**Supplemental Digital Content 1: Definitions of Key Terms**

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| **Population:****Healthcare Providers:** Any professional or student in a field related to healthcare. Encompasses (but not limited to) physicians, nurses, respiratory therapists, emergency medical technicians/paramedics, medical students, and nursing students. **Intervention:****In-situ simulation:** Any simulation that takes place in the actual patient care setting/environment.50**Comparison:****Nothing:** Comparison to either the same learner group’s performance prior to training, or to the performance of a historical group of learners.**Other Educational Modalities:** Comparison to learners who received another, non-simulation-based form of education (such as didactic training or video review) with similar content.**Other Simulation Modalities:** Comparison to learners receiving simulation-based training with similar content that does not occur in actual clinical space.**Outcome:****Satisfaction:** Clinician’s reported satisfaction with the in-situ simulation **Knowledge:** Subjectively (learner self-report) or objectively (i.e., via multiple choice test, etc.) assessed measures of clinician understanding.**Technical Skills**: Objectively assessed measures of technical aspects of care, such as procedural skill.**Non-technical Skills:** Objectively assessed non-procedural tasks such as communication and teamwork-oriented behaviors. **Patient Outcomes:** Objective measures of patient-level effects such as accurate diagnosis, guideline-based metrics of care (i.e., time to CPR, time to intubation) or mortality. **Cost Effectiveness**: Numeric measures of the cost of the intervention in terms of personnel, equipment, and space used as compared to potential cost improvements related to other outcomes.**Data Types:****Quantitative data**: Any outcome numerically measurable including (but not limited to) Likert Scale scores, time measures, percentage completion of checklists, latent safety threat counts and mortality rates. |