**Simulation scenario validation grid**

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| PROBLEM  ANALYSIS OF THE SITUATION[[1]](#footnote-1) | Situation relevance | - Potential repetition frequency of the situation and/or important consequences  - Frequent risky situation  - Potential adaptation in daily practice |
| Identified by healthcare professionals *(for the SimuCarePro project)* | - Originating in local analysis of accidents or local incidents (example: MMR)[[2]](#footnote-2)  - Originating in a service problem  - Originating in a public health stake defined by institutions  - As responding to a demand for training curriculum |
| Identified by students *(for the SimuCarePro project)* | - Experienced during internship  - Personal reflexion,   dissertation/thesis topic |
| Internal consistency | - Consistent situation related to the problem |
| SIMULATION PROGRAMME DESIGN | Clear identification of the topic and of the simulation programme purpose | - General objectives[[3]](#endnote-1)  - Topics addressed  - Specific objectives |
| SCENARIO PEDAGOGICAL OBJECTIVES | Validity | - Optimal number: 1 to 4 objectives  - Definition of general objectives  - Definition of specific objectives  - Related to the school or hospital framework of competences |
| DOCUMENT RESEARCH METHODOLOGY[[4]](#footnote-3) | Validity | - The research needs to be conducted on an internal level  - The sources have to be cited[[5]](#footnote-4)  - Bibliographical reference ISO 690 : 2010 norm  - Detailed EBN or EBM approach (reliability) |

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| TARGETED LEARNER POPULATION[[6]](#footnote-5) | Availability | - To make sure of the time participants can make  - Hospitals-schools agreements  - Adapted to needs |
| Functions | Title of the participant related to the needs |
| Competences | - To check the scenario matches the learner’s level of competences and experience.  The scenario solution lies in the learner’s development proximal area[[7]](#footnote-6)  - To define the learners’ training level in order to adapt the scenario solution:  Study semesters/ or years of experience  in the topic area:  beginner/intermediate/advanced  - For students: link with study semesters and ECTS[[8]](#footnote-7) or teaching unit. |
| Compulsory training or volunteering | - Agreement to participation  - Individual/Group/Team |
| MODALITIES, APPROACH, TOOLS | Simulation type | - Standardised patient  - Role plays  - Patient simulators (high or low fidelity)  - Procedure simulators   (high or low fidelity)  - Hybrid simulation  - Virtual reality  - Serious games |
| Simulator type | To check the simulator capacities match the selected scenario |
| Environment/ Materials and equipment | To check the selected environment  (operating theatre, patient’s room, neutral room) and the necessary material are available in the simulation centre (will be detailed in phase O5) |

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| EVALUATION ELEMENTS | Of the scenario | - Pre-test/scenario: to test the scenario works well (foreseen proceeding, encoding, check-list for complete material)  - Post-test: Consistency between used competences and foreseen objectives  - Definition of axes of improvement  - Simulation programme review by the pedagogical and/or scientific committee and/or the peers |
| Of learners | - Pre-test/knowledge, prerequisites evaluation  - Post-test: similar to the pre-test  - Modality to evaluate theoretical and practical learning: including with Maslow’s pyramid and Kirkpatrick’s model as detailed in phase O4  - Follow-up of learning transfer in simulation on professional practice |
| DOCUMENTS AND SUPPORTS | - Laid out scenario (phase O2 -O5)  - Main data expected during debriefing  - Report given to learners 🡪 Documents with proofs or their references must be handed to learners.  - Personalised table of outcomes: phase O6 | |

1. All criteria have to be met [↑](#footnote-ref-1)
2. http://www.has-sante.fr/portail/jcms/c\_434817/fr/revue-de-mortalite-et-de-morbidite-rmm: “A review of morbidity and mortality (RMM) is a collective, retrospective and systemic analysis of cases characterised by the occurrence of death, a complication, or an event that could have caused injury to the patient, and which aims to implement and monitor actions to improve patient care and health security.” [↑](#footnote-ref-2)
3. The general objectives “express in a general way the purpose of the simulation programme and are meant to express the pedagogical objectives.” *HAS Guide de bonne pratique en matière de simulation en santé*.

   They take into account: healthcare quality improvement and care security enhancement, discipline objectives and the professional target concerned. [↑](#endnote-ref-1)
4. Practice is guided by proofs. The scenario needs to identify references used as theoretical basis for learning objectives. [↑](#footnote-ref-3)
5. One is enough if academic or governmental society. [↑](#footnote-ref-4)
6. The term “learner” will be used in an undifferentiated way for “learner” and “student”. It must be noted that the “student” specifically concerns academic programmes. [↑](#footnote-ref-5)
7. Waxman, K (2010). The development of evidence-based clinical simulation scenarios: guidelines for nurse educators. Journal of Nursing Education, 49(1), 29-35 7p. doi : 10.3928/01484834-20090916-07 [↑](#footnote-ref-6)
8. **The training curriculum of French nurses is now part of the European university system based on the acquisition every year of a certain number of teaching units (unites d’enseignement – UE).** The student evaluation system is based on ECTS (European credit transfer system). Thanks to this system, attended studies can be recognised in an EU member state, which makes student mobility in Europe easier. The nurse state diploma is obtained with 180 European credits (ECTS) (30 credits validated per semester) corresponding to the acquisition of 10 competences required to practice the different activities of a nurse. [↑](#footnote-ref-7)