

## ESSAY

# Developing a strategic plan for a healthcare simulation facility

Paul O'Connor<sup>1,2</sup>, Emily O'Dowd<sup>1,2</sup>, Sinéad Lydon<sup>2,3</sup>,  
Dara Byrne<sup>2,3</sup>

<sup>1</sup>*Discipline of General Practice, University of Galway, Co. Galway, Ireland*

<sup>2</sup>*Irish Centre for Applied Patient Safety and Simulation, University of Galway, Co. Galway, Ireland*

<sup>3</sup>*School of Medicine, University of Galway, Co. Galway, Ireland*

**Corresponding author:** Paul O'Connor, [paul.oconnor@universityofgalway.ie](mailto:paul.oconnor@universityofgalway.ie)

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## ABSTRACT

A strategic plan defines an organization's strategy, or direction, and supports decisions on how to allocate resources in order to best pursue key goals. The need for a simulation facility to have a strategic plan is recognized by the Society for Simulation in Healthcare and the Association for Simulated Practice in Healthcare. A strategic plan is also relevant to the professional standards for accreditation outlined by the Society for Simulation in Europe. However, specific guidance on how to develop a strategic plan for a simulation facility is lacking. This report describes a five-stage process for developing a strategic plan for a simulation facility: (1) define the mission, vision and values; (2) strategic formulation; (3) operational planning; (4) assessing the results; and (5) reformulating the strategy. It is not suggested that this is the only method for developing a strategic plan. However, it is important that whatever approach used is systematic, rational, justifiable and draws upon input from all of the stakeholders in the simulation facility.

## Introduction

Many of those involved in healthcare simulation have become so because they are passionate about delivering simulation-based education, and not because they are interested in the business of running a simulation facility. However, it is not possible to deliver effective education in the absence of appropriate organizational processes founded upon an applicable strategic plan. A strategic plan supports an organization to move from its current situation to a desired situation in the future through identifying opportunities and threats to an organization, so these can then be addressed [1].

The importance of a strategic plan for a simulation facility has been recognized by the Association for Simulated Practice in Healthcare (ASPIH) and the Society for Simulation in Healthcare (SSH), and is required as part of the accreditation process [2,3]. A strategic plan is also relevant to the professional standards for accreditation outlined by the Society for Simulation in Europe [4]. However, despite the importance, specific guidance on how to develop a strategic plan for a simulation facility is lacking. Therefore, the purpose of this paper is to offer clear guidance on how to write a strategic plan for a simulation facility. This guidance is not only relevant to simulation centres, but also to develop a strategy for simulation programmes that may occur outside of dedicated simulation centres (e.g. a simulation programme delivered in an Emergency Department). We will

reference examples of existing healthcare simulation centre strategic plans. Following a systematic internet search, a total of six exemplar strategic plans for simulation facilities were identified.

### The process of developing a strategic plan for a simulation facility

Although the strategic planning process can be led by the simulation facility director or manager, it is ultimately a team effort that will require the formation of a steering group with representatives of all stakeholders in the facility. The guidance offered herein takes a ‘classic’ approach to developing a strategic plan in six stages (see Table 1) [5].

#### Stage 1: Define the mission, vision and values

The mission statement, vision and values are the guiding forces behind a simulation facility’s administrative strategic planning and performance assessment activities [6].

##### 1A. Mission statement

The mission statement describes the purpose of the simulation facility. For example, the mission statement for the Steinberg Centre for Simulation and Interactive Learning is: ‘to employ simulation in a health care context, focused on the education of health care professionals, patients and the public’ [7].

##### 1B. Vision

The vision is a statement of what the simulation facility hopes to be once the proposed changes in the strategic plan have been implemented. To illustrate, the vision of the Radford University Waldron College of Health and Human Services Clinical Simulation Centre is ‘to be the premier, innovative and student-centred simulation program with a keen focus on teaching, research and interprofessional education preparing competent, compassionate, professional clinicians to meet the needs of the local and global community’ [8].

##### 1C. Values

Values are the core beliefs of the simulation facility and those affiliated with it. For example, the core values of

the University of California, Irvine, Medical Education Simulation Centre are: ‘accountability, respect, integrity, excellence, service through teamwork and innovation’ [9].

#### Stage 2: Strategic formulation

Strategic formulation is concerned with forming a strategy in order to allow the simulation facility to meet the mission, vision and values. The five parts of the strategy formulation process described below provide a systematic analytical process of selecting a course of action to achieve the mission of the simulation facility.

##### 2A. Analysing the external environment

This analysis is concerned with identifying any external factors that can impact the simulation facility and its efforts to achieve the mission, vision and values. These external factors are those that directly impact the simulation facility, but over which the facility has no control. There are four components of the external environment to consider:

- *Learners and faculty.* The learners that come to the facility, and the external faculty that use the facilities for teaching.
- *Competitors.* Competitors can be considered to be other nearby simulation facilities. These facilities are not necessarily competitors in a business sense. However, competitors are a major source of learning.
- *Suppliers.* This may be companies that supply simulators, or it may be the providers of consumables required to carry out the simulation.
- *Owners.* Simulation facilities are not generally independent entities, and are typically part of a larger organization. Therefore, it is important to consider how the simulation facility fits within these larger organizations [5].

##### 2B. Analysing the internal environment

The internal environment are factors that affect the performance which can be changed and influenced by the simulation facility. The ASPIH identified a number of these factors:

*Faculty.* Faculty members may be experienced in simulation-based education, content experts in the subject being delivered or both. Consideration should be given on how to support the individual needs of faculty members.

*Technical personnel.* Technical personnel are crucial for the maintenance, preparation, and operational delivery of simulation-based education [10]. Much of the training for technical staff is on-the-job. Therefore, consideration should be given to the skills required by technical staff to support a facility’s operations.

*Activities (programme, procedural skills, assessment and in situ simulation).* An analysis should be undertaken of the education and training programmes delivered at the simulation facility, how these programmes could be improved, and a consideration of what future programmes could/should be delivered. A useful approach to considering these particular activities is SimZones. SimZones are a system for matching approaches to using simulation to particular learning needs [11]. This framework divides simulation into four distinct zones:

**Table 1:** Summary of stages for developing a strategic plan

<b>Stage 1. Define the mission, vision and values</b>
1A. Mission statement 1B. Vision 1C. Values
<b>Stage 2: Strategic formulation</b>
2A. Analysing the external environment 2B. Analysing the internal environment 2C. SWOT analysis 2D. Strategic alternatives 2E. Strategic areas and objectives
<b>Stage 3: Operational planning</b>
<b>Stage 4: Assessing the results</b>
<b>Stage 5: Reformulating the strategy</b>
<b>Stage 6: Communicate the strategy</b>

- **Zone 0:** Simulations practiced by solitary learners without an instructor present – often using virtual-reality simulators.
- **Zone 1:** Instructor led simulations of basic clinical skills.
- **Zone 2:** Simulations employing partial or full clinical teams to promote learning.
- **Zone 3:** Simulations with actual complete clinical teams with a focus on team and system development [11].

The SimZones approach is useful for considering the factors of the internal environment as it allows the characterization of the current (or desired) simulation activities of a simulation facility, and the faculty, technical staff and resources required to deliver on these activities.

*Activities (research, quality improvement).* Consideration should be given to how the simulation facility might be able to complete research and quality improvement projects. The concept of translational simulation is useful in supporting these considerations. Translational simulation is an approach to thinking about simulation based upon the impact on patient care and healthcare systems through diagnosing safety and performance issue and delivering simulation-based interventions irrespective of the location, modality or content of the simulation [12]. Translational simulation considers the impact of simulation-based education and training on healthcare outcomes. However, translational simulation also encompasses the use of simulation for diagnosing potential issues in the healthcare system (e.g. ‘system probing’ to identify latent threats, evaluating and testing new equipment), and the impact on health service performance (e.g. cost effectiveness, patient/staff satisfaction, complication rates) [12].

*Resources.* An analysis of the current, and future resource needs is arguably the most important consideration as it underpins everything that is done at the simulation facility [2].

### 2C. SWOT analysis

As part of the process of analysing the external environment (part 2A) and the internal environment (part 2B), a range of actions for improvement will have been developed. A Strengths, Weakness, Opportunities and Threats (SWOT) analysis subsequently provides a structured process to inform which

actions the simulation facility should focus on achieving. Table 2 provides an example of a SWOT analysis of a potential action.

### 2D. Strategic alternatives

In this step, all of the potential actions for improvement generated in the SWOT analysis are collated. The purpose is to start to group the actions in particular themes (e.g. grouping all actions concerned with faculty training). Once this theming has been achieved, the steering group can combine actions that are similar, or discard those that are unfeasible. This step should conclude with <20 areas of potential action [5].

### 2E. Strategic areas and objectives

The final step is to take the potential actions from step 2D and determine which of these should be addressed in the strategic plan. The actions that are selected for inclusion in the plan are subsequently called strategic areas. It is recommended that:

- there should be a limited number of strategic areas (five or six) to ensure that the simulation facility can still continue to run effectively while completing the actions;
- it must be possible to address the strategic areas within the time frame of the plan; and
- the names of the strategic areas should be generic, i.e. ‘faculty development’, rather than ‘improving the debriefing skills of faculty’.

Once the strategic areas have been identified, a set of four or five strategic objectives should be assigned to each area. A strategic area identified by the University of California Medical Education Simulation Centre is ‘create simulation-based educational programmes to assist in maintenance of certification, to improve and enhance learner competence, and to serve as outreach to professional organisations’ (p. 22) [9]. The associated strategic objectives are:

- ‘ensure proper staffing and learner experience;
- aligning with simulation industry best practice; and
- foster a system(s) that entrench simulation-based competency into the medical school curriculum’ (p. 22-23) [9].

**Table 2:** Example of a SWOT analysis for a potential action

<b>Action</b>	
To ensure standards of best practice in simulation programme design.	
<b>Strengths</b>	<ul style="list-style-type: none"> <li>• Accredited simulation centre staff who know how to develop educational activities to meet desired standards.</li> <li>• Stakeholder and faculty willingness to collaborate on programme design.</li> <li>• Well-developed and tested scenario design templates and guidance documents.</li> </ul>
<b>Weaknesses</b>	<ul style="list-style-type: none"> <li>• Lack of protected educational time for faculty and other stakeholders.</li> <li>• Shortage of trained debriefers limits the type of simulation activities and programmes delivered.</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>• Online training programmes and courses available to faculty that are flexible and funded by educational grants and subsidies.</li> <li>• Banks of scenarios available online from accredited facilities and/or to purchase which can be used as a starting point, e.g. California Simulation Alliance.</li> </ul>
<b>Threats</b>	<ul style="list-style-type: none"> <li>• A larger better resourced simulation facility nearby who operate a pay per use system and may be perceived as an easier option.</li> <li>• A lack of buy-in and resourcing of simulation activities by healthcare management.</li> </ul>

Together the strategic areas, and associated strategic objectives, constitute the strategy formulation – the strategy of the simulation facility.

### Stage 3: Operational planning

This stage ensures that each strategic objective is specific, practical and recognizable [5]. This is achieved by assigning operational objectives to each strategic objective. Operational objectives should clearly delineate what they should achieve. So, if the strategic objective is ‘improving the debriefing skills of faculty’, one of the operational objectives could be ‘deliver four debriefing courses annually for faculty’. Operational objectives should: be of a fixed duration; be quantifiable; be achievable; have someone responsible for ensuring completion; and supported by sufficient resources [5].

### Stage 4: Assessing the results

During the strategy implementation period, the steering group must retain oversight of whether specific objectives are being achieved on time and progress should be assessed at least quarterly. Based on this assessment it may be that changes are made to a number of the operational objectives or timescales of delivery in order to support their completion.

### Stage 5: Reformulating the strategy

The final stage is for the steering committee to retain oversight of the strategic and operational objectives. If there are issues with a particular group of operational objectives (e.g. slow implementation), it may be that the objective needs to be changed.

### Stage 6: Communicating the strategy

Although not specifically outlined as a stage in strategy development by Perera and Peiró [5], it is important that the strategy is communicated to all stakeholders. It is recommended that the mission statement, vision and values of the simulation facility are prominently displayed in the facility. It is particularly important that facility staff and faculty are aware of the strategy, as they are the people who are most likely to be involved in delivering on it. The strategy should be available to download from the simulation facility’s website, and the progress in the delivery on strategic goals should be a regular item in meetings with facility staff, and should also be discussed in meetings/presentations by the facility staff with members of the wider organization of which the simulation facility is part.

## Conclusions

Strategic planning is crucial to ensure that simulation facilities are best placed to manage or overcome challenges and to capitalize on their potential and opportunities for success. We are not suggesting that the approach outlined in this document is the only method for conducting a strategic plan. However, it is important that whatever method used is systematic, rationale, justifiable and draws upon input from all of the stakeholders in a simulation facility.

## Declarations

### Acknowledgements

None declared.

### Authors’ contributions

POC, SL and DB conceived of the study. EOD conducted the searches for the strategic plans. DB and POC led the writing of the manuscript. All authors revised and commented on drafts of the manuscript and agreed to the submission of the final manuscript.

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Not relevant.

### Competing interests

The authors declare that they have no competing interests.

### Consent for publication

Not applicable.

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