The Resource Costs of Maintaining Learner Utilization of a Simulation Center During the COVID-19 Pandemic

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INTRODUCTION

• Despite major technological advances in the implementation of new online education practices during the COVID-19 pandemic, its practical impact on hands-on simulation remains to be defined.

• Primary aim of this study was:
  1. To compare the costs and resources required to maintain simulation training in the pandemic.
  2. To evaluate how it has affected the exposure of medical students to simulation during their surgical clerkship.

MATERIALS AND METHODS

• East Carolina University multi-departmental simulation center
  ✓ Number of learners
  ✓ Contact hours (number of learners multiplied by the number of hours each learner spends in training)
  ✓ Staff hours for set-up and breakdown
  ✓ Total costs for personal protective equipment (PPE)

• Comparison between the first quarter (July-September) of each academic year for the years 2018-2020

RESULTS

• Overall number of learners and contact hours decreased
• Overall staff hours increased
• Costs for PPE increased
• In the subgroup analysis of the 3rd-year medical students entering the surgery clerkship, there was an increase in the number of learners, as well as in the staff hours and in the space required to perform the simulation training.

CONCLUSIONS

Despite an increase in total costs and resources spent in surgical simulation training during the COVID-19 pandemic, the utilization of the simulation center by residents and medical student learners has remained unaffected. Further studies are required to identify potential solutions to lower the simulation resources without a negative impact on the quality of surgical simulation.