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

|  |
| --- |
| **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. |