South African Simulation Survey

Introduction and background

Many thanks for completing this survey which we hope will help us better understand:

1. The state of simulation-based education in South Africa
2. Simulation resources available in the various centres
3. Attitudes towards and perceptions of simulation as an educational tool
4. Perceived barriers or facilitators influencing how simulation is used.
5. Goals and vision for simulation

It is hoped this will facilitate national collaboration to accelerate the growth of this valuable training technique.

This survey should not take longer than 20 minutes to complete. If any explanations or clarification is needed, please contact Dr Rowan Duys rowanduys@gmail.com or Dr Robert Swart robswart6@gmail.com

The data collected will be confidential and when published will not identify individual institutions.

The completion of the survey will be seen as consent for the data to be used in the research paper.

The development of this survey has been guided by a Society for Simulation in Healthcare accreditation document, expert opinion and other sources from the simulation literature.

Ethics approval number: HREC REF 157/2017
Human Research Ethics Committee
University of Cape Town

Please answer the following questions as completely as possible.

Name of individual completing survey:

_____

Email:

_____
(This email will only be used for future sim related communication)

Institution:

_____

Department:

_____

Role at institution:

_____

You are answering this questionnaire on behalf of:

○ An anaesthesia department, including critical care and perioperative medicine
○ A multi-disciplinary simulation programme (eg: a university-wide programme), or a non-anaesthesia department

Please indicate your level of agreement with the following statements:

	strongly disagree	disagree	undecided	agree	strongly agree
Our department provides some form of simulation-based education	○	○	○	○	○
Simulation-based education is integrated into the formal education programme of our department	○	○	○	○	○
Our department is trying to grow the simulation-based education programme	○	○	○	○	○
Our department would be interested in collaboration with other centres to facilitate growth in simulation-based education programmes.	○	○	○	○	○

Please indicate to what extent the following factors impede the growth of simulation-based education in your department:

	strongly disagree	disagree	undecided	agree	strongly agree
Lack of finances for simulation programme	○	○	○	○	○
Lack of trained educators	○	○	○	○	○
Lack of space/facilities dedicated to simulation (eg: simulation centre)	○	○	○	○	○
Lack of simulation equipment (eg manikins, sundries)	○	○	○	○	○
Lack of protected time for educators	○	○	○	○	○
Lack of protected time for learners	○	○	○	○	○
Lack of institutional support for simulation-based education	○	○	○	○	○
Simulation is not yet validated as an educational model	○	○	○	○	○
Simulation is perceived as stressful and intimidating	○	○	○	○	○

Curriculum and Learners

This section will explore the learners targeted, and the topics explored through simulation programmes. It will also explore decision-making around scenario design and learning objectives.

What content or learning needs do you cover? (tick where appropriate)	☐ Medical knowledge or theory ☐ Practical skills ☐ Communication skills ☐ Leadership skills ☐ Critical thinking and decision making ☐ Integrated management of clinical scenarios ☐ Teamwork or Crew Resource Management or Human Factors
Whom do you target? (tick where appropriate)	☐ Nurses ☐ Paramedics ☐ Undergraduates students ☐ Medical interns ☐ Medical Officers ☐ Registrars ☐ Specialists ☐ Teams from within a department ☐ Multi-disciplinary teams
How are topics for new scenarios decided?	☐ Experts identify a learning need ☐ Adverse events inform scenario design ☐ Curriculum focused ☐ Scenarios are part of an established course e.g.: MEPA ☐ Other
If other, please specify	_____
Who designs the scenarios?	☐ Departmental simulation leaders ☐ Departmental experts ☐ Dedicated simulation facility staff ☐ Learners design their own simulations and learning objectives ☐ Combination ☐ Other
If other, please specify	_____
Estimate the number of unique learners exposed to simulation in a 12-month period:	_____
Contact hours are defined as the length of time a learner spends within a simulation-based curriculum, including instruction, structured practice, and debriefing/feedback. Using this definition, estimate the number of contact hours per learner per year for undergraduates?	_____

Contact hours are defined as the length of time a learner spends within a simulation-based curriculum, including instruction, structured practice, and debriefing/feedback. Using this definition, estimate the number of contact hours per learner per year for post-graduates?

_____

Organization, management, personnel

This section explores details concerning personnel involved with running the simulation programme and the organizational structure and funding. Questions regarding funding and finance are to help understand how simulation education is currently functioning and to assist with future planning.

Does the simulation program have a specific director?

- ○ Yes
- ○ No

Are the staff involved in the simulation program allocated protected time to conduct simulation-based education?

- ○ Yes
- ○ No

List the current staff allocated to simulation education in your department or institution and briefly describe:

Category of staff

- ☐ Consultant
- ☐ Registar
- ☐ Medical officer
- ☐ Tech
- ☐ Nurse
- ☐ Outside consultant
- ☐ Other

Consultants

Number of consultants

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

Consultant 1

In which discipline does this consultant have simulation-based education responsibilities?

- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?

- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Consultant 2

In which discipline does this consultant have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Consultant 3

In which discipline does this consultant have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Consultant 4

In which discipline does this consultant have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Consultant 5

| In which discipline does this consultant have simulation-based education responsibilities? | ○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only |

| How is this employee's position funded? | ○ University ○ Hospital/Province ○ Private/Donor ○ Other |

If other, please specify

_____

Role in programme

_____

Registrars

| Number of registrars | ○ 1 ○ 2 ○ 3 ○ 4 ○ 5 |

Registrar 1

| In which discipline does this registrar have simulation-based education responsibilities? | ○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only |

| How is this employee's position funded? | ○ University ○ Hospital/Province ○ Private/Donor ○ Other |

If other, please specify

_____

Role in programme

_____

Registrar 2

| In which discipline does this registrar have simulation-based education responsibilities? | ○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only |

| How is this employee's position funded? | ○ University ○ Hospital/Province ○ Private/Donor ○ Other |

If other, please specify

_____

Role in programme

_____

Registrar 3

In which discipline does this registrar have simulation-based education responsibilities?

- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?

- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Registrar 4

In which discipline does this registrar have simulation-based education responsibilities?

- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?

- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Registrar 5

In which discipline does this registrar have simulation-based education responsibilities?

- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?

- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Medical Officers

Number of medical officers	○ 1
	○ 2
	○ 3
	○ 4
	○ 5

Medical officer 1

In which discipline does this medical officer have simulation-based education responsibilities?
○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?
○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Medical officer 2

In which discipline does this medical officer have simulation-based education responsibilities?
○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?
○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Medical officer 3

In which discipline does this medical officer have simulation-based education responsibilities?
○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?
○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Medical officer 4

In which discipline does this medical officer have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Medical officer 5

In which discipline does this medical officer have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Techs

Number of techs
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5

Tech 1

In which discipline does this tech have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Tech 2

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Tech 3

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Tech 4

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Tech 5

In which discipline does this tech have simulation-based education responsibilities?

○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?

○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Nurses

Number of nurses

○ 1
○ 2
○ 3
○ 4
○ 5

Nurse 1

In which discipline does this nurse have simulation-based education responsibilities?

○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?

○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Nurse 2

In which discipline does this nurse have simulation-based education responsibilities?

○ Anaesthesia only
○ Anaesthesia and other disciplines
○ Other disciplines only

How is this employee's position funded?

○ University
○ Hospital/Province
○ Private/Donor
○ Other

If other, please specify

_____

Role in programme

_____

Nurse 3

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

Nurse 4

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

Nurse 5

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

Outside consultants

Number of outside consultants	○ 1
	○ 2
	○ 3
	○ 4
	○ 5

Outside Consultant 1

In which discipline does this outside consultant have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 2

In which discipline does this outside consultant have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 3

In which discipline does this outside consultant have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 4

| In which discipline does this outside consultant have simulation-based education responsibilities? | ◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only |

| How is this employee's position funded? | ◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other |

If other, please specify

_____

Role in programme

_____

Outside Consultant 5

| In which discipline does this outside consultant have simulation-based education responsibilities? | ◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only |

| How is this employee's position funded? | ◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other |

If other, please specify

_____

Role in programme

_____

Other

| Number of others | ◯ 1
◯ 2
◯ 3
◯ 4
◯ 5 |

Other 1

Specify other designation

_____

| In which discipline does this other designation have simulation-based education responsibilities? | ◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only |

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How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Other 2

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Other 3

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Other 4

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?

◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only

How is this employee's position funded?

◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other

If other, please specify

_____

Role in programme

_____

Other 5

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?

◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only

How is this employee's position funded?

◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other

If other, please specify

_____

Role in programme

_____

Other information about staff

Do the staff running the simulation program have accreditation or formal training with regards to simulation education?

◯ Yes
◯ No

If yes, which training programme is employed? eg: BASIM, local etc

_____

Does your facility provide an orientation program for the simulation program teaching faculty?

◯ Yes
◯ No

REDCap

Where do your simulations take place?	☐ Dedicated simulation facility off-site ☐ Dedicated simulation facility within your hospital/university/organisation complex ☐ Dedicated simulation facility within your department ☐ In-situ or in clinical areas where patients are not currently being treated ☐ Other

If other, please specify	_____

Is the simulation space owned by your department?	◯ Yes ◯ No ◯ Partially

Is your simulation equipment owned by your department?	◯ Yes ◯ No ◯ Partially

Running a simulation programme is expensive.

Who funds the simulation centre/facility?	☐ University ☐ Hospital ☐ Department ☐ Corporate Sponsor ☐ Self-funded fundraising

Who funds the simulation equipment?	☐ University ☐ Hospital ☐ Department ☐ Corporate Sponsor ☐ Self-funded fundraising ☐ Donated

Simulation equipment includes everything from large, expensive items like integrated patient simulators to sundries and consumables. We would like to understand your access to these items.

Please indicate if you have unlimited/sufficient access to and use of the equipment, limited access with items occasionally unavailable or if your programme has no access to this item at all.

	NO access	Limited (not always available)	Unlimited or sufficient access
Part-task simulator: models represent only a part of the real thing and will often comprise a limb or body part or structure	○	○	○
Computer based multimedia: programs which incorporate audio and video components, are used as adjuncts to formal teaching and learning	○	○	○
Computer based interactive: programmes which provide the user with an interface that presents physiological or pharmacological variables that can be manipulated through the user's actions, providing feedback on decisions made and actions taken	○	○	○
Virtual reality and haptic systems: haptic systems refer to those replicating the kinaesthetic and tactile perception	○	○	○
Simulated patient & environments: real people (actors, students, faculty) trained to mimic patient reactions	○	○	○
Integrated simulators: sophisticated manikin with computerised controls designed to mimic physiological responses eg: SimMan, METI	○	○	○
Self-designed simulation equipment:	○	○	○

List your most important equipment gaps?

_____

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How likely are you to be able to fill these gaps in the near the future?	○ Next 1 year ○ Next 2 years ○ Unlikely in next 5 years

Evaluation and Improvement

Methods to evaluate the strengths, impact and areas for improvement of any educational programme are critical to ensuring quality.

What methods are used to evaluate the quality of the simulation faculty?	☐ None ☐ Peer evaluation ☐ Independent evaluation ☐ Participant feedback ☐ Other

If other, please specify	_____

What methods are used to evaluate the impact of the simulation program?	☐ Informal faculty discussion about simulation scenario ☐ Learner feedback ☐ Assessment of learner performance in simulated clinical scenarios ☐ Assessment of learner performance in 'real' clinical scenarios ☐ Impact on patient outcomes

Expanding the field/Research

Research is an important vehicle for understanding and expanding a field. However, we acknowledge that some researchers may not be ready to share details of their work.

Is your facility conducting any of the following categories of research related to simulation education?	☑ Quantitative research into efficacy of simulation ☑ Quantitative research using simulation as the vehicle for investigation ☑ Qualitative research into how and why simulation works ☑ Other

If other, please specify	_____

Simulation for assessment

Simulation can be used for formative assessment, where the goal is student learning and growth, or as a tool for summative assessment where the goal is to assess the learner's performance against a required standard and award an appropriate grade. This section concerns summative assessments.

Do you use simulation for summative assessment of any of the following learner categories?	○ Nurse ○ Intern ○ Medical Officer ○ Registrar ○ Specialist

What tools are used for assessment?	☐ Expert opinion of overall performance
	☐ Peer evaluation of performance
	☐ Validated check lists
	☐ Other

If other, please specify

_____

Future plans

Describe your vision for the future of your programme or the role of simulation in your department?

_____

What are your most urgent needs/deficiencies/requirements in the achievement of your goals?

_____

What are your immediate plans for growth of the programme?

_____

Would you be interested in collaborating with other centres in South Africa to grow the educational or research impact of your simulation programme?

○ Yes
○ No

The UCT Department of Anaesthesia and Perioperative Medicine is building a simulation package for the interns rotating through the Department. Would your facility be interested in collaborating on this work, or using the material once complete?

○ Yes
○ No

Please indicate your level of agreement with the following statements

	strongly disagree	disagree	undecided	agree	strongly agree
Our facility provides some form of simulation-based education	○	○	○	○	○
Simulation-based education is integrated into the formal education programme of our facility	○	○	○	○	○
Our facility is trying to grow the simulation-based education programme	○	○	○	○	○
Our facility would be interested in collaboration with other centres to facilitate growth in simulation-based education programmes.	○	○	○	○	○

Please indicate to what extent the following factors impede the growth of simulation-based education in your department:

	strongly disagree	disagree	undecided	agree	strongly agree
Lack of finances for simulation programme	○	○	○	○	○
Lack of trained educators	○	○	○	○	○
Lack of space/facilities dedicated to simulation (eg: simulation centre)	○	○	○	○	○
Lack of simulation equipment (eg manikins, sundries)	○	○	○	○	○
Lack of protected time for educators	○	○	○	○	○
Lack of protected time for learners	○	○	○	○	○
Lack of institutional support for simulation-based education	○	○	○	○	○
Simulation is not yet validated as an educational model	○	○	○	○	○
Simulation is perceived as stressful and intimidating	○	○	○	○	○

Curriculum and Learners

This section will explore the learners targeted, and the topics explored through simulation programmes. It will also explore decision-making around scenario design and learning objectives.

What content or learning needs do you cover? (tick where appropriate)

☐ Medical knowledge or theory
☐ Practical skills
☐ Communication skills
☐ Leadership skills
☐ Critical thinking and decision making
☐ Integrated management of clinical scenarios
☐ Teamwork or Crew Resource Management or Human Factors

Whom do you target? (tick where appropriate)

☐ Nurses
☐ Paramedics
☐ Undergraduates students
☐ Medical interns
☐ Medical Officers
☐ Registrars
☐ Specialists
☐ Teams from within a department
☐ Multi-disciplinary teams

How are topics for new scenarios decided?	☐ Experts identify a learning need ☐ Adverse events inform scenario design ☐ Curriculum focused ☐ Scenarios are part of an established course e.g.: MEPA ☐ Other

If other, please specify	_____

Who designs the scenarios?	○ Departmental simulation leaders ○ Departmental experts ○ Dedicated simulation facility staff ○ Learners design their own simulations and learning objectives ○ Combination ○ Other

If other, please specify	_____

Estimate the number of unique learners exposed to simulation in a 12-month period:	_____

Contact hours are defined as the length of time a learner spends within a simulation-based curriculum, including instruction, structured practice, and debriefing/feedback. Using this definition, estimate the number of contact hours per learner per year for undergraduates?	_____

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Are the staff involved in the simulation program allocated protected time to conduct simulation-based education?	○ Yes ○ No

List the current staff allocated to simulation education in your department or institution and briefly describe:

Category of staff

☐ Consultant
☐ Registar
☐ Medical officer
☐ Tech
☐ Nurse
☐ Outside consultant
☐ Other

Consultants

Number of consultants

◯ 1
◯ 2
◯ 3
◯ 4
◯ 5

Consultant 1

In which discipline does this consultant have simulation-based education responsibilities?

◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only

How is this employee's position funded?

◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other

If other, please specify

_____

Role in programme

_____

Consultant 2

In which discipline does this consultant have simulation-based education responsibilities?

◯ Anaesthesia only
◯ Anaesthesia and other disciplines
◯ Other disciplines only

How is this employee's position funded?

◯ University
◯ Hospital/Province
◯ Private/Donor
◯ Other

If other, please specify

_____

Role in programme

_____

Consultant 3

In which discipline does this consultant have simulation-based education responsibilities?	⃝ Anaesthesia only ⃝ Anaesthesia and other disciplines ⃝ Other disciplines only
How is this employee's position funded?	⃝ University ⃝ Hospital/Province ⃝ Private/Donor ⃝ Other

If other, please specify

_____

Role in programme

_____

Consultant 4

In which discipline does this consultant have simulation-based education responsibilities?	⃝ Anaesthesia only ⃝ Anaesthesia and other disciplines ⃝ Other disciplines only
How is this employee's position funded?	⃝ University ⃝ Hospital/Province ⃝ Private/Donor ⃝ Other

If other, please specify

_____

Role in programme

_____

Consultant 5

In which discipline does this consultant have simulation-based education responsibilities?	⃝ Anaesthesia only ⃝ Anaesthesia and other disciplines ⃝ Other disciplines only
How is this employee's position funded?	⃝ University ⃝ Hospital/Province ⃝ Private/Donor ⃝ Other

If other, please specify

_____

Role in programme

_____

Registrars

Number of registrars	○ 1 ○ 2 ○ 3 ○ 4 ○ 5

Registrar 1

In which discipline does this registrar have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only
How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other
If other, please specify	_____
Role in programme	_____

Registrar 2

In which discipline does this registrar have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only
How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other
If other, please specify	_____
Role in programme	_____

Registrar 3

In which discipline does this registrar have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only
How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other
If other, please specify	_____

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Role in programme

_____

Registrar 4

In which discipline does this registrar have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Registrar 5

In which discipline does this registrar have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Medical Officers

Number of medical officers	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

Medical officer 1

In which discipline does this medical officer have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Medical officer 2

In which discipline does this medical officer have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Medical officer 3

In which discipline does this medical officer have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Medical officer 4

In which discipline does this medical officer have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Medical officer 5

In which discipline does this medical officer have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Techs

Number of techs
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

Tech 1

In which discipline does this tech have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Tech 2

In which discipline does this tech have simulation-based education responsibilities?
- ○ Anaesthesia only
- ○ Anaesthesia and other disciplines
- ○ Other disciplines only

How is this employee's position funded?
- ○ University
- ○ Hospital/Province
- ○ Private/Donor
- ○ Other

If other, please specify

_____

Role in programme

_____

Tech 3

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only
	◯ Anaesthesia and other disciplines
	◯ Other disciplines only

How is this employee's position funded?	◯ University
	◯ Hospital/Province
	◯ Private/Donor
	◯ Other

If other, please specify

_____

Role in programme

_____

Tech 4

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only
	◯ Anaesthesia and other disciplines
	◯ Other disciplines only

How is this employee's position funded?	◯ University
	◯ Hospital/Province
	◯ Private/Donor
	◯ Other

If other, please specify

_____

Role in programme

_____

Tech 5

In which discipline does this tech have simulation-based education responsibilities?	◯ Anaesthesia only
	◯ Anaesthesia and other disciplines
	◯ Other disciplines only

How is this employee's position funded?	◯ University
	◯ Hospital/Province
	◯ Private/Donor
	◯ Other

If other, please specify

_____

Role in programme

_____

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Nurses

Number of nurses	○ 1
	○ 2
	○ 3
	○ 4
	○ 5

Nurse 1

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Nurse 2

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Nurse 3

In which discipline does this nurse have simulation-based education responsibilities?	○ Anaesthesia only
	○ Anaesthesia and other disciplines
	○ Other disciplines only

How is this employee's position funded?	○ University
	○ Hospital/Province
	○ Private/Donor
	○ Other

If other, please specify

_____

Role in programme

_____

Nurse 4

In which discipline does this nurse have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Nurse 5

In which discipline does this nurse have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Outside consultants

Number of outside consultants
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5

Outside Consultant 1

In which discipline does this outside consultant have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 2

In which discipline does this outside consultant have simulation-based education responsibilities?	⚪ Anaesthesia only ⚪ Anaesthesia and other disciplines ⚪ Other disciplines only

How is this employee's position funded?	⚪ University ⚪ Hospital/Province ⚪ Private/Donor ⚪ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 3

In which discipline does this outside consultant have simulation-based education responsibilities?	⚪ Anaesthesia only ⚪ Anaesthesia and other disciplines ⚪ Other disciplines only

How is this employee's position funded?	⚪ University ⚪ Hospital/Province ⚪ Private/Donor ⚪ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 4

In which discipline does this outside consultant have simulation-based education responsibilities?	⚪ Anaesthesia only ⚪ Anaesthesia and other disciplines ⚪ Other disciplines only

How is this employee's position funded?	⚪ University ⚪ Hospital/Province ⚪ Private/Donor ⚪ Other

If other, please specify

_____

Role in programme

_____

Outside Consultant 5

In which discipline does this outside consultant have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Other

Number of others	◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

Other 1

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	◯ University ◯ Hospital/Province ◯ Private/Donor ◯ Other

If other, please specify

_____

Role in programme

_____

Other 2

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	◯ Anaesthesia only ◯ Anaesthesia and other disciplines ◯ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

Other 3

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

Other 4

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?	○ Anaesthesia only ○ Anaesthesia and other disciplines ○ Other disciplines only

How is this employee's position funded?	○ University ○ Hospital/Province ○ Private/Donor ○ Other

If other, please specify

_____

Role in programme

_____

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Other 5

Specify other designation

_____

In which discipline does this other designation have simulation-based education responsibilities?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

How is this employee's position funded?
- ◯ University
- ◯ Hospital/Province
- ◯ Private/Donor
- ◯ Other

If other, please specify

_____

Role in programme

_____

Other information about staff

Do the staff running the simulation program have accreditation or formal training with regards to simulation education?
- ◯ Anaesthesia only
- ◯ Anaesthesia and other disciplines
- ◯ Other disciplines only

If yes, which training programme is employed? eg: BASIM, local etc

_____

Does your facility provide an orientation program for the simulation program teaching faculty?
- ◯ Yes
- ◯ No

Where do your simulations take place?
- ☐ Dedicated simulation facility off-site
- ☐ Dedicated simulation facility within your hospital/university/organisation complex
- ☐ Dedicated simulation facility within your department
- ☐ In-situ or in clinical areas where patients are not currently being treated
- ☐ Other

If other, please specify

_____

Is the simulation space owned by your facility?
- ◯ Yes
- ◯ No
- ◯ Partially

Is your simulation equipment owned by your facility?
- ◯ Yes
- ◯ No
- ◯ Partially

Running a simulation programme is expensive.

Who funds the simulation centre/facility?	☐ University ☐ Hospital ☐ Department ☐ Corporate Sponsor ☐ Self-funded fundraising
Who funds the simulation equipment?	☐ University ☐ Hospital ☐ Department ☐ Corporate Sponsor ☐ Self-funded fundraising ☐ Donated

Simulation equipment includes everything from large, expensive items like integrated patient simulators to sundries and consumables. We would like to understand your access to these items.

Please indicate if you have unlimited/sufficient access to and use of the equipment, limited access with items occasionally unavailable or if your programme has no access to this item at all.

	NO access	Limited (not always available)	Unlimited or sufficient access
Part-task simulator: models represent only a part of the real thing and will often comprise a limb or body part or structure	○	○	○

	NO access	Limited (not always available)	Unlimited or sufficient access
Computer based multimedia: programs which incorporate audio and video components, are used as adjuncts to formal teaching and learning	○	○	○
Computer based interactive: programmes which provide the user with an interface that presents physiological or pharmacological variables that can be manipulated through the user's actions, providing feedback on decisions made and actions taken	○	○	○
Virtual reality and haptic systems: haptic systems refer to those replicating the kinaesthetic and tactile perception	○	○	○
Simulated patient & environments: real people (actors, students, faculty) trained to mimic patient reactions	○	○	○
Integrated simulators: sophisticated manikin with computerised controls designed to mimic physiological responses eg: SimMan, METI	○	○	○
Self-designed simulation equipment:	○	○	○

List your most important equipment gaps?

_____

How likely are you to be able to fill these gaps in the near the future?

○ Next 1 year
○ Next 2 years
○ Unlikely in next 5 years

Evaluation and Improvement

Methods to evaluate the strengths, impact and areas for improvement of any educational programme are critical to ensuring quality.

What methods are used to evaluate the quality of the simulation faculty?

○ None
○ Peer evaluation
○ Independent evaluation
○ Participant feedback
○ Other

If other, please specify

_____

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What methods are used to evaluate the impact of the simulation program?	◯ Informal faculty discussion about simulation scenario ◯ Learner feedback ◯ Assessment of learner performance in simulated clinical scenarios ◯ Assessment of learner performance in 'real' clinical scenarios ◯ Impact on patient outcomes

Expanding the field/Research

Research is an important vehicle for understanding and expanding a field. However, we acknowledge that some researchers may not be ready to share details of their work.

Is your facility conducting any of the following categories of research related to simulation education?	☐ Quantitative research into efficacy of simulation ☐ Quantitative research using simulation as the vehicle for investigation ☐ Qualitative research into how and why simulation works ☐ Other
If other, please specify	_____

Simulation for assessment

Simulation can be used for formative assessment, where the goal is student learning and growth, or as a tool for summative assessment where the goal is to assess the learner's performance against a required standard and award an appropriate grade. This section concerns summative assessments.

Do you use simulation for summative assessment of any of the following learner categories?	◯ Nurse ◯ Intern ◯ Medical Officer ◯ Registrar ◯ Specialist
What tools are used for assessment?	☐ Expert opinion of overall performance ☐ Peer evaluation of performance ☐ Validated check lists ☐ Other
If other, please specify	_____

Future plans

Describe your vision for the future of your programme or the role of simulation in your facility?	_____
What are your most urgent needs/deficiencies/requirements in the achievement of your goals?	_____
What are your immediate plans for growth of the programme?	_____

Would you be interested in collaborating with other centres in South Africa to grow the educational or research impact of your simulation programme?	○ Yes ○ No
The UCT Department of Anaesthesia and Perioperative Medicine is building a simulation package for the interns rotating through the Department. Would your facility be interested in collaborating on this work, or using the material once complete?	○ Yes ○ No