STEPS

OBSERVABLE PRACTICE ACTIVITIES

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STEPS | maxSIMhealth | OntarioTech UNIVERSITY

STEPS Observable Practice Activities

This set of OPAs is designed to help you understand the key tasks performed by non-clinical SOS, that will be used to structure the STEPS minor curriculum.

What are OPAs?

Observable Practice Activities (OPAs) are specific, observable tasks performed by non-clinical Simulation Operations Specialists (SOS) within their professional scope of practice.

While Entrustable Professional Activities (EPAs) represent end-of-training objectives, OPAs can be thought of as building blocks towards achieving entrustment of broader EPAs (Warm et al., 2014; Tehrani & Chen, 2014). Integrating both EPAs and OPAs allows curricula to cover a broad scope of practice, while remaining functional even in early training stages (Warm et al., 2014).

In the context of the STEPS minor, these OPAs represent the tasks trainees will need to be able to perform independently and competently upon graduation. Structuring the STEPS curriculum to gradually develop proficiency in these OPAs will ensure trainees are competent and workforce-ready upon graduation (Ten Cate et al., 2024).

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Purpose of this Document

This document provides a comprehensive overview of the core and elective OPAs for non-clinical SOS. It serves two key purposes:

Define OPAs:

Clearly define core and elective tasks performed by non-clinical SOS within their professional scope of practice.

Output Format

The STEPS OPAs are organized under the following functional groups:

1. Course Development, Scheduling, and Booking
2. Hardware and Software Operations and Troubleshooting
3. Audio Visual and Data Storage
4. Supply Chain Management
5. Realism and Authenticity
6. Health and Safety
7. Program and Research Support

Within each functional group, OPAs are grouped into two categories, which indicate their priority for training purposes:

Core OPAs: Tasks essential for non-clinical SOS professional practice and successful graduation from the STEPS minor.

Elective OPAs: Non-essential, specialized, or rarely performed tasks that can be pursued by trainees who demonstrate competence in core OPAs with time still remaining to satisfy credit hours.

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Functional Group 1:
Course Development, Scheduling, and Booking

Priority	OPA
CORE	Interpret and activate course booking forms.
CORE	Organizing faculty and learner orientation sessions, including simulator limits of use (e.g. "do not make an incision").
CORE	Compile, update, and manage simulation documentation.
CORE	Compiling, updating, and managing simulation documentation before and after simulation events.
CORE	Developing and managing calendars to coordinate lab availability and resource allocation.
CORE	Managing and filing detailed scenario scripts for future reference and repeated events (e.g. SimGHOSTS booking form).
CORE	Supporting the collaborative maintenance of required documentation and collection of evidence for accreditation and certification bodies, and centre operations needs.
CORE	Working with facilitators to design and develop simulation scenarios and scripts.
CORE	Collaboratively reviewing post-simulation surveys to gather feedback from learners and instructors to support future modifications.
ELECTIVE	Developing post-simulation surveys and implementing feedback from learners and instructors to support future modifications.

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Functional Group 2:

Hardware and Software Operations and Troubleshooting

Priority	OPA
CORE	Setting-up and calibrating patient simulators and task-trainers.
CORE	Performing pre-simulation equipment functionality checks.
CORE	Performing diagnostic tests and troubleshooting equipment malfunction, documenting accordingly.
CORE	Performing routine maintenance and repairs on mannequins and task trainers (e.g., replace worn-out parts, updating software etc.).
CORE	Supporting adjustment of mannequin physiological parameters and vital signs in real-time according to the scenario and directions given by the instructor.
CORE	Implementing unexpected complications in real-time according to the scenario and the directions of the instructor.
CORE	Pre-programming mannequins with the indicated physiological responses and vital signs from scenario booking form.
CORE	Regularly updating simulation softwares.
CORE	Resetting mannequins after simulation training.
CORE	Providing real-time technical support to instructors and learners with video recordings.
CORE	Storing simulators and simulation equipment, ensuring safety and security.
CORE	Providing support for virtual simulations.

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Functional Group 3:
Audio Visual and Data Storage

Priority	OPA
CORE	Setting up microphones, cameras, and speakers for simulation recording for optimal use in debriefing, analysis, and data collection.
CORE	Managing live video streaming for remote simulation training sessions.
CORE	Troubleshooting audio and video quality.
CORE	Organizing and archiving recorded simulation sessions in safe, limited access storage.
CORE	Operating different web-based applications and information systems.

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Functional Group 4:
Supply Chain Management

Priority	OPA
CORE	Ordering and restocking equipment and supplies and finding cost-effective solutions (i.e., sourcing decommissioned equipment, 3D-printing replacement parts for equipment and simulators etc.).
CORE	Maintaining a contact list of supply and equipment company representatives.
CORE	Managing facility and equipment upkeep, organization, and maintenance.
CORE	Tracking inventory just-in-time, for continued inventory replenishment.
ELECTIVE	Ordering, preparing, and storing cadaveric tissue.
ELECTIVE	Ordering, handling, defrosting and storing animal and meat products.

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Functional Group 5:
Realism and Authenticity

Priority	OPA
CORE	Staging simulation environments to match clinical settings according to the case scenario.
CORE	Applying and removing make-up and moulage according to manufacturer's instructions.
CORE	Enhancing simulation scenario realism using variable art mediums and locally sourced supplies.
CORE	Applying and managing medical supplements, equipment and devices to simulators (e.g., IV, ECG, O2, fetal heart stimulator etc.)
CORE	Managing and maintaining auxiliary equipment, medical supplies, and drugs (e.g., crash carts, casting carts, IOs, ultrasounds etc.).
CORE	Developing, refining, and evaluating realistic simulator prototypes through iterative testing with facilitators and educators.
ELECTIVE	Designing and developing 3D models of anatomical structures using CAD softwares (e.g., TinkerCAD, SolidWorks, Fusion360), various filament types (e.g., PLA, TPU, resin etc.), and post-processing (e.g., sanding, painting, sealing etc.) to enhance realism.

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Functional Group 6:
Health and Safety

Priority	OPA
CORE	Adjusting simulations to accommodate learner stress or discomfort.
CORE	Interpreting, following, and maintaining policies and procedures for simulation centre operations (i.e., managing simulator and electronic failures, following IPAC protocols etc.)
CORE	Completing and submitting incident reports.
CORE	Implementing accessibility accommodations.
CORE	Safely disposing of potentially hazardous equipment and materials using WHIMIS, PPE, Safety with Sharps, and universal precaution guidelines.
CORE	Supporting safety culture within the simulation environment.
CORE	Securing in-situ and non-hospital based simulation environments with public awareness notifications that a simulation is in progress.

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Functional Group 7:

Program and Research Support

Priority	OPA
CORE	Supporting and facilitating public relations, tours, showcases, and simulation promotions.
CORE	Assisting with evaluation of simulation scenarios, courses, or programs (i.e., cataloguing, collating, reporting etc.)
ELECTIVE	Assisting with writing grants to secure funding for simulation research and development projects.
ELECTIVE	Assisting with field research, conducting research interviews, and supporting manuscript preparation in simulation education development.
ELECTIVE	Assisting with facilitating assessment of trainees (i.e., cataloguing, collating, reporting etc.)

References

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