

Expressions of Interest

to provide

NON-TECHNICAL SKILLS TRAINING FOR SPECIALIST TRAINEES USING SIMULATION METHODS – PILOT TRAINING IN PROJECTS

An initiative of the Australian Government, Queensland Government and the Australian Society for Simulation in Healthcare (ASSH)

Expressions of Interest should be submitted to

Ms Adelle Wahry

Address

DEADLINE FOR SUBMISSION OF EXPRESSIONS OF INTEREST

5pm Friday March 13 2008

1 PROJECT AIMS and OVERVIEW

- 1.1 Experienced providers of simulation- based training are invited to submit an expression of interest to develop and deliver a pilot training activity, using simulation training methods, which address non-technical skills development in specialist trainees¹.
- 1.2 Providers will undertake the pilot training on behalf of ASSH which is overseeing the project.
- 1.3 The pilot training will be provided as one component of a Commonwealth government funded initiative entitled: *Non-Technical Skills Training (NTS) in Synthetic Learning Environments – Mapping Curricula for Vocational Specialist Training (abbreviated to “Curricula Mapping Consultancy” (see background).*
- 1.4 Up to six pilot training activities will be conducted. The pilots will be targeted at different specialist colleges. The participating colleges will be announced in May, after the providers have been contracted.
- 1.5 Each provider may be contracted to provide one pilot activity for one Specialist College.
- 1.6 Providers are expected to attend a one day forum scheduled for May 2008 for the purposes of acquainting themselves with the broader project and consultancy team.
- 1.7 Day to day coordination, administration, communication and liaison for the project is provided by the ASSH project officer, based at the Queensland Health Skills Development Centre (QHSDC).
- 1.8 The project will be conducted from March to December 2008 with final report due January 30 2009.

¹ **Vocational specialist trainee** – a medical practitioner undertaking post graduate training for the purpose of qualifying as a Fellow of a medical specialist college. The training is in accordance with the curriculum of the relevant accredited specialist college.

2 BACKGROUND

- 2.1 Non-technical skills (NTS) are recognised to underpin safe and effective clinical practice. Simulation has an established role in providing learning for NTS. A variety of learning technologies and learning methods, available in synthetic learning environments have been used for this application. Most specialist training colleges have responded to evidence supporting the relevance of NTS by emphasising NTS in their respective training curricula. However, the level of engagement with, and utilisation of, simulation varies amongst the different specialist colleges. Change management theory predicts that new practices will be more successfully adopted and sustained if a strategic approach is employed.
- 2.2 During 2008, ASSH will manage (on behalf of the Australian Government) a project broadly aimed at promoting non-technical skills (NTS) relevant to accredited specialist training in synthetic learning environments. The project is entitled: *Non-Technical Skills Training (NTS) in Synthetic Learning Environments – Mapping Curricula for Vocational Specialist Training*. The project comprises a consultancy, the outcomes of which will be completed in four sequential steps, as shown below:
- 1 **Inform key stakeholders** from specialist colleges about simulation-based training for NTS and the potential to develop this to address the contextual needs of their respective specialist disciplines.
 - 2 **Increase engagement** by the colleges to develop, or further advance, simulation applications to support NTS training, which are contextually relevant in their specialty.
 - 3 **Undertake a training needs analysis** of no fewer than four and not greater than six specialist colleges relevant to NTS to inform future curricula design and training initiatives.
 - 4 **Develop curricula maps** for the same 4-6 specialist colleges outlining priorities for competency development, appropriate simulation applications and vertical and horizontal integration with the existing vocational training program(s).
 - 5 **Mentor** the same specialist colleges as in 3 and 4 as they participate in pilot training activities. **(The subject of this Expression of Interest)**. The consultant will independently evaluate the pilots and provide recommendations for future developments.
- 2.3 A final component of this larger project will entail a series of pilot training activities. These are the subject of this expression of interest.

3 SCOPE OF SERVICE

Providers will

- 3.1 work collaboratively with the *Curricula Mapping Consultancy* project team and the targeted specialist college (See Appendix 1). This will entail:
- identifying learning objectives. This entails being advised by the consultancy project team regarding the priority learning objectives identified by the college (See Appendix 2).
 - Proposing suitable training technologies and methods. This entails advising the college regarding effective training technologies and methods best suited to address these objectives and developing a draft curriculum (Appendix 3).

- Working with key people within the college, consulting and receiving input, and where possible enabling them to participate in the training (as participants or faculty).
 - Attending an information forum in Melbourne in May 2008, if requested by the ASSH Project Sub-Committee.
 - Allowing reasonable requests by ASSH and key stakeholders recommended by ASSH to observe part of the program.
- 3.2 develop a pilot training activity which entails the following:
- developing a curriculum which reflects collaboration with stakeholders (see above point)
 - to be conducted over a short time frame (approximately 1-2 days)
 - is piloted on trainee specialists of the nominated college (minimum 12)
 - addresses the identified learning objectives (See Appendix 2)
 - uses simulation methods for at least 70% of learning activities with 100% of the activities delivered from synthetic learning environments (See Appendix 3, Table 3)
 - uses at least two approved simulation technologies (See Appendix 3, Table 4)
 - uses at least two approved simulation methods (See Appendix 3, Table 4)
 - is supported by a written course outline and relevant learning materials
 - includes recruiting and administrative support, liaison and communication for participants.
 - is overall approved by the ASSH Project Sub-Committee
 - and by cooperating with the consultant who is responsible for independently evaluating this pilot.
- 3.3 deliver the pilot not later than November 30 2008
- 3.4 maintain accurate and detailed records of financial transactions and allocate funding within the agreed upon budget.
- 3.5 submit a descriptive report of the activity inclusive of the learning objectives, learning formats, any learning materials developed for the project, and a financial statement (complying with Australian financial reporting standards). The due date of this report will be Jan 30 2009.
- 3.6 acknowledge ASSH, the Australian Department of Health and Ageing and the Qld government in any advertising or presentation of this pilot.

4 RESOURCES

- 4.1 The Provider will have support as needed from the ASSH management subcommittee and ASSH project officer. Roles of the project officer include:
- Contract management
 - Communication between Provider and ASSH Management subcommittee

- Liaison for reporting
- 4.2 The Provider is responsible for providing all other resources required to complete the consultancy including office equipment, stationery and communications.

5 OWNERSHIP OF INTELLECTUAL PROPERTY

- 5.1 Title to and intellectual property rights in all new contract material developed by the successful provider will vest in the State of Queensland.
- 5.2 Providers shall specify in the Schedule of Particulars, details of intellectual property rights in existing contract material to be provided/made available for the pilot training under this expression of interest and the provider, if successful, will be required to grant to the State of Queensland a non-exclusive, non-transferable, irrevocable and paid up licence to use, reproduce and adapt the contract material and to sub-licence that material including a right of sub-licence to ASSH.

6 FUNDING

- 6.1 Providers will be notified by the ASSH Project Sub-Committee of the exact amount funding available for the pilot once the college has been allocated and the specifications of the pilot activities have been determined.
- 6.2 Providers will be required to develop a budget for the activity and submit this to the ASSH Project Sub-Committee for approval prior to commencing the activities. No further funding will be available once the specifications have been approved.

7 FINANCIAL MANAGEMENT

Providers will be required to

- 7.1 manage expenditure according to the approved budget.
- 7.2 provide a summary and detailed records of expenditure using Australian financial reporting standards

8 INSURANCE

- 8.1 Providers shall have Public Liability and Professional Indemnity Insurance cover to the following values:
- Public liability insurance in the sum of \$10 million
 - Professional indemnity insurance in the sum of \$10 million; and
 - Workers' compensation for an amount determined by the relevant State legislation.

9 SUBMISSION OF FEE ESTIMATE

- 9.1 Providers are invited to submit an estimate of fees based on the evaluation criteria
- 9.2 A total should be provided which incorporates all inclusions. Provide the amount **exclusive of GST**.

10 EVALUATION CRITERIA

10.1 Obtaining the “Best Ultimate Value for Queensland Health”, after taking the Evaluation Criteria into account will be the main objective in the awarding of this service.

10.2 Providers who satisfy the essential criteria and who submit the most cost effective proposals will be contracted to provide the service.

Evaluation Criteria	
Essential criteria 1. Credentials	<p>Providers submitting expressions of interest to undertake this project should be able to demonstrate they have sufficient experience, capability and capacity to develop a custom made training pilot, where the specific objectives and formats will be determined after consultation with stakeholder.</p> <p>This would be indicated by a track record and current capacity to provide effective training:</p> <ol style="list-style-type: none"> 1. for the full range of NTS marked with an “*” in Appendix 2, Table 2) 2. using SLEs and simulation training methods (as described in Appendix 3, Table 3) 3. employing scenarios in learning activities 4. employing a range of training technologies (as listed in Appendix 3, Table 2) 5. employing a range of training methods (as listed in Appendix 3, Table 2)
Essential criteria 2. Capability and capacity	<p>Providers submitting expressions of interest to undertake this project should be able to demonstrate they are have the experience, capability and capacity to develop and deliver a training pilot according to the specifications required by the ASSH Project Committee as listed in Section 3 Scope of Service.</p> <p>This would be evidenced by a brief description (2 A4 pages) of an indicative course</p>
Cost effectiveness	<p>Providers who satisfy the essential criteria and who submit the most cost effective proposals will be contracted to provide the service.</p> <p>This would be evidenced by a quotation based on the above mentioned indicative course (see above point). <u>The quote should itemise costs for the following:</u></p> <ul style="list-style-type: none"> • Salaries of key staff (including rates and estimated time commitment) • Hire of venues and training equipment • Materials • Catering • Other costs <p>Note: the quotation <u>should not include</u></p> <ul style="list-style-type: none"> • travel related costs for participants • costs related to the consultant team • travel costs for providers to attend forum in Melbourne

11 CONTRACT

11.1 The successful provider/s will be required to enter into a contract for the provision of the training on terms and conditions as agreed by the parties.

12 APPENDIX 1 – PARTICIPATING SPECIALIST TRAINING COLLEGES

Table 1: Participating colleges

The table lists specialist colleges targeted in the broader project. Up to six will participate in pilot activities. The colleges will be determined in May. Training providers will be allocated a college to work with. The ASSH Management Committee overseeing the project will be responsible for allocating the colleges to providers.

1. Specialist colleges targeted to participate in this initiative comprise:

- a. Australasian College of Dermatologists (ACD)
- b. Australasian College of Emergency Medicine (ACEM)
- c. Australian and New Zealand College of Anaesthetists (ANZCA)
- d. ANZCA - Joint Faculty of Intensive Care Medicine (JFICM)
- e. ANZCA - Faculty of Pain Medicine (FPM)
- f. Royal Australasian College of Medical Administrators (RACMA)
- g. Royal Australasian College of Physicians (RACP)
- h. RACP - Australasian Chapter of Palliative Medicine (ACPM)
- i. RACP - Australasian Faculty of Rehabilitation Medicine
- j. RACP - Australasian Faculty of Occupational Medicine (AFOM)
- k. RACP - Australian Faculty of Public Health Medicine (AFPHM)
- l. RACP - Paediatrics & Child Health Division (PCHM)
- m. Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)
- n. Royal Australian and New Zealand College of Ophthalmologists (RANZCO)
- o. Royal Australian and New Zealand College of Psychiatrists and the Faculties of Child and Adolescent Psychiatry, and Old Age (RANZCP)
- p. Royal Australian and New Zealand College of Radiologists and the Faculty of Radiation Oncology
- q. Royal Australasian College of Surgeons (RACP)
- r. Royal College of Pathologists of Australia (RCPA)

2. Specialist colleges not targeted in this initiative comprise:

- s. Royal Australian College of General Practitioners (RACGP)
 - t. Australian College of Rural and Remote Medicine (ACRRM)
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APPENDIX 2 – RANGE OF POSSIBLE LEARNING OBJECTIVES

Table 2

The table presents a non-exhaustive list of competencies relevant to specialist trainees.

* **NTS.** The learning objectives of the pilot training activities will address NTS. However, the specific learning objectives to be addressed in the pilot training activities will be determined after the training provider has been contracted. The decision will be made by the consultant in consultation with the specialist college and the training provider. **Providers submitting expressions of interest to undertake this project should be able to demonstrate they have the capability and capacity to provide effective training for items marked with an “*”**

Clinical skills. These are not the main focus of the project. However, simulation commonly uses training methods which immerse learners in clinical situations or reproduce aspects of clinical situations. The enhancement of clinical skills would be expected to be a secondary gain of training that employed clinical scenarios. Not every pilot training activity is strictly required to employ clinical situations in the learning activities, however this option must be available. **Providers submitting expressions of interest to undertake this project should be able to demonstrate they have the capability and capacity to employ scenarios in learning activities.**

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1. * **Non-technical skills (NTS)**, in this document refer to cognitive functioning and observable behaviours that underpin safe and effective clinical practice. They include without being limited to the following:
 - a. * communication (patient-doctor, team)
 - b. * leadership
 - c. * teamwork
 - d. * situation awareness and decision-making
 - e. * resource management
 - f. * safe practice, adverse event minimization/ mitigation
 - g. * professionalism
 2. # **Clinical skills**, in this document, refer to domain specific components of clinical practice directly required including but not limited to:
 - a. Patient assessment and clinical diagnostic reasoning
 - b. Judgement and decision-making regarding therapy
 - c. procedural knowledge and technical skills relevant to execution of procedures
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APPENDIX 3: DEFINITIONS, RANGE OF SIMULATION TECHNOLOGIES AND TRAINING METHODS POTENTIALLY USED IN PILOT TRAINING ACTIVITIES

Table 1: Definition of simulation

Providers submitting expressions of interest to undertake this project should be able to demonstrate they have the experience, capability and capacity to provide effective training activities using SLE for 100% of the training activities and simulation training methods for at least 70% of training activities.

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1. **Synthetic learning environment (SLE)** – an area, used for the purpose of learning and related activities, the latter including research into, assessment and evaluation of learning, which reproduces components or aspects of the real world environment, to support learning.
 2. **Simulation** in this document refers to learning methods provided in SLEs which support experiential learning. Key components of experiential learning include:
 - a. the learner interacts with his or her environment.
 - b. A high proportion of the learning activities enact activities and tasks representative of the learner’s real world responsibilities.
 - c. The environment needs to be sufficiently realistic for experiential learning to occur. Depending upon the learning objectives, realism can be built into the equipment, the surrounding environment or the overall integration of equipment, environment and interactions between learners and instructors²
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Table 2: Learning technologies and training methods.

The table lists a learning technologies and training methods that are employed in synthetic learning environments. **Providers submitting expressions of interest to undertake this project should be able to demonstrate they have the experience, capability and capacity to provide a range of training methods using a range of technologies from the following list.**

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1. **Learning technologies** used in (SLEs) include, without being limited to:
 - a. Manikin – life-like aspects of people and situations are generated by a manikin and or a “theatrical” interaction of actors and props with manikins.
 - b. Computer-based virtual reality – a realistic environment is reproduced on a computer screen.
 - c. Haptics (tactile information is fed back to the learner (E.g. feel of surgical instruments on tissue)
 - d. Actors – reproduce components of real world experience, especially involving communication between people
 - e. Part-task trainers – reproduce components of a patient’s anatomy. They are generally used to support procedural skills training however may be used in conjunction with other learning technologies to
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² From Beaubien JM. Baker DP. The use of simulation for training teamwork skills in health care: how low can you go? Quality & Safety in Health Care. 13 Suppl 1:i51-6, 2004 Oct.

create integrated clinical situations.

f. Video – actual real world, or any of the above enacted on video

2. Learning methods used in (SLEs) include, without being limited to:

- a. Scenarios - Using any of the above technologies to enact whole events or components of events.
 - b. Case-based learning – using other formats including written and oral presentations, to present clinical scenarios for learning.
 - c. Role play – Using any of the above technologies to enact interactions between people, including but not limited to:
 - i. health professionals and patients (E.g doctor–patient; nurse-patient)
 - ii. Health professionals and health professionals
 - d. Procedural training - Using any of the above technologies as a platform from which to conduct a procedure.
 - e. Multimodal formats – refer to activities which integrate two or more discrete techniques or curricula which use a variety of specific formats to address specific individual learning objectives.
 - f. Debriefing and reflection
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