the cost optimisation and revenue enhancement analysis is shown in Table 15 on the following page.

Table 15: CORE analysis metrics and outputs

Metric	Current state	Future state	Difference
Costs	$200,447	$229,223	$28,776
Revenue	$0	$199,797	$199,797
Surplus/deficit	-$200,447	-$29,426	$171,021
Number of users	316	912	596
Cost per user	$634	$251	-$383
User generated revenue	$0	$115,400	$115,400
User generated revenue (per user)	$0	$127	$127
Other revenue	$0	$84,397	$84,397
Other revenue (per user)	$0	$93	$93
Hours operational	230	230	0
Total training hours delivered	1264	3648	2384
Cost per training hour per student	$159	$63	-$96
Cost per hour of operation	$870	$995	$125
Utilisation	28%	79%	289%

Chapter 6: Implementation plan

6.1 Objectives and measures of success

It is important that the objectives and success measures are detailed for each option and that the key resources involved in delivering the initiative support them. Of the six options identified, the objectives and success measures are:

Table 16: Objectives and measures of success

Objectives	Measures of success
Increased revenue	IPSBET project is sustainable in its own right by 2016
Increased students trained at the facility	Increase in utilisation of the SLE facility
Improved relationships with existing university partners	Greater buy in from universities of the value of HS's SLE with a greater number of students directed to HS for simulated activities
Simulated activities from HS become part of the curriculum	Instilling the value of simulated learning activities in nursing and physiotherapy degrees and pave the way for more simulated activities to be delivered as part of their qualification
Rationalised organisational structure to deliver the offering	Offerings are delivered to the same quality standard with a leaner organisational structure.
Increased understanding and awareness of the value of process simulation testing at HS	Increased buy-in from internal departments at HS measured by the number of process simulation testing requested. IPSBET received HS funding through the annual budget allocation process to replace capital items as required.

6.2 Work Plan

The work plan shown in Table 17 below represents a decomposition of the main work elements that need to be undertaken to deliver the plan. It also specifies target dates for commencing and completing tasks and deliverables, and the resource responsible for that work element. The Project's manager will use the work plan to execute and control the work elements and to track and monitor progress of the plan:

Table 17: Work Plan

No.	Task/activity	Start	Finish	Responsibility
1	**Rationalise staffing**			
1.1	Identify resources and skills critical to the successful delivery of IPSBET.	1st September 2014	30th November 2014	Simulation Educator
1.2	Undertake a gap analysis between the 'leanest' structure and the current structure identifying resources/skill in excess to requirements and or lacking	1st September 2014	30th November 2014	Simulation Educator
1.3	Discuss revised structured with management and affected staff members	1st September 2014	30th November 2014	Simulation Educator

No.	Task/activity	Start	Finish	Responsibility
1.4	Identify date for new structure to take effect.	1st September 2014	30th November 2014	Simulation Educator
1.5	Communicate new roles and responsibilities to all staff.	1st September 2014	30th November 2014	Simulation Educator
2	**Summer School**			
2.1	Identify target students and Heads of programs from targeted universities to be approached with the offering of a summer school program.	1st September 2014	Ongoing	Project Sponsor
2.2	Simulation educator to develop the curriculum and sample scenarios to be used as part of the training	30th September 2014	31st October 2014	HS Education Co-ordinator
2.3	Determine dates for the first training course and communicate to target universities and students.	30th September	31st October 2014	Marketing resource
2.4	Book facilities and commence student registration process.	15th October 2014	Ongoing annually	Simulator Educator
3	**E-learning**			
3.1	Commence discussions with Department of Health and other lead projects who have developed an E-learning product	1st November 2014	Ongoing	Project Sponsor
3.2	Identify changes which would be required to modify the E-learning tool and information to ensure it is suitable for HS	30th November 2014	31st December 2014	Simulation Educator
3.3	Determine the mechanism for how the E-learning product could be shared and whether there would be a cost involved (if cost is involved this to be passed on to the beneficiaries)	1st November 2014	31st December 2014	Simulation Educator
3.4	Determine the technical requirements to make the E-learning modules available to students.	1st November 2014	31st December 2014	
3.5	Communicate to university partners and students the availability of E-learning to complement the existing simulated training offered by HS	30th November 2014	Ongoing	
4	**Subcontract SLE services**			
4.1	Identify target universities and hospitals to approach with the offering and gauge their interest in the offering	1st September 2014	Ongoing	Project Sponsor
4.2	Seek internal approval from HS to deliver the offering	1st September 2014	30th September 2014	Simulation Educator
4.3	Discuss insurance and contractual requirements with HS legal advisors	1st September 2014	30th September 2014	Marketing resource
4.4	Develop a training package including training materials, assets and skills that would be required to deliver the training to an external organisation.	1st October 2014	31st December 2014	Project support officer

No.	Task/activity	Start	Finish	Responsibility
4.5	Deliver training program to client	1st January 2015	Ongoing	
5	**Marketing and communication**			
5.1	Schedule face to face meeting with the university to understand their planning cycle and issues and constraints regarding simulated learning activities	15th August 2014	Ongoing	HS Education Co-ordinator
5.2	Identify core competencies which graduates are currently lacking – data to be compiled in aggregate identifying common errors, themes of areas that need to be developed.	15th August 2014	30th September 2014	
5.3	Articulate the clinic's expectations of graduates prior to placement and link these expectations to the outcomes of the IPSBET training program	15th August 2014	30th September 2014	
5.4	Compile outcomes which have been achieved as a result of IPSBET 1, 2 & 3 in the form of testimonies.	15th August 2014	30th September 2014	
5.5	Develop a convincing message (based on the data) on the importance of IPSBET training and IPSBET based training for students.	30th September 2014	31st October 2014	
5.6	Continually and regularly engage with universities face to face to deliver the message and to keep abreast of their issues and concerns	15th August 2014	ongoing	
5.7	Engage the SBET EAG to communicate a clear and consistent message to users	31st October 2014		
6	**Process simulation**			
6.1	Communicate the service offering to department heads to gauge interest	1st January 2014	31st January 2014	Department leads
6.2	Select a department and undertake a process simulation testing demonstration and invite all department heads to observe	1st February 2014	28th February 2014	HS Education Co-ordinator
6.3	Create a booking system (excel based) to manage department bookings	1st February 2014	28th February 2014	Project Support Officer
6.4	Create a database of process simulation testing scenarios which can be continually added to	1st March 2014	ongoing	
6.5	Engage HS Finance Department, advise that the offering will be on a user pays basis and seek advice on how to do internal chargebacks	1st February 2014	28th February 2014	
6.6	Communicate to the broader hospital outcomes of the testing and how the SLE centre has been used.	1st February 2014	Ongoing	

6.3 Additional resources required

All the resources needed to implement the initiatives including labour, equipment, materials and facility space are documented in Table 18. Additional resources comprise not only new resources, but also an extension of the availability of existing resources to be used for the project.

Table 18: Resource requirements

Stakeholder groups	Concerns
Rationalise staff and positions	• No additional resources required to implement this option.
Summer School	• Marketing materials including brochure and dedicated resource
E-learning	• Resource to modify E-learning content • IT technical support resource
Sub-contract SLE services	• Educators and resources such as SLE facility, manikins, actors etc. • Marketing resource to develop and package offering to target users • Legal advice
Marketing and communication	• Marketing resource to develop and package offering to target users • Simulation facilities including staff, actors, infrastructure
Process simulation	• Simulation facilities including staff, actors, infrastructure

6.4 Budget

The increase in the annual operating budget to deliver these initiatives is approximately $28,000. Estimates of the increase in the principal cost items are as follows:

Table 19: Budget impact

Resources	Cost
Simulated patients (actors)	$11,800
IPSBET trainers	$11,800
Consumables (props, linens, etc.)	$ 9,100
Marketing/course promotion (8% revenue)	$ 9,200
Catering	$ 1,650
Printing & Stationery	$ 7,000
IT & Content Management Services	$ 7,900
Simulation Process Tests	$ 500
Salary Savings	- $30,732
Total	$28,218

6.5 Stakeholder management

An initial communications plan has been prepared based upon the stakeholders identified and analysed to date. Table 20 below outlines the key communication messages and activities for each stakeholder group, based upon the anticipated level of engagement required.

Table 20: Initial stakeholder engagement and communications plan

Stakeholder group	Concerns	Key messages	Channels	Frequency
Hospital Executive	Prudent financial management, patient safety	The project is delivering measurable benefits for the hospital and its customers	Management reporting	Monthly
Staff	Additional workload, loss of employment	Sustainability is central to the future of the Project and everyone's responsibility	Face to face	Ongoing
Users and beneficiaries	Affordable high quality learning experience	We understand your needs and we are delivering a service that responds to them	Digital Face to face	As required
Department of Health	Return on investment	The program is sustainable and delivering positive clinical training outcomes for the state	Stakeholder reporting	Monthly

6.6 Risks and issues

An initial register of the major risks and issues identified to date for each of the CORE initiatives is provided below in Table 21, along with recommended mitigation strategies. An ongoing process of risk and issue management will be required to monitor, assess and review the status of risks and issues and the effectiveness of the mitigation strategies.

Table 21: Initial risk and issue register

Strategy	Risks	Controls
Rationalise staff and positions	Loss of existing knowledge acquired to date which impacts the quality of the service.	Ensure IP is captured and codified for future use.
	Redundancies or loss of hours reduces staff morale.	Engage early with staff and explore all other sustainability options with them.
	Cost of training new staff reduces projected savings.	Cost of training new staff reduces projected savings.
Summer School	Insufficient interest from undergraduates and universities	Engage directly with market to identify learning needs.
	Educators unavailable during holiday periods, requiring more costly contract staff to deliver training.	Manage staff expectations regarding leave periods and potentially offer some form of loading.
E-learning	The tool is difficult to use and does not complement the existing offering.	Undertake user experience testing and iron out any bugs.

Strategy	Risks	Controls
Sub-contract SLE services	Available resources to develop the subcontract package.	Prioritise resources towards sustainability initiatives.
	Contractual risk associated with subcontracting	Legal and commercial review by HS corporate
Marketing and communication	No buy in from the universities as they don't see the value in HS's offering	Engage with universities to identify what it is they value and align offering.
	HS approach the university too late, missing the opportunity to deliver the training program in 2015.	Prioritise this strategy and immediately direct resources towards implementation.
Process simulation	Excessive resources and use of the facilities is required to implement process simulation testing impacting other uses of the facility.	Design and review service requirements prior to implementing. Ensure constant review of efficiency.

6.7 Monitoring, reporting and control

Regular reporting against each initiative will help to ensure the successful implementation of the idea and also to ensure it continues to align with the objectives of HS.

A steering group should be established to provide advice and guidance to the project team implementing the initiative specifically to provide oversight and advice on risks, issues and decisions if the initiative is not meeting the desired objectives.

The champion responsible for each initiative should provide a monthly status report to the steering group covering the following items:

- Key activities achieved during the period
- Key issues and risks
- Details of any costs associating with establishing the initiative (investment costs)
- Revenue generated during the period against the budgeted amount
- Cost incurred during the period against the budgeted amount