Quality Assurance in Simulation Framework and Guidance

for the
South London Simulation Network (SLSN)
May 2015
Quality Assurance in Simulation Framework and Guidance

Prepared by Colette Laws-Chapman on behalf of the South London Simulation Network

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This quality assurance guide is the result of a collaborative project across South London Simulation centres to provide a peer quality assurance tool.

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- Dr Simon Broughton, Kings College Hospital NHS Foundation Trust
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# Index

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td>Process Overview</td>
<td>5</td>
</tr>
<tr>
<td>The Quality Assurance Process and Submission of Evidence Guide</td>
<td>7-14</td>
</tr>
<tr>
<td>Appendix A: Quality Assurance Literature Review</td>
<td>15-39</td>
</tr>
<tr>
<td>Appendix B: Annual Peer Reviewer Observation Form</td>
<td>40-46</td>
</tr>
<tr>
<td>Appendix C: Annual Peer Review Summary Report Form</td>
<td>47-48</td>
</tr>
<tr>
<td>Appendix D: Biennial Quality Assurance and Governance Review Form</td>
<td>49-52</td>
</tr>
<tr>
<td>Appendix E: Day to Day QA Course Debrief Form</td>
<td>53</td>
</tr>
</tbody>
</table>
Quality Assurance in Simulation Framework and Guidance – for peer review of Simulation Courses in the South London Simulation Network

Introduction:
The utilisation of simulation and interactive learning in healthcare education has become an established modality for inter-professional education over the past ten years within both hospital and university-based centres in South London.

It is recognised that the development of simulation based training is diverse and variable across South London and in the last few years it has been recognised by centres including GAPS, SaIL at GSTT, KCH and SLAM that a partnership approach to sharing resources and expertise is an effective format for the future of high-quality simulation. A South London Simulation Network (SLSN) has been developing over this time period with the intention to share best practice to support effective course development and quality assurance for south London based simulation.

Members of this network include simulation centres based at the following hospitals: Epsom and St Helier, Kingston, Lewisham, Croydon, South London and Maudsley and St George’s.

In order to develop a quality assurance model for simulation, a literature review was initially carried out to explore what our colleagues in simulation consider is quality in simulation medical education and if any current quality assurance mechanisms exist. This can be found in Appendix A.

Purpose of this Document:
This document is designed to be used as a tool for the process of quality assurance of individual simulation courses being conducted within the SLSN. It has been developed from a number of sources including the NHS Yorkshire and Humber Quality Framework produced by the Montagu Clinical Simulation Centre (http://login.qaclinicalskills.co.uk/pdfs/QACSS), The Simulation Quality Assurance and Developmental (SQUAD) Visits Framework developed by Health Education Kent Surrey & Sussex & GAPS (2013) and the International Nursing Association for Clinical Simulation and Learning (INACSL) standards revised (2013). An amendment to the tool was made in the pilot phase utilising a local day to day course debrief tool.

Key Principles:
Peer review visits are intended to be developmental with the opportunity to compare:

- operational & governance functions
- design and delivery of simulation courses against standards identified as best practice
- exchange good practice, ideas and processes
- any aspect of simulation could be observed from low or no-tech training days to part task training, of fully immersive high-fidelity simulation using human patient simulators or actor based simulation

This tool is intended to be used by individual faculty members/ course directors/centre directors and teams involved in the quality assurance process of simulation courses within the SLSN.
Process overview:

There are three formal stages to the review that occur over a two-year period.

**Stage 1: Annual Peer Review Visit:** Each course should have a peer review annually. Over the two year period, one of these peer reviews must be conducted by an external peer reviewer. Each centre should organise peer-to-peer course reviews with the peer reviewer completing an Annual Peer Review Observation form (Appendix B) and Annual Peer Review Summary Report form (Appendix C).

**Stage 2: Annual Quality Assurance Course Board Review:** Centres conduct an end-of-year course board review meeting with key stakeholders. Reports and course content will be reviewed including course evaluation data, research results, peer QA review report and ongoing development activities / topic evidence. Course review summary data is discussed at each centre’s Educational Governance meetings.

**Stage 3: Biennial Quality Assurance & Governance review:** Self-reported return and peer site visits

- Centre completes Biennial Review Form (Appendix D) showing evidence of QA processes and Summary Reports carried out on current courses (Appendix C).
- A senior external reviewer from a peer organisation will review and sign-off a completed Biennial Review Form (Appendix D). The centre may provide the course directory and course review papers as governance evidence.

Informal process:

**Day to Day QA Course Debrief Form:** Centres can utilise this tool on a day to day basis to capture faculty post courses debrief discussions (Appendix E).

**The annual peer review visit:**

There will normally be one peer reviewer, either external or internal, observing the simulation course either from an educationist or faculty background with extensive experience in the field of medical simulation. The reviewer will make notes during the observation using the Annual Peer Review Observation form (Appendix B) and may supplement these with their own notes for debriefs of debriefs they undertake for individuals.

A peer reviewer information pack should be made available, in advance of attending the visit wherever possible, which may include the following:

- pre-course information
- programme timetable
- intended learning outcomes
- scenario briefing sheets
- any pre-course reading/ activities
- model of the debrief format used
- level of learners present (e.g. RN’s, Therapists, Foundation Year 1, Specialist trainee)
- names and level of faculty members participating in scenarios/debrief
• example of the pre and post course evaluation measurement tool

Peer reviewers are expected to:
• attend and observe the faculty pre-brief
• observe at least one whole scenario and scenario debrief
• conduct at least one debrief of the debrief to faculty observed
• provide a same day summary of quality improvement observations found during the visit
• where possible stay for the course debrief and review course evaluations

The peer reviewer is looking at the whole course process and through the QA tools will consider the following elements:

• The learning environment
• Pre-session development including scenario design and purpose
• Familiarisation for faculty and learners
• Course introduction
• Scenarios & workshop sessions used in the course
• Debrief of simulations
• The characteristics of effective facilitation including debrief structure and questions
• Course evaluation

After the peer observation visit, the peer reviewer should complete an Annual Peer Review Summary Report (Appendix C) from their observations which should be emailed to the course lead/ faculty. Subsequently, a course review board should consider the QA review recommendations alongside any relevant evaluation data at the annual course review to consider and amend the course if required.

The Biennial Quality Assurance and Governance Review visit:
A simulation based learning centre should aim to have a core governance structure that incorporates quality, finances, and course and faculty development elements. Ideally a centre has a designated director who co-ordinates a strategic governance framework that’s aligned with the organisational and stakeholder values and needs of the organisation it is based within. To support this, the SLSN QA process has incorporated a biennial review using a prompt sheet (Appendix D) which features the broader elements of centre governance combined with a single course review.

The principles are that every other year a simulation centre will prepare for and host a biennial peer review. The senior external peer reviewer will attend in order to meet with the centre director to conduct the biennial QA review. They will review governance documents and complete any gaps in Appendix D when meeting with the centre director.
## The Quality Assurance Process and Submission of Evidence

### 1. The Core Standards

**KEY:**

<table>
<thead>
<tr>
<th>Stage</th>
<th>Person(s) responsible &amp; areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Peer Review Visit</td>
<td>Centre Director:</td>
</tr>
<tr>
<td></td>
<td>Peer Site Visit: 1x per course to be arranged. Minimum of one external peer reviewer every two years.</td>
</tr>
<tr>
<td>Annual Quality Assurance Course Board Review</td>
<td>Course Lead and Centre Director:</td>
</tr>
<tr>
<td></td>
<td>1x per course</td>
</tr>
<tr>
<td></td>
<td>Collates course evaluation data &amp; QA review data to formulate review and recommendations for course changes / continuation. Provides reports and minutes of meeting to centre director.</td>
</tr>
<tr>
<td>Biennial Quality Assurance and Governance review</td>
<td>Centre Director:</td>
</tr>
<tr>
<td></td>
<td>Collates summary of peer review reports and peer visit feedback to formulate action plan for governance reviews</td>
</tr>
<tr>
<td></td>
<td>Completes biennial review QA and governance form (Appendix D)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard/ Stage</th>
<th>Possible evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Course Mission Statement and Governance</td>
<td>Key: There is a clear course mission statement that addresses the course purpose and activities that will be provided by the course provider</td>
</tr>
<tr>
<td></td>
<td>Principles:</td>
</tr>
<tr>
<td></td>
<td>1) Clear aims and objectives of the course</td>
</tr>
<tr>
<td></td>
<td>2) Specified target population</td>
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<td></td>
<td>3) Expected results</td>
</tr>
<tr>
<td></td>
<td>4) Course aims and activities regularly reviewed</td>
</tr>
<tr>
<td>Annual Peer Review (Peer course QA observation)</td>
<td>Evidence:</td>
</tr>
<tr>
<td></td>
<td>1) Review of individual course documentation and delivery including aims, objectives, administration &amp; marketing materials, attendance records and course timetable.</td>
</tr>
<tr>
<td>Annual QA course board review (Self Report)</td>
<td>Evidence:</td>
</tr>
<tr>
<td></td>
<td>1) Documented review of course aims and activities by course leads.</td>
</tr>
<tr>
<td></td>
<td>2) Provision and public display of clear course aims.</td>
</tr>
<tr>
<td></td>
<td>3) Summary of attendance records / evaluation data.</td>
</tr>
<tr>
<td>Biennial Quality Assurance and Governance review</td>
<td>Evidence:</td>
</tr>
<tr>
<td>(Self-Report and Peer Site Visit)</td>
<td>1) Minutes of educational governance or review body meetings.</td>
</tr>
<tr>
<td></td>
<td>2) Appendix C completed for each course and evidence observed by biennial peer reviewer.</td>
</tr>
</tbody>
</table>
### 2) Course Organisation and Management

**Key:** There is an organisational structure in place to ensure adequate finance, personnel and material in order to support the delivery of the course.

**Principles:**
1) There is an organisational structure that clearly shows lines of authority and areas of accountability
2) There is a process in place for setting and managing a responsible and realistic budget
3) There is an appropriately qualified individual who has overall responsibility for management of the educational facilities and provision of services
4) Adequate and appropriately trained staff are available to deliver the course
5) There are policies and procedures in place for quality monitoring, confidentiality and contingency plans for unexpected events

| **Annual Peer Review** (Peer course QA observation) | **Evidence:**
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1) There is an appropriately qualified individual leading the course.</td>
<td>2) Review of faculty numbers, levels and training.</td>
</tr>
</tbody>
</table>

| **Annual QA course board review** (Self Report) | **Evidence:**
<table>
<thead>
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<tbody>
<tr>
<td>1) There is an organisational chart and individual role allocation which outlines roles, responsibilities and accountabilities.</td>
<td>2) There is a designated course lead. 3) There is a yearly financial statement for individual courses.</td>
</tr>
</tbody>
</table>

| **Biennial Quality Assurance and Governance review** (Self-Report and Peer Site Visit) | **Evidence:**
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1) Able to provide copies of policies and procedures for quality standards, confidentiality and unexpected events e.g. cancelled courses, staff sickness etc.</td>
<td></td>
</tr>
</tbody>
</table>

### 3) Course Resources and Equipment

**Key:** The course facilities and equipment are fit for purpose.

**Principles:**
1) The course provider undertakes a needs analysis to ensure that the technology and equipment available is appropriate to achieve the educational objectives.
2) The course provider uses appropriate equipment/level of fidelity for each course.
3) The course environment must be educationally supportive and clinically credible.
4) All equipment and maintenance schedules must be documented and kept.
5) There are defined areas for the course sessions e.g. clinical skills facilities, scenarios, debriefing and equipment storage.
6) Adheres to organisational Health and Safety policies and procedures.
### Annual Peer Review (Peer course QA observation)

**Evidence:**
1. Pre-brief to participants regarding orientation to general housekeeping, health and safety, simulation environment and manikins and equipment.
2. Designated clinical and debrief areas.
3. Courses or scenarios have appropriate prop/equipment supplied e.g. props list on scenario template or technician info.

### Annual QA course board review (Self Report)

**Evidence:**
1. Can provide data detailing equipment and defined areas required.
2. Equipment and environment matches training needs.
3. Course faculty appropriately trained on course equipment and environment.
4. Course feedback from users provides data on course environment being educationally supportive and clinically credible.

### Biennial Quality Assurance and Governance review (Self-Report and Peer Site Visit)

**Evidence:**
1. Health and Safety policies and procedures clearly available for all staff. Nominated individual to maintain these and ensure all staff are up to date.
2. All areas clearly identifiable and floor plan as per fire regulations.

### 4) Course Evaluation and Development

**Key:** There are processes in place to evaluate individual courses and functioning of facilities.

**Principles:**
1. The course provider commits to evaluate performance.
2. Identifies areas for improvement and documents how and when these improvements are made.

### Annual Peer Review (Peer course QA observation)

**Evidence:**
1. Can provide copies of evaluation forms (e.g. pre course and/or post course)

### Annual QA course board review (Self Report)

**Evidence:**
1. Can provide copies of evaluation results to evidence why changes are made. Identify how improvements are made and where these are documented e.g. annual review, local meetings.

### Biennial Quality Assurance and Governance review (Self-Report and Peer Site Visit)

**Evidence:**
1. Provides documentation of annual course board reviews or local educational meetings

### 5) Ethics & Psychological Safety

**Key:** The course faculty members all demonstrate a commitment to highest ethical and professional standards.

**Principles:**
1. All course faculty staff are honest, open and provide accurate
2. Education Standards

<table>
<thead>
<tr>
<th>Key: The course provider ensures the clinical skills and/or simulation activities and expert faculty/facilitators are using simulation or educational theories to support the student learning. Educational material should be reliable, valid and evidence/curriculum based.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles:</td>
</tr>
<tr>
<td>1) Courses should utilise simulation and/or clinical skills practice in the learning environment.</td>
</tr>
<tr>
<td>2) Faculty should be supported by a recognised educational lead or have access to development programmes.</td>
</tr>
<tr>
<td>3) A simulation or clinical skills experts should be nominated as a course lead to supervise individual courses.</td>
</tr>
<tr>
<td>4) There should be a yearly review of course aims, objectives and materials updating them in line with current guidelines/curriculums where necessary.</td>
</tr>
</tbody>
</table>
### Annual Peer Review (Peer course QA observation)

**Evidence:**
1. Course provider is able to produce the course timetable.
2. Evidence of monitoring quality of debriefs e.g. faculty debrief each other and level of debriefer of debriefs (e.g. novice, intermediate, advanced and expert).
3. Faculty debrief /review the whole course at the close of the day.

### Annual QA course board review (Self Report)

**Evidence:**
1. List of courses provided, their degree of immersive simulated environment and details of their course leads/ faculty.
2. Course aims etc reviewed and updated.
3. Details of In-house or external faculty development – informal or formal.

### Biennial Quality Assurance and Governance review (Self-Report and Peer Site Visit)

**Evidence:**
1. The course provider is able to produce a profile of each of its trainers e.g. visiting faculty training portfolio/ job description/CV.
2. The course provider can produce evidence of course reviews and updates including relevant competency frameworks and/or curricula.
3. Evidence of sound educational practice in peer observation
4. Use of appropriate tool to monitor quality of debriefs (e.g. OSAD or in-house tool) and other course elements.

### 2) Trainer, Faculty and Facilitator Qualities

**Key:** Courses are supervised by appropriately experienced/trained faculty/facilitators/trainers

**Principles:**
1. Training and faculty members and facilitators are experts in their specialist areas and/or simulation.
2. The experts are delivering courses appropriate to their skills.
3. The course provider can access or provide faculty development programmes to ensure appropriate use of skills.
4. Training and faculty members and facilitators are encouraged to attend on-going education in this field.
5. All teaching staff receives feedback either informally or formally e.g. SPOT – simulation peer observation of teaching/ debrief the debrief.
### Annual Peer Review (Peer course QA observation)

**Evidence:**
1) Number of facilitators for each course.
2) Numbers and experience of debriefer.
3) Presence of embedded participants and their impact on scenarios.
4) Appropriate consultant faculty if a surgical skills course.

### Annual QA course board review (Self Report)

**Evidence:**
1) Training and faculty members and facilitators can provide evidence of the successful completion of a “Faculty Development Course” e.g. Train the Trainer or Essential debriefing skills.
2) Each course has a nominated expert in simulation or the specialist area.
3) Expert faculty for clinical skills are consultants, senior speciality trainees or senior nurses.
4) The course provider is able to provide evidence of the educational attainment of all faculty/trainers e.g. CV, personal educational records, certificates.
5) Each faculty member is responsible for maintaining their own professional development.
6) Course provider conducts an annual review/appraisal of faculty members.

### Biennial Quality Assurance and Governance review (Self-Report and Peer Site Visit)

**Evidence:**
1) See above – demonstrates evidence of faculty appraisal and development

### 3) Course Purposes

**Key:** The course outline is based on current clinical skills guidelines and theories, and/or simulation based theory. A recognised model of debriefing/reflection should be utilised to enhance learning.

**Principles:**
1) The course is based on current clinical skills guidelines/evidence base/curricula, and/or simulation education based theory. It is systematically devised to meet the learner’s needs e.g. via learning needs analysis and to include patient safety at all times.
2) Patient safety, communication and team working principles are at the core of the course training.
3) A model of debriefing and/or reflection should be used in order to allow learner’s to identify and reflect on their learning experience, identify performance gaps and explore personal development.
4) Individual course delivery by the faculty should be standardised in the areas of course aims, ethics, clinical skills and the educational material used.
| **Annual Peer Review**  
(PEER course QA observation) | **Evidence:**  
1) Course objectives and pre-reading material.  
2) Types of simulation programme/modality in use.  
3) Simulation environments in use.  
4) Details of debrief format being used.  
5) Course governance and standardisation. |
| **Annual QA course board review**  
(Self Report) | **Evidence:**  
1) Course providers are able to provide documentation which supports the development of training and the links to patient safety e.g. Trust policies, regional quality standard, curricula standards.  
2) Evidence of course objectives with reference to patient safety, communication, team working e.g. course material.  
3) Course providers should identify which debrief and/or reflective model they are using. It should undergo yearly review as to whether appropriate for the course and meeting learner’s needs. |
| **Biennial Quality Assurance and Governance review**  
(Self-Report and Peer Site Visit) | **Evidence:**  
1) See above. |
| **5) Continual Course Review** | **Key:** Course providers should use feedback and other outcome measures to guide course development.  
**Principles:**  
1) The course provider should have processes in place for evaluation and outcome measures for trainers and learners.  
2) There should be training rationale, evaluations and research relevant to the course e.g. post course questionnaires, trainee evaluations, focus groups, follow-up questionnaires.  
3) The course provider should maintain up to date records on candidate demographics for audit purposes. |
| **Annual Peer Review**  
(PEER course QA observation) | **Evidence:**  
1) Process in place for ongoing evaluation and consideration of how each course is conducted/run. |
| **Annual QA course board review**  
(Self Report) | **Evidence:**  
1) The course provider reviews processes / tools for obtaining training evaluation and appropriate follow-up surveys.  
2) The course provider is able to provide records of course evaluation data.  
3) The course provider can provide attendance lists/ fill rates/ DNA’s. |
| **Biennial Quality Assurance and Governance review**  
(Self-Report and Peer Site Visit) | **Evidence:**  
1) Summary of course feedback and other outcome measures. |
### 6) Continual Professional Development (CPD) Provision

(CPD provision is optional)

**Key:** The course provider can offer CPD where appropriate to candidates and faculty.

**Principles:**
1) The course provider can access or provide resources for CPD to candidates and faculty.  
2) Course provider gives details of affiliation to professional bodies e.g. RCN, RCS etc.

| **Annual Peer Review**  
(Peer course QA observation) | **Evidence:**  
1) There is evidence of CPD or accreditation made explicit to the course candidates. |
|-------------------------------|---------------------------------|
| **Annual QA course board review**  
(Self Report) | **Evidence:**  
1) The course provider provides evidence of its ability to provide access to or resources for CPD.  
2) Course provider gives details of affiliation to professional bodies e.g. RCN, RCS etc. |
| **Biennial Quality Assurance and Governance review**  
(Self-Report and Peer Site Visit) | **Evidence:**  
1) See above |

These standards are adapted from the NHS Yorkshire and Humber Quality Framework produced by the Montagu Clinical Simulation Centre ([http://login.qaclinicalskills.co.uk/pdfs/QACSS](http://login.qaclinicalskills.co.uk/pdfs/QACSS)).
Appendix A: Quality Assurance Literature Review

Quality Assurance of Simulation Training

Literature Review for the Simulation and Interactive Learning Centre
Guys & St Thomas’ NHS Foundation Trust

On behalf of the South London Simulation Network (SLSN)

January 2015
1.0 Introduction

Patient harm as a result of human error and recent reports on poor quality care as a result of organisational failure and lack of leadership (1) have necessitated the emergence of simulation as a leading modality in the delivery of healthcare education. There is a growing body of evidence that simulation does improve patient safety when focused on technically-related or protocol-driven outcomes (2) with evidence of skill retention (3). Evidence also suggests that targeting the area of non-technical skills does reduce medical error (4).

In response to such compelling evidence, the use of simulation has now become embedded in both undergraduate and postgraduate healthcare curriculums. With the burden of patient safety and training falling upon the simulation community, there is a need to ensure simulation centres are able to sustain and deliver high-quality training consistently. Quality assurance mechanisms must therefore be robustly implemented to achieve this goal. These mechanisms must permeate the entire spectrum of simulation-based education from simulation centre directorship to course execution and achieving and maintaining standards. There must be a focus on what these mechanisms look like, and how they can be implemented by the simulation community.

What is quality and quality assurance?

Quality assurance has been defined by the General Medical Council (GMC) as:

“...the overarching activity under which both quality management and quality control sit. It includes all the policies, standards, systems and processes that are in place to maintain and improve the quality of medical education and training in the UK.” (5)

These policies, standards, systems and processes are all mechanisms geared towards ensuring the quality of simulation-based medical education. The concept of quality itself is frequently poorly defined as it is often multi-faceted and largely dependent on the originating perspective (6). For example, quality can be viewed from an economic discourse where outcomes are linked to cost and quality is seen as ‘value for money’. Another example is from a professional discourse where a quality simulation programme involves the recognition of faculty as professionals and individuals achieving set standards which may include accreditation and regulation.

Thus, in order to develop a quality assurance model for simulation, it is relevant to examine the current literature on the topic to explore what the simulation community believe is quality in simulation medical education and what relevant, if any, quality assurance mechanisms currently exist.
2.0 Methodology

To understand what mechanisms currently exist to ensure quality in simulation-based education, a literature review was undertaken. Primarily, articles relating to quality assurance and standards in simulation training were selected for in-depth review. This was achieved by searching different medical, simulation and education journals (see table one).

Articles were first selected based on the title and abstract. Each of these articles were then fully examined to determine if they could be included in the review. A search of the internet using search engines was then performed and relevant texts included in the review. The search was not limited to simulation related journals but instead was wide enough to incorporate any relevant medical education literature not related to simulation.

<table>
<thead>
<tr>
<th>Table one: Literature review</th>
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<tbody>
<tr>
<td><strong>Simulation in Healthcare journal</strong></td>
</tr>
<tr>
<td>o All journals from the first issue reviewed</td>
</tr>
<tr>
<td>o Selected abstracts reviewed</td>
</tr>
<tr>
<td>o Additional searches included: “Quality” in title field and “quality assurance” in abstract field to capture potentially missed articles</td>
</tr>
<tr>
<td><strong>Medline search</strong></td>
</tr>
<tr>
<td>o Quality AND assurance AND simulation - filtered based on title/abstract</td>
</tr>
<tr>
<td><strong>Medical Education journal</strong></td>
</tr>
<tr>
<td>o “quality assurance” in generic search field</td>
</tr>
<tr>
<td>o Non-Boolean</td>
</tr>
<tr>
<td><strong>Web-based search</strong></td>
</tr>
<tr>
<td>o “Quality assurance simulation”</td>
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<td>o Non-Boolean</td>
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Once relevant texts were identified, thematic analysis was performed to group similar key texts around quality, quality assurance or discourses of quality together. For example, an article on ‘best practice’ for scenario design would be grouped together with formal standards of scenario design in an accreditation programme under the heading of ‘course design’.
3.0 Results

The review revealed a paucity in the literature of reported quality assurance mechanisms, methods or standards in relation to simulation training. There were however some key texts drawn from the searches including:

- **A Quality management of clinical skills and simulation training guideline** (7)
  - Health Education Yorkshire and the Humber
  - [http://clinicalskillsnetwork.com/](http://clinicalskillsnetwork.com/)

- **Certification standards and elements - Certified Healthcare Simulation Expert (CHSE)** (8)
  - Society for simulation in healthcare
  - [http://www.ssih.org/Certification/CHSE](http://www.ssih.org/Certification/CHSE)

- **SSH Accreditation Standards** (9)
  - Council for Accreditation of Healthcare Simulation Programs, Society for simulation in healthcare
  - [http://www.ssih.org/Accreditation/Full-Accreditation](http://www.ssih.org/Accreditation/Full-Accreditation)

3.1 Key texts

3.11 A Quality Management of Clinical Skills and Simulation Training Guideline

Health education Yorkshire and the Humber developed a quality management system/quality framework mapped against regulatory standards (e.g. GMC, NMC) in 2010 (7). The quality framework, consists of 11 standards and was developed to assist clinical skills and simulation providers to use in their quality assurance process.

Each standard (five core standards and six educational standards, see table two) is accompanied by a policy criteria (i.e. the standard) and how this may be demonstrated (i.e. the Evidence). Appendix 1.1 gives an example of a core standard and appendix 1.2 an example of an education standard.

<table>
<thead>
<tr>
<th>Table Two: Quality Framework Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core standards</strong></td>
</tr>
<tr>
<td>- Mission statement and governance</td>
</tr>
<tr>
<td>- Organisation and management</td>
</tr>
<tr>
<td>- Resources and equipment</td>
</tr>
<tr>
<td>- Evaluation and development</td>
</tr>
<tr>
<td>- Ethics</td>
</tr>
<tr>
<td><strong>Education standards</strong></td>
</tr>
<tr>
<td>- Educational performance</td>
</tr>
<tr>
<td>- Trainer / faculty / facilitator qualities</td>
</tr>
<tr>
<td>- Course purpose</td>
</tr>
<tr>
<td>- Continual course review</td>
</tr>
<tr>
<td>- Continual Professional Development (CPD) provision</td>
</tr>
</tbody>
</table>

A web based quality management system (QMS) was developed to assist providers in meeting the quality management requirements (10). The development of this web-based tool underwent paper piloting prior to web transfer.

The web-based system serves two main functions consisting of:
• A profile section for trainers or training centres
• An audit section where trainers are benchmarked against set standards

In addition, the guideline also suggests the use of a course evaluation questionnaire (appendix 2.1), self-assessment (appendix 2.2) and peer observation (appendix 2.3) as good practice in ensuring ongoing quality in clinical and simulation training.

3.12 Certified Healthcare Simulation Expert (CHSE) (8)

The CHSE certification standards and elements outlines the minimum standards expected of faculty members in order to be certified healthcare simulation experts. The standards cover four main domains (table three).

<table>
<thead>
<tr>
<th>Table three: CHSE Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professional Values &amp; Capabilities</td>
</tr>
<tr>
<td>a. Integrity And Motivation</td>
</tr>
<tr>
<td>b. Leadership</td>
</tr>
<tr>
<td>2. Knowledge Of Educational Principles, Practice, and Methodology In Simulation</td>
</tr>
<tr>
<td>3. Implementing, Assessing, And Managing Simulation—Based Educational Interventions</td>
</tr>
<tr>
<td>4. Scholarship—Spirit Of Inquiry And Teaching</td>
</tr>
</tbody>
</table>

The focus of this document is for trainers to achieve a satisfactory standard across several domains in order to be certified. The document does not explain how each standard should be achieved but instead has been created to ensure consistency amongst trainers. Assessment of the standards is via a 100-item multiple-choice examination.

When applying for certification, applicants must also supply a list of individuals who will be able to provide feedback on the applicant using a Confidential Structured Report of Performance (CSRP) (see appendix 3.1).

3.13 SSH Accreditation Standards (9)

The SSH also outlines standards for the accreditation of healthcare simulation programs(9). The SSH states:
```
“A Program is eligible for SSH Accreditation when it is able to demonstrate compliance with the established core and area specific standards. A program must have a minimum of two years experience in the functional area in which Accreditation is sought.” (9)
```

The functional area is the area in which a Program is seeking accreditation. There are four main areas; Assessment; Research; Teaching/Education and; System Integration and Patient Safety. For successful accreditation, programs or simulation centres must demonstrate core standards (table four) and area specific standards (table five).
The standards are examined in detail by external site visitors. Each standard has numerous criteria which must be achieved if the overall standard is to be deemed complete. See appendix 3.2 for an example of the criteria involved in the curriculum design and learning environment standards under the teaching/education domain.

Whilst key readings 3.12 and 3.13 are not explicitly quality assurance mechanisms, they do set clear standards of which achievement results in a form of accreditation. If these standards, published by the SSH are considered the minimum standards, then an element of quality assurance could be seen as achieving all of these standards.

3.2 Key themes

In addition to the key texts, there were themes drawn from the literature review. Many of the articles reviewed focused on a particular domain of simulation training or the field of medical education rather than approaching the quality assurance of simulation training as a whole. For example, there were articles focusing exclusively on scenario design or how to ensure standardised patients are standardised. The general breadth of the extracted material was narrow and the quality limited.
Identified themes included:

**Simulation centre/program**
- Mission statement and governance
- Regular auditing and reporting mechanisms
- Financial accountability
- Research activity and faculty development

**Course Design**
- Scenario
  - Learning needs analysis
  - Curriculum mapping
  - Design
    - Standardised
    - Multi-professional faculty design
  - Review workshops
- Feedback / questionnaires
- Standardised documents including presentations and forms
- Training of standardised patients
- Maintenance of AV equipment and manikins

**Staff**
- Standards for technicians
- Trainers / Faculty
  - Expected standards
  - Role of portfolio
  - Multi-source feedback
  - Self-assessment
    - Standardised assessment
  - Peer assessment/observation
    - Standardised assessment / assessment tools
    - Checklists
  - Participant / delegate trainer assessment
  - Appraisal and faculty development

### 3.3 Detailed information on literature search

The information below is taken from the literature review and identifies some interesting articles with regards to potential mechanisms of quality assurance. Although each of these fields will have a plethora of published literature, what the articles below demonstrate is that each of these fields has already been consider important as a marker of quality within clinical medicine and clinical education. Thus, many of these fields could be adapted for simulation-based medical education in a quality assurance framework.

#### 3.3.1 Simulation Centres / Programs

In addition to a quality management system, Health education Yorkshire and the Humber (HEYH) also developed a quality assurance website. The role of the website was to facilitate verification that the participating clinical skills and simulation trainers/centres achieve set core and educational standards to attain quality assurance status (11). (Further details found at [www.qaclinicalskills.co.uk](http://www.qaclinicalskills.co.uk)). There were no other articles identified relating directly to quality assurance mechanisms and simulation centres or programs.
Many of the domains set out by the Quality Framework by HEYH are similar to standards published by the SSH (9) (see table four). Whilst the SSH does not label the standards as guidelines for quality assurance, it can be appreciate that many of these standards imply minimum standards and thus a degree of quality.

To maintain optimum quality of simulation centres and minimise faculty turnover, Kim (12) suggested simulation centres should engage in multiple activities including:

- Research
- Faculty Development
  - Research and development meetings
- Professional mentoring
- Formal faculty affiliation

The World Federation for Medical Education (WFME) (13) defined international standards in basic medical education. The main domains which are outlined in appendix 4.1 define what a ‘quality’ medical education program should look like. Many of these themes can be incorporated in a Medical Education Simulation Framework.

### 3.32 Course Design

Quality assurance mechanisms exist for simulation-based examination. Although the vast majority of simulation activity is non-examination based, the principles can still be applied to generic simulation training.

Furman et al (14) outlined three domains for quality assuring best practices for simulation examinations. These domains covered content development, staff training and administrative protocols. Standards within **content development** included:

- Selection of cases driven by assessment objectives
- For non-assessment, this will be learning needs (competencies) or needs analysis
- Case author attends to the needs of multiple users (i.e. someone can use the case without being dependent upon the original author for direction)
- Consists of physician based committees with dedicated writing time
- Use of standardised content database – e.g. text descriptions and vivid demonstrations on how manoeuvres should be performed. Once a description is validated, it can be reused without variance
- Logistical needs addressed
- Standardising portrayal: timelines in generic or universal terms; using realistic language; standardised descriptions across similar cases
- Standardised equipment across sites
- Pilot new cases

In high-stake simulations outside of the assessment environment, a rigorous and high-quality process may also be required. For example, Gardner (15) described an obstetric simulation course where participating individuals would see a reduction in their annual insurance premiums. In such a course, transparency of the quality of the course is required. The **process** involved a pilot course, a formally systematically designed course and then impact evaluation one year post delivery of the course. Content was designed by analysing training needs by reviewing obstetric cases which had been raised with the governing body. Others have also used critical incidents or patient safety events as a **needs analysis** or to inform them of the content (16) and subsequent utilisation of patient safety experts. When courses are designed to include multi-professionals, **psychological safety and team learning** amongst the professionals are crucial to avoid conflict and to ensure course quality (17).
Nestel (18) explored the role of **simulated patients** as part of a quality assurance initiative. Through a qualitative approach, they identified and developed guidelines for the expectations and responsibilities of all stakeholders when simulated patients are used for teaching sessions and simulation courses. This ensured clear and transparent expectations of standards for all parties. See appendix 4 for further information including links to the guidelines which were developed. By implementing the guidelines, standardised patients are case-trained to a minimum standard and training would ideally include time for rehearsal (14).

There is a growing body suggesting the inclusion of student feedback in medical education is essential to improve course content, teaching skills, attitudes and relationships and to develop curricula (19). **Participant feedback** in simulation can be used as another facet of quality assurance demonstrating a will for continued improvement.

For all education courses, Furman et al (14) has suggested there should be **administrative protocols** in place. These include:
- All material copyrighted
- Staff and faculty sign written confidentiality agreements
- Orientation for faculty
- Course/examination timings including set-up and tear-down
- Course/examination irregularities protocols (fire, flooding etc.) and completion of incident report form

3.33 Staff

**Simulation Technicians** play an important part in simulation based education. There was nothing identified in the literature regarding mechanisms of quality assuring the role of Simulation Technicians. A report by Nicklin (20) regarding the current situation of clinical skills and simulation technicians in the United Kingdom involved a scoping exercise using an online survey contacting simulation centres across the UK. There was a perceived lack of quality as a result of:

- No clear job descriptions
- No clear career pathways
- Seen as an evolving role

From a previous regional survey in the Yorkshire and Humber region (20), the following areas were identified as roles for simulation technicians:

- Audio Visual
- Information technology
- Equipment maintenance
- Partners with trade
- Moulage
- Wet Lab
- Administration
- Inventory/ordering
- Teaching

Additional responses to the evolving role included:

- Acting skills
- Development of new simulation courses / eLearning
- Debriefing
- Internal promotion of simulation
- External promotion via commercial activities, websites, brochures and twitter.
The role of technicians has also been explored by the Society for Simulation in Healthcare who have developed a Certification of Healthcare Simulation Operations Specialist (21). The SSH states expected standards which need to be demonstrated to be CHSOS certified (21). Successful certification is dependent upon demonstrating knowledge in five domains:

- Concepts in healthcare and simulation
- Simulation modalities and technologies
- Healthcare simulation program practices/processes/procedures
- Professional role development
- Instructional design and theory

**Faculty** training and assessment was repeatedly highlighted in the literature although there were no formal quality assurance mechanisms identified. Two **debriefing assessment tools** were identified which can be used to assess the quality of debriefing and form part of quality assurance.

The Objective Structured Assessment of Debriefing (OSAD) (22) was developed to assess surgical debriefing. It consisted of a literature review, end-user interviews and expert panel consensus in constructing the tool prior to psychometric analysis.

Debriefing Assessment for Simulation in Healthcare (DASH) (23) was also developed to assess debriefings and construct red through literature review and an expert panel. This tool has also undergone psychometric analysis (24).

Schmutz (25) 2014 argues that the assessment of performance is dependent on process performance and outcome performance. With colleagues, he developed a 5-step approach to developing **checklists** for evaluating clinical performance which included a Delphi technique with item weighing.

Southgate (26) suggests the primary purpose of **performance assessment** in clinical medicine should be to maintain optimal health care standards. They suggest that it is important to recognise accountability from the funder to the provider to the consumer. In healthcare, a performance assessment blueprint would reflect healthcare outcomes such as mortality rates. In simulation, it would be training outcomes in the first instance which would need to be examined. Southgate suggested testing the following performance outcomes to demonstrate a ‘quality’ process:

- Patient generated data (or participant generated data)
- Peer-review
- Clinical outcomes
- Broader competence/performance
- Self-assessment

**Lieske** (2006) (27) suggested that for all new forms of assessments that are used for QA purposes, assessors should also be **trained** in using the new tools.

The use of objective assessments and checklists to assess performance on clinical teachers has been previously explored (28). Such ‘in-situ’ observation can be taken to the simulation field. Peer observation without a checklist is also described and implemented by the Yorkshire and Humber team (7).

**Fry** (29) suggested **peer observation** enhances practice by engaging with reflective, analytical and constructive discussion with peers and suggested it should be used as part of continuing professional development and quality assurance. A team at Imperial College London developed a method for peer observation which involved developing a guideline of ‘good practice’ when observing clinical teaching, informed consent and patient confidentiality. They developed a clinical teaching observation record sheet which covered six domains:
• Setting the scene
• Structuring the episode for teaching and learning
• Developing expertise and professionalism
• Concluding the session
• Teaching context
• Enhancing practice

The team used these domains as the basis for discussion after peer observation.

The GMC engages in more formalised peer observation of clinicians who may be ‘seriously deficient’. (30). The review is carried out over two days and inspects multiple areas including portfolio review; medical record keeping; case-based oral; observation of consultations; site tour; structured interviews; third party interviewers; and record over the previous two years. Whilst such a robust mechanism may not be needed in simulation, procedures should exist for faculty who are ‘seriously deficient’.

Another form of peer involvement in feedback is the use of multi-source feedback. Multi-source feedback has been used in postgraduate education in the UK to quality assure healthcare professionals (31). The generic multi-source feedback tool can be adjusted to be speciality specific (32). A similar method of feedback is already taking place in simulation based education with the use of the confidential structured report of performance which is required for those educators pursuing certification with the SSH (8).

Faculty may also seek certification or accreditation. Although no formal quality assurance mechanisms within simulation were identified, the SSH has published standards expected of certified healthcare simulation experts. In medical education, Alwan (33) argues however that accreditation does not automatically translate into quality and has suggested research is required to determine the relationship of accreditation and outcomes. The acceptance of accreditation as a marker for quality assurance has also been raised by Norcini (34). Whilst accreditation does demonstrate minimum standard adherence, quality assurance in education should strive to improve standards.

The use of a portfolio or clinical skills passport could potentially be used as part of accreditation or revalidation (35) (36). Wilkinson (36) suggests portfolios can provide a summative assessment of doctors in training and provide feedback. He suggests that to provide a complete picture, a portfolio should cover patient care, personal development and context management. This would be adapted in the Simulation-Based Education context.

Wilkinson (36) further states a portfolio should also include: self-appraisal; identifying areas that require development; recording learning cycles; contain evidence that has been generated by assessments that are acceptably reliable; and ensuring the evidence is sufficient, authentic, valid and current. Wilkinson suggests validity arises from breadth, currency and authenticity.

Portfolio review would naturally occur during an appraisal. Appraisal has been used for some time in medicine as a role to both glean information about faculty and a platform for feedback (37). Appraisal is also a means of:

• Self-assessment for both educators and clinicians. (37) (38)
• Also involves self-regulation (38)
• Re-certification (38)
4.0 Conclusion

The literature review demonstrates that although formal frameworks of quality assurance in simulation are lacking, there is a body of literature outlining the concept of ‘quality’. To develop a quality assurance framework, many of these ‘quality standards’ must be threaded together, leaning on the key texts identified.

When developing a new framework for quality assurance, it would be prudent to start small scale, taking one of the identified themes from either simulation centre, course design or staff. Framework development should consist of using existing evidence with expert opinion, much like the methods used in assessment or checklist generation.

Post-development, the tool must undergo testing and refinement prior to a period of piloting. Further changes will then be required before widespread use. It is paramount that those using the framework, understand how to do so in a reliable manner.
5.0 Bibliography


35. Whiteley M. QUALITYSKILLSTRAINING. 2011.


Appendices

1.1 Example of core standard (Health Education Yorkshire and the Humber)
1.2 Example of education standard (Health Education Yorkshire and the Humber)

2.1 Course Evaluation Questionnaire (Health Education Yorkshire and the Humber)
2.2 Self-assessment of clinical skills teaching/training (Health Education Yorkshire and the Humber)
2.3 Peer observation of clinical skills teaching/training feedback form

3.1 Confidential Structured Report of Performance
3.2 SSH Accreditation Example standards

4.1 World Federation for Medical Education (WFME)
4.2 Key website links
### 1.1 Example of core standard (Health Education Yorkshire and the Humber)

#### 1. Mission Statement & Governance

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Policy criteria</strong></td>
<td><strong>Evidence</strong></td>
</tr>
<tr>
<td>a) What education activities are provided There is a mission statement that should be made available and that has a statement of purpose to include:</td>
<td>a) Provision and public display of mission statement</td>
</tr>
<tr>
<td>- What education activities are provided</td>
<td></td>
</tr>
<tr>
<td>- Target population</td>
<td>b) Attendance record and minutes of annual meeting or review</td>
</tr>
<tr>
<td>- Expected results</td>
<td>c) Attendance records and minutes of all meetings to reflect the active participation of individuals in this process of governance</td>
</tr>
<tr>
<td>b) Mission statement reviewed annually if / where necessary</td>
<td></td>
</tr>
<tr>
<td>c) All staff actively participate in the process of governance and have the opportunity to contribute to decisions made regarding the training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- For example these issues may be discussed at Individual Personal Development Reviews (PDRs) with managers</td>
</tr>
</tbody>
</table>
### 1.2 Example of education standard (Health Education Yorkshire and the Humber)

#### 2. Trainer / faculty / facilitator qualities

<table>
<thead>
<tr>
<th>Principle</th>
<th>Evidence</th>
</tr>
</thead>
</table>
| a) Training and faculty (external and internal training staff) members and facilitators are experts in their specialist areas and/or simulation experts, for example:  
  - Can provide evidence of the successful completion of a ‘Faculty Development Course’  
  - Consultant or senior specialty trainee or senior nurse | a) The training provider is able to provide evidence of the educational attainment of all faculty / trainers  
  - For example kept on file in form of curriculum vitae or personal educational records |
| b) Experts in simulation, clinical skills or specialist practitioners are available to deliver courses appropriate to their skills | b) Each course has a nominated expert in simulation or the specialist area  
  - For example the clinical skills trainer or an external trainer such as a urology nurse as a specialist |
| c) The training provider can either access or provide faculty development programmes (or train the trainer) available for its trainers to ensure appropriate use of skills | c) The training provider delivers or can access faculty development programmes  
  - For example delivered at specialist training providers such as Montagu Clinical Simulation Centre |
| d) Faculty members / facilitators / trainers are encouraged to attend on-going education in this field | d) Each faculty member / trainer is responsible for maintaining their professional development such as:  
  - Courses  
  - Conferences – ASPIH / ASME / SESAM  
  - Personal Development Plans  
  - Continuous Professional Development (courses available on the NHS Y&H website) |
| e) Informal feedback available for all staff | e) The training provider uses own internal mechanisms such as  
  - Annual review  
  - Personal Development Reviews  
  - Appraisals |
2.1 Course Evaluation Questionnaire (Health Education Yorkshire and the Humber)

Course Evaluation Questionnaire

(Please take a moment and complete all of the following before you leave – Thank you)
Course Attended ........................................Town/Geographical place of work..............................
Date .....................  Job Title................................. Speciality ............................ Grade.....................

Please answer each of the following statements by ticking one box to indicate your level of agreement.

ANSWER the 2 questions in the comment box below and add any further course feedback.

The course was enjoyable
The course was relevant to my work
The information I received beforehand was relevant
The trainers were helpful and supportive
I felt able to ask any questions I had
The venue/equipment assisted learning
The length of course was appropriate
The course was well organised
The course content and delivery pace was appropriate
The type of training should be repeated every 1–2 years
I found it easy to be released to attend the course
I would recommend this course to others
How will you evidence that this training has had direct benefit on care in practice?

If you have any other comments, please use this space

Can we contact you in 6 months, if so please add your email details here...........................................
2.2 Self-assessment of clinical skills teaching/training (Health Education Yorkshire and the Humber)

**Self-Assessment of Clinical Skills Teaching/Training**

- **Trainer's Name:**
- **Organisation/Training Centre:**

*Current activities & responsibilities (please list).*

*Strengths when performing current activities (please list).*

*Development needs to meet Standards (please list).*

*Action Plan.*

*Resources required to support action plan (please list).*

*Additional support required;*

*Review arrangement.*

*Review notes.*
### 2.3 Peer observation of clinical skills teaching/training feedback form

<table>
<thead>
<tr>
<th>Name Clinical Skills Trainer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation/Department</td>
</tr>
<tr>
<td>Name Observer/Title</td>
</tr>
<tr>
<td>Observation Date</td>
</tr>
<tr>
<td>Observation Length</td>
</tr>
<tr>
<td>No of Learners &amp; Professions</td>
</tr>
<tr>
<td>Skill Taught</td>
</tr>
<tr>
<td>Venue Details</td>
</tr>
<tr>
<td>Teaching Method/s</td>
</tr>
<tr>
<td>Resources used</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning of Session</th>
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</thead>
<tbody>
<tr>
<td>Organisation &amp; Approach</td>
</tr>
<tr>
<td>Delivery &amp; Pace</td>
</tr>
<tr>
<td>Appropriateness of Level</td>
</tr>
<tr>
<td>Currency of Content (e.g. incorporates local/regional policies).</td>
</tr>
<tr>
<td>Learners Participation</td>
</tr>
<tr>
<td>Use of Resources</td>
</tr>
<tr>
<td>Evaluation of Session</td>
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<tr>
<td>Assessment Procedure</td>
</tr>
</tbody>
</table>

#### Evaluation of Training and Suggested Development Priorities

<table>
<thead>
<tr>
<th>Observers General Comments</th>
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<tbody>
<tr>
<td>Trainers General Comments</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Observer's Signature</th>
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<tbody>
<tr>
<td>Trainer/Educator's Signature</td>
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<td>Date</td>
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</table>

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**Quality Assurance Evaluation of Simulation Tool SLSN post pilot v3 10/05/15**

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3.1 Confidential Structured Report of Performance

Example first page

Applicant Name:

Applicant email address:

Please rate the applicant according to the following criteria:

4. Strongly Agree (SA)
3. Agree (A)
2. Disagree (D)
1. Strongly Disagree (1)
0. Unable to Evaluate (N/A-not applicable)

<table>
<thead>
<tr>
<th>Professional Values and Capabilities</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 SA</td>
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<tr>
<td></td>
<td>3 A</td>
</tr>
<tr>
<td></td>
<td>2 D</td>
</tr>
<tr>
<td></td>
<td>1 SD</td>
</tr>
<tr>
<td></td>
<td>N/A</td>
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<tr>
<td>Demonstrates an awareness of and adherence to applicable laws and accepted ethical standards as</td>
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<td>published for each healthcare profession.</td>
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<td></td>
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<tr>
<td>Treats all learners and colleagues honestly and fairly and maintains a professional manner in</td>
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<td>educational and interpersonal activities.</td>
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<tr>
<td>Committed to excellence in simulation education.</td>
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<tr>
<td>Demonstrates a commitment to the overall educational objectives of the curriculum or simulation</td>
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<tr>
<td>program.</td>
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<tr>
<td>Demonstrates advocacy for simulation education.</td>
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<td>Demonstrates leadership capabilities.</td>
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<tr>
<td>Please provide an example(s):</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td>I have no concerns about this individual’s Professional Values and Capabilities</td>
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<tr>
<td>I have concerns about this person’s Professional Values and Capabilities as follows:</td>
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<tr>
<td>Description of concerns:</td>
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<table>
<thead>
<tr>
<th>Knowledge of Educational Principles, Practices, and Methodology in Simulation:</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 SA</td>
</tr>
<tr>
<td></td>
<td>3 A</td>
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<tr>
<td></td>
<td>2 D</td>
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<tr>
<td></td>
<td>1 SD</td>
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<tr>
<td></td>
<td>N/A</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates knowledge in the construction of a simulation educational intervention. Needs</td>
<td></td>
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<tr>
<td>assessment, writing goals and objectives and designing instructional modules.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Demonstrates a knowledge of simulation as an educational tool (e.g., experiential learning,</td>
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<tr>
<td>reflection)</td>
<td></td>
</tr>
</tbody>
</table>
### 3.2 SSH Accreditation Example standards

<table>
<thead>
<tr>
<th><strong>3. CURRICULUM DESIGN</strong>: Curriculum design follows a rational process based on currently understood education theory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Provide a brief summary of how the Simulation Program meets the Curriculum Design standards described within Section 3 (not more than 250 words)</td>
</tr>
<tr>
<td><strong>b.</strong> The Program uses a curriculum design process that involves appropriate learning theories</td>
</tr>
<tr>
<td><strong>i.</strong> Describe curricular design process and provide tools used in the simulation curricular design process</td>
</tr>
<tr>
<td><strong>ii.</strong> Onsite, the Program provides documentation of three (3) teaching activities (selected by reviewers on site)</td>
</tr>
<tr>
<td><strong>c.</strong> There is a logical approach for simulation design, development, and selection</td>
</tr>
<tr>
<td><strong>d.</strong> Document or demonstrate that educational principles are used in the design and development of Courses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4. LEARNING ENVIRONMENT</strong>: Simulation event is conducted in an environment to optimize the achievement of learning objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Provide a brief summary of how the Simulation Program meets the Learning Environment standards described within Section 4 (not more than 250 words)</td>
</tr>
<tr>
<td><strong>b.</strong> The learning environment of a simulation event is conducted in a manner to optimize the achievement of learning objectives</td>
</tr>
<tr>
<td><strong>i.</strong> On site: Provide videos of actual learning activities for reviewers to select on-site for review</td>
</tr>
</tbody>
</table>
4.1 World Federation for Medical Education (WFME).

Elements in a medical education setting:

1. Mission and objectives
   a. A statement of mission and objectives
   b. Participation in formulation of mission and objectives
   c. Policy on academic independence
   d. Definition of educational outcomes
2. Educational Programmes and principles
   a. Curriculum models and instructional methods
   b. Scientific foundation
   c. Role of basic sciences
   d. Role of behavioural and social sciences and medical ethics
   e. Role of clinical sciences and skills
   f. Curriculum structure, composition and duration
   g. Programme management
   h. Linkage with medical practice
3. Assessment of Educational Outcomes
   a. Assessment methodology
   b. Relationship between assessment and learning
4. Students
   a. Recruitment and admission policy
   b. Methods of selection
   c. Student intake
   d. Student support and counselling
   e. Student representation
5. Academic staff/faculty
   a. Recruitment Policy
   b. Staffing policy
6. Educational Resources
   a. Physical facilities
   b. Facilities for clinical training
   c. Information technology and networking
   d. Research attainment
   e. Medical education expertise
   f. Exchange with other educational institutions
7. Monitoring and Evaluation of programmes and courses
   a. Mechanisms for programme evaluation
   b. Student and teacher opinion
   c. Student performance
   d. Feedback of evaluation information
   e. Involvement of stakeholders
8. Governance and administration
   a. Organisational structure
   b. Educational Budget and resource allocation
   c. Academic leadership
   d. Administrative staff and management
   e. Interaction with health sector
9. Continuous renewal of the medical school
4.2 Key website links

DASH (24)
Includes score sheets

Simulated/standardised patients (18)
Expectations of SPs in teaching sessions: see original article, table 4
Expectations of students in SP teaching sessions: http://links.lww.com/sih/a11
Expectations of tutors in SP teaching sessions: http://links.lww.com/sih/a12
Expectations of programme directors: http://links.lww.com/sih/a13
Expectations of administrators working with SPs for teaching sessions: http://links.lww.com/sih/a14
### Appendix B: Annual Peer Reviewer Observation Form

**Quality Assurance in Simulation & Interactive Learning - Peer reviewer Observation Form**

| Course title: | | | | |
| Course lead: | | | | |
| Date of review: | | Name of Peer reviewer: | | |

#### 1. Pre-course correspondence:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Reading: Please indicate if the course has any pre-course reading materials. <em>(NB this is not essential)</em></td>
<td></td>
<td></td>
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<tr>
<td>ii) Type of material:</td>
<td></td>
<td></td>
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<tr>
<td>- NTS/ CRM literature</td>
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<tr>
<td>- Clinical literature (e.g. NICE standards, evidence based article)</td>
<td></td>
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<tr>
<td>iii) Notification email: Please indicate if the course notification email includes:</td>
<td></td>
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<tr>
<td>- Start and end times</td>
<td></td>
<td></td>
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<tr>
<td>- A map of the venue</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- Information about refreshments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Other</td>
<td></td>
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<td></td>
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</tbody>
</table>

#### 2. Course Administration:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Attendance record &amp; Timetable Please indicate if:</td>
<td></td>
<td></td>
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<tr>
<td>- A course attendance list was taken</td>
<td></td>
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<tr>
<td>- A course timetable was provided</td>
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</tr>
<tr>
<td>ii) Consent:</td>
<td></td>
<td></td>
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<tr>
<td>- Was any form of consent for filming requested?</td>
<td></td>
<td></td>
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<tr>
<td>iii) Did the course run to time?</td>
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</table>

#### 3. Pre-briefing faculty:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>i) Please indicate if the faculty attended a pre-course pre-brief orientation: E.g.</td>
<td></td>
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<tr>
<td>- To the course’s learning objectives</td>
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<tr>
<td>- Allocation of roles</td>
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<tr>
<td>- Assisting novice faculty to undertake roles and receive feedback on performance)</td>
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</table>
4. Type of simulation programme/ modality being observed:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>i) Please indicate which modality is in use on course:</td>
<td></td>
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<tr>
<td>- Low fidelity (case studies, role play, part task trainers, static mannequins)</td>
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<tr>
<td>- Mixed modality HPS/ or Actors and part task/skills based course</td>
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<tr>
<td>- High fidelity full scale human patient simulators, virtual reality or standardised patients {*or actors}</td>
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<tr>
<td>ii) Were any other teaching modalities employed as part of the course?</td>
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<tr>
<td>e.g. Didactic sessions, skills workshops, group work, case based discussion</td>
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</tbody>
</table>

5. Environment - Simulation:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Please indicate the degree of immersive simulated environment the training is taking place in:</td>
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<tr>
<td>- In-situ training in the clinical environment</td>
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<tr>
<td>- Centre based with dedicated clinical environment</td>
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<tr>
<td>- Classroom based with adapted props to recreate reality</td>
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</tbody>
</table>

6. Environment - Debriefing:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Please indicate if there is a designated and private area for debriefing</td>
<td></td>
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</tbody>
</table>

7. Faculty and Facilitators:

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<tr>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Please indicate the number of faculty and facilitators for the course:</td>
</tr>
<tr>
<td>i) Technician</td>
</tr>
<tr>
<td>ii) Debrief (Numbers &amp; Level)</td>
</tr>
<tr>
<td>- Novice</td>
</tr>
<tr>
<td>- Intermediate</td>
</tr>
<tr>
<td>- Advanced</td>
</tr>
<tr>
<td>- Expert</td>
</tr>
<tr>
<td>iii) Embedded participant (e.g. Plant/role player)</td>
</tr>
<tr>
<td>iv) Actor(s)</td>
</tr>
</tbody>
</table>

8. Participants:

<table>
<thead>
<tr>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Please indicate the number of students on the course</td>
</tr>
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</table>

9. Interprofessional:

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>Please indicate if the course is interprofessional (i.e. has 2 or more professions participating on the course)</td>
<td></td>
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</tbody>
</table>
## 10. Learning Objectives:

Please indicate if there are specific measurable results participants are expected to achieve during the simulation-based course.

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>- None</td>
<td></td>
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<tr>
<td>- 1-2</td>
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<tr>
<td>- 3-5</td>
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<tr>
<td>- More than 5</td>
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## 11. Pre-briefing participants:

### i) Psychological & Physical safety:

Please indicate if the facilitator indicated that debrief formats are designed to allow a safe environment for participants to speak up, share thoughts, feelings, perceptions without the risk of retribution or embarrassment, that they may see/experience challenges and that the simulation environment permits mistakes.

### ii) On the day course pre-brief:

Please indicate if the participants received a course pre-briefing (simulation orientation) including the following:

- Introduction to other participants
- Introduction to faculty and roles
- Introduced to course objectives
- Introduction to the modality being used/course format
- Introduction to the modality of simulation with human factors (immersion to recreate reality for purposes of exploring individual and team performances in NTS & patient safety)
- Introduction to the debrief mode

### ii) Environmental orientation:

Please indicate if the participants received information regarding the following:

- Housekeeping & Health safety
- Orientation to the clinical environment
- Orientation to manikins functions/equipment
- Orientation to debrief environment

### iv) Professional integrity:

Please indicate if the course introduction discusses confidentiality and the protection of course content & participants including:

- Demonstrating professional and ethical behaviour
- Receiving and providing constructive feedback
- Mutual respect (try and see each other’s points of view)
### 12. Scenarios:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Please indicate if the participants receive a pre-brief to the scenario:</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>- Verbally</td>
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<tr>
<td>- Hand written</td>
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<tr>
<td>- Opportunity to ask questions</td>
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<tr>
<td>ii) How many simulated scenarios were there?</td>
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<tr>
<td>- 1-2</td>
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<tr>
<td>- 3-5</td>
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<tr>
<td>- &gt;5</td>
<td></td>
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<tr>
<td>iii) Were there specific learning objectives for each scenario?</td>
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<tr>
<td>- None</td>
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<td>- 1-3</td>
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<td>- 4-5</td>
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<tr>
<td>- &gt;5</td>
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<tr>
<td>iv) Were the scenarios appropriate to the learner’s level/grade and previous experience?</td>
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</tbody>
</table>

### 13. Embedded participant (plant):

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please indicate if the influence of the EP is:</td>
<td></td>
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<tr>
<td>- Positive</td>
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<tr>
<td>- Negative</td>
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<tr>
<td>- Neutral</td>
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<tr>
<td>- Distractor</td>
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</table>

### 14. Formative feedback:

<table>
<thead>
<tr>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the situation where clinical or professional performance is identified as a concern, please indicate how the faculty / centre gives formative feedback to individuals</td>
</tr>
</tbody>
</table>

### 15. Debrief observational specific questions

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i) Debrief format: Please indicate the model of debrief or format of debrief that was used:</td>
<td></td>
<td></td>
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<tr>
<td>- None</td>
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<td>- DAA</td>
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<tr>
<td>- PEARL</td>
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<tr>
<td>- Plus Delta</td>
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<tr>
<td>- Advocacy with Inquiry</td>
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<tr>
<td>- Team gains</td>
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<tr>
<td>- 3D Diffusing, Discovering &amp; Deepening</td>
<td></td>
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<tr>
<td>- Other:</td>
<td></td>
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<tr>
<td>ii) Was the model on display/ available for participants to refer to?</td>
<td></td>
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</tbody>
</table>

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Quality Assurance Evaluation of Simulation Tool SLSN post pilot v3 10/05/15 Page 43 of 53
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### iii) Were facilitators:
- Co-debriefing
- Single debriefer
- Other

### iv) Was video playback used in the debrief?

### v) Did the debrief allow space for participants to reflect on the simulation experience?
Including:
- Skills (kinetic)
- Knowledge (cognitive)
- Feelings / interactions (affective)
In order to enhance behavioural changes and application in practice
*(meta cognitive skill acquisition to enhance the theory practice gap)*

### vi) Was there comparison to real life experiences?

### vii) Was there a chance to correct any misconceptions?
- Were these handled sensitively?

### viii) Did the debriefer ask open ended questions?

### ix) Was there discussion of specific non-technical skills or human factors during the debrief?

### x) Was there any discussion of application of reflection and learning to future practice?

### 16. Psychological safety:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Maintenance of safety</td>
<td></td>
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<tr>
<td>Please indicate if you feel that the facilitator(s) maintained a safe environment for participants to speak up, share thoughts, feelings, perceptions without the risk of retribution or embarrassment</td>
<td></td>
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<tr>
<td>ii) Validation</td>
<td></td>
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<tr>
<td>If during the debrief participants shared personal experiences - Was this contribution validated?</td>
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</tbody>
</table>

### 17. Evaluation:

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>i)</td>
<td></td>
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</tr>
<tr>
<td>Kirkpatrick Levels</td>
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<tr>
<td>- Reaction of student - what they thought and felt about the training</td>
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<tr>
<td>- Learning - the resulting increase in knowledge or capability</td>
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</tr>
</tbody>
</table>
- Behaviour - extent of behaviour and capability improvement and implementation/application

- Results - the effects on the business or environment resulting from the trainee's performance

### ii) Pre-course Evaluation
- Do the evaluation tools measure pre course knowledge/skills/attitudes?

### iii) Post-course Evaluation
- Do the evaluation tools measure post course knowledge/skills/attitudes?

### iv) Evaluation of Knowledge, Skills, Attitudes
- Does the evaluation tool measure a change in knowledge, skills or attitudes as a result of the course?

### v) Feedback
- Does the evaluation tool provide space for feedback about the course/ faculty/ environment?

<table>
<thead>
<tr>
<th>18. Faculty / Course debrief:</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i) Faculty debrief</strong></td>
<td></td>
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<tr>
<td>- Did the faculty debrief each other formatively at any stage of the day?</td>
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<tr>
<td>- If so, was a specific tool used? E.g. OSAD</td>
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<tr>
<td><strong>ii) What level was the debriefer of the debriefs?</strong></td>
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<tr>
<td>* see appendix x for definition of levels</td>
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<td></td>
</tr>
<tr>
<td>- Novice</td>
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<tr>
<td>- Intermediate</td>
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<tr>
<td>- Advanced</td>
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<tr>
<td>- Expert</td>
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<tr>
<td><strong>iii) Did the faculty debrief the whole course/ review the evaluations at the close of the day?</strong></td>
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<tr>
<td>- Were changes/ suggestions recorded?</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>19. For surgical skills courses:</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i) Consultant presence</strong></td>
<td></td>
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<tr>
<td>- Is there an appropriate Consultant surgeon present as faculty?</td>
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<tr>
<td><strong>ii) Candidate assessment</strong></td>
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<tr>
<td>- Is the assessment of candidates appropriate to the skill being taught? (see specific course curricula/ assessment documents)</td>
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</table>

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<thead>
<tr>
<th>20. Course governance</th>
<th>Yes</th>
<th>No</th>
<th>NA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>i) Is the course delivery standardised?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.g. Each course content includes the same aims/ content/ scenarios</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Annual return specific questions</td>
<td>Yes</td>
<td>No</td>
<td>NA</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>----------</td>
</tr>
<tr>
<td>i) Review Board</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Does the course have a course review board?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii) Participant outcomes and Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Does the course review receive collated course information about the participant’s outcomes to make judgements about the programme, improve or amend the course for effectiveness?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These standards are adapted from the INACSL (2013) standards: International Nursing Association for Clinical Simulation and Learning (INACSL) (2013) Standards for Simulation *Clinical Simulation in Nursing* 9(6S) Si – S32 [http://dx.doi.org/10.1016/j.ecns.2013.05.010](http://dx.doi.org/10.1016/j.ecns.2013.05.010)
### Appendix C: Annual Peer Review Summary Report Form

To be completed by the course peer reviewer and returned by email to the course lead

<table>
<thead>
<tr>
<th>Simulation Centre</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td></td>
</tr>
<tr>
<td>Course title</td>
<td></td>
</tr>
<tr>
<td>Course Lead</td>
<td></td>
</tr>
<tr>
<td>Group Size</td>
<td></td>
</tr>
<tr>
<td>Name(s) of Peer reviewer</td>
<td></td>
</tr>
</tbody>
</table>

#### Course Administration and Pre-Course Correspondence (See 1-2 QA Tool)

<table>
<thead>
<tr>
<th>Summary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Pre reading, confirmation email</td>
<td></td>
</tr>
<tr>
<td>- Registration, attendance, consent</td>
<td></td>
</tr>
<tr>
<td>- Course runs to time</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendations**

#### Faculty – Course pre-brief, faculty details and numbers (See 3, 7, 18 QA Tool)

<table>
<thead>
<tr>
<th>Summary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- How many faculty members?</td>
<td></td>
</tr>
<tr>
<td>- How many present at pre-brief?</td>
<td></td>
</tr>
<tr>
<td>- How many attended teacher education workshops such as Train the Trainer?</td>
<td></td>
</tr>
<tr>
<td>- Did any debrief the debrief take place? Themes of feedback to faculty?</td>
<td></td>
</tr>
</tbody>
</table>

**Recommendations**
### Participants: Participant details, orientation to course and environment plus physical and psychological safety (See 8-11 QA Tool)

**Summary**
- Numbers and level
- Interprofessional
- Objectives
- Course pre-brief
- Environmental orientation
- Psychological & physical safety
- Professional integrity

**Recommendations**

### Scenarios and Debrief: Pre-brief, Scenario and Debrief (See 4-6 and 12-16 QA Tool)

**Summary**
- Simulation modality & environment
- Appropriateness of the scenarios for learners & their prior experience
- Quality / content of briefing sheets – faculty and learners
- Curriculum mapping
- Quality and safety of debrief

**Recommendations**

### Course Governance and Evaluation (See 17, 19-21 QA Tool)

**Course review undertaken?**
- Evaluation data reviewed
- Curriculum mapping / Objectives reviewed

**Summary**

**Overall Feedback**
## Appendix D: Biennial Quality Assurance and Governance Review Form

Please complete ahead of your biennial peer review visit:

<table>
<thead>
<tr>
<th>Simulation Centre</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Review Date</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Name(s) of Peer reviewer</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Directors title</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Number of staff employed (WTE)</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td></td>
</tr>
<tr>
<td>Fellows</td>
<td></td>
</tr>
<tr>
<td>Clinical Educators</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Size of centre</strong> (Number of rooms for training)</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Facilities</strong> (Live A-V feed, HPS adult/child/birthing manikin)</th>
<th></th>
</tr>
</thead>
</table>

### 1. Core Mission Statement and Governance

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Centre has a clear strategy for course activity which including standards for faculty development, course governance and evaluation and research</td>
<td></td>
</tr>
<tr>
<td>2. Centre has a mission statement or clear aims and objectives for all healthcare groups utilising the centre that are visible</td>
<td></td>
</tr>
<tr>
<td>3. Centre is aligned to organisational strategy/ vision/ values</td>
<td></td>
</tr>
<tr>
<td>4. Centre has specified target populations</td>
<td></td>
</tr>
<tr>
<td>5. Centre actively participates in educational governance activities</td>
<td></td>
</tr>
<tr>
<td>6. Courses provided have their aims and activities regularly reviewed</td>
<td></td>
</tr>
<tr>
<td>7. Centre director reports into the educational stakeholders from the organisation – e.g. Medical Education directorate</td>
<td></td>
</tr>
</tbody>
</table>

### 2. Course Organisation and Management

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is an organisational structure that clearly shows lines of authority and areas of accountability for the centre.</td>
<td></td>
</tr>
<tr>
<td>2. There is a process in place for setting and managing a responsible and realistic budget</td>
<td></td>
</tr>
<tr>
<td>3. Feasibility and resources analysis is conducted prior to new course commencement</td>
<td></td>
</tr>
<tr>
<td>4. Funding streams are identified for course costs and sustainability prior to courses commencing</td>
<td></td>
</tr>
</tbody>
</table>
5. Equitable access is made available for all learners to attend

6. There is an appropriately qualified individual who has overall responsibility for management of the educational facilities and provision of services

7. Appropriately trained staff are available to deliver courses.

8. There are policies and procedures in place for quality monitoring, confidentiality and contingency plans for unexpected events.

9. Course booking and cancellations processes are clear. Terms and conditions are available to assist with communication and implementation of cancellations

10. Social media and websites used to publicise course provision and are up to date

### 3. Course Resources and Equipment

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The centre undertakes a needs analysis to ensure that the technology and equipment available is appropriate to achieve the educational objectives.</td>
<td></td>
</tr>
<tr>
<td>2. The environment must be educationally supportive and clinically credible.</td>
<td></td>
</tr>
<tr>
<td>3. There is an up to date inventory of training equipment in use</td>
<td></td>
</tr>
<tr>
<td>4. All equipment and maintenance schedules must be documented and records kept.</td>
<td></td>
</tr>
<tr>
<td>5. There are defined areas for the course sessions e.g. clinical skills facilities, scenarios, separate debriefing areas and equipment storage.</td>
<td></td>
</tr>
<tr>
<td>6. Adheres to organisational Health and Safety policies and procedures.</td>
<td></td>
</tr>
</tbody>
</table>

### 4. Course Evaluation and Development

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The centre commits to evaluate course delivery and performance.</td>
<td></td>
</tr>
<tr>
<td>2. Centre and individual course leads identifies areas for improvement and documents how and when these improvements are made.</td>
<td></td>
</tr>
</tbody>
</table>

### 5. Ethics and Psychological Safety

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All course faculty are honest, open and provide accurate material.</td>
<td></td>
</tr>
<tr>
<td>2. All course faculty uphold confidentiality and create a safe learning environment.</td>
<td></td>
</tr>
<tr>
<td>3. The centre publicises and creates space in the course timetables to explain about safe learning</td>
<td></td>
</tr>
</tbody>
</table>
environments/ learning contracts

4. Centre applies and adheres to an organisational complaints policy

5. Centre applies and adheres to an organisational environmental policy.

### 6. Educational Performance

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Courses should utilise simulation and/or clinical skills practice in the learning environment.</td>
<td></td>
</tr>
<tr>
<td>2. Faculty should be supported by a recognised educational lead or have access to development programmes.</td>
<td></td>
</tr>
<tr>
<td>3. A simulation or clinical skills experts should be nominated as a course lead to supervise individual courses.</td>
<td></td>
</tr>
<tr>
<td>4. There should be a yearly review of each courses aims, objectives and materials updating them in line with current guidelines or curriculums where necessary.</td>
<td></td>
</tr>
</tbody>
</table>

### 7. Trainer, Faculty and Facilitators

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Training and faculty members and facilitators are experts in their specialist areas and/or simulation.</td>
<td></td>
</tr>
<tr>
<td>2. The experts are delivering courses appropriate to their skills.</td>
<td></td>
</tr>
<tr>
<td>3. The course provider can access or provide faculty development programmes to ensure appropriate facilitation of courses is provided</td>
<td></td>
</tr>
<tr>
<td>4. Mentoring/support is provided for novice simulation faculty</td>
<td></td>
</tr>
<tr>
<td>5. Training and faculty members and facilitators are encouraged to attend on-going education in this field.</td>
<td></td>
</tr>
<tr>
<td>6. All teaching staff receives feedback either informally or formally using simulation / teaching peer observation &amp; feedback</td>
<td></td>
</tr>
<tr>
<td>7. A record of faculty providers records level of faculty provision and the centre offer updates for faculty who have not been able to debrief for &gt;12 months</td>
<td></td>
</tr>
</tbody>
</table>

### 8. Course Purposes

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual courses are based on current clinical skills guidelines, evidence base, curricula, and/or simulation education based theory. They are systematically devised to meet the learner’s needs and to include patient safety at all times.</td>
<td></td>
</tr>
</tbody>
</table>
2. Individual course delivery by the faculty should be standardised in the areas of course aims, ethics, clinical skills and the educational material used.

3. Patient safety, communication and team working principles are at the core of the course training.

4. A model of debriefing and/or reflection should be used in order to allow learner’s to identify and reflect on their learning experience, identify performance gaps and explore personal development.

### 9. Continual Course Review

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The course provider should have processes in place for evaluation and outcome measures for trainers and learners.</td>
<td></td>
</tr>
<tr>
<td>2. There should be course evaluation and research relevant to the course e.g. post course questionnaires, trainee evaluations, focus groups, follow-up questionnaires.</td>
<td></td>
</tr>
<tr>
<td>3. The course provider should maintain up to date records on participant demographics for audit purposes.</td>
<td></td>
</tr>
</tbody>
</table>

### 10. CPD Provision/Accreditation

<table>
<thead>
<tr>
<th>Principles</th>
<th>Evidence provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The course provider can access or provide resources for CPD to candidates and faculty.</td>
<td></td>
</tr>
<tr>
<td>2. The course provider gives details of accreditation to affiliated organisations.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E: Day to day quality assurance course debrief form

Day to Day Quality Assurance Course Debrief Form

Please use at the end of each day and pass to the administration team for scanning into the course evaluation data folder.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td></td>
</tr>
</tbody>
</table>

Course lead

Review of Feedback Forms
- Did it meet learning objectives

Timetable/ Structure of day
- What went well/ needs improving

Debriefing Model Model / Adherence:

Debrief the debrief themes

Scenarios Content:
- Other:
  - Actor Feedback:

Technical Feedback

Agreed Action Points
<table>
<thead>
<tr>
<th>What?</th>
<th>Who?</th>
<th>By when?</th>
</tr>
</thead>
</table>
