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# Recreating simulation scenarios for interprofessional education: an example of educational interprofessional practice

Dorothy F. Tullmann[1], Ashley M. Shilling[2], Lucy H. Goeke[1], Elisabeth B. Wright[3] and Keith E. Littlewood[2,3]

[1]School of Nursing, [2]School of Medicine, and [3]Medical Simulation Center, University of Virgnia, UVa Health System, Charlottesville, VA, USA

**Abstract**

High-fidelity simulation has proliferated in healthcare education. Once a novelty, simulation is now a mainstay of many curricula and even required by some accrediting bodies. Interprofessional behaviors, manifested through interprofessional education and practice are believed to improve patients' lives. The exciting potential of simulation-interprofessional education (SIM-IPE) is now being explored. This report details a SIM-IPE experience from a university medical simulation center and Schools of Nursing and Medicine. Circumstances required an existing scenario to be ''retrofitted'' for interprofessional education. Key decision points, challenges and practices are highlighted in the hope that they may be of use to other simulation educators.

**Keywords**

Faculty development, high-fidelity simulation, interprofessional education, teamwork

**History**

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## Introduction

The deans of the University of Virginia Schools of Nursing (SoN) and Medicine (SoM) jointly declared the highest curricular prioritization of interprofessional education (IPE). SoM and SoN faculty developed a simulation-interprofessional education (SIM-IPE) experience for 4th-year nursing students and 3rd-year medical students from an established profession-specific scenario. This brief report relates the experiences of one educational group in rapidly recreating an existing simulation experience for IPE.

## Method

SoN and SoM faculty, in consultation with the university medical simulation center (MSC) team, had created emergency department scenarios with critical interprofessional practice (IPP) actions. This standardized development included educational goals and objectives, case submission, prototype development, evaluation tool creation and piloting. Unfortunately, shortly before deployment, the original project's SoM faculty became unavailable.

This created a crisis for the IPE project that led to the events described in this report and summarized in Figure 1.

There was not enough time to create and pilot new scenarios. Three options were considered: (1) cancellation, (2) utilize other SoM department(s) or (3) restructure an existing experience by retrofitting IPE goals and objectives. Coordinating schedules of students, faculty and the MSC had required great effort and political capital; cancellation would waste both, and jeopardize the fledgling SIM-IPE initiative. MSC policy allows faculty to teach only what they clinically practice. Finally, restructuring existing scenarios was uncharted territory that raised the concern of substandard production.

Correspondence: Keith Littlewood, MD, University of Virgnia, School of Medicine, PO Box 800862, UVa Health System, Charlottesville, VA 22908, USA. E-mail: kel2n@virginia.edu

Despite reservations, scenarios that were already in use were evaluated as possible candidates to incorporate IPE. Scenarios were reviewed for possible IPP-dependent interactions and behaviors as defined by accepted competencies (''University of Virginia'', 2012). Specific criteria were: (1) potential for meaningful impact on learners' IPP, (2) history of robust scenario performance over at least 1 year, (3) taught by established faculty, (4) anticipated appeal to both SoM and SoN students, (5) educational content relevant to both SoN and SoM curricula and (6) important public health implications.

A sepsis scenario was selected on the basis of the above criteria. The scenario was based on a patient on the hospital post-op ward found to have developed mental status changes followed by cardiovascular deterioration. History, vital signs and labs point towards evolving sepsis. After diagnosis, treatment implementation, and arrangement for an ICU transfer by the interprofessional student team, the session is debriefed with all learners. A second team, who had been remote observers of the first group, then attends to the same patient in the ICU setting. Continued diagnostics, resuscitation, invasive monitoring, implementation of vasopressors and reasoned consideration of ventilatory support are among critical learner actions. Specific IPE opportunities that were identified included (1) early reevaluation of patient at shift handoff, including the Confusion Assessment Method (CAM), (2) communication using the Situation, Background, Assessment and Recommendation (SBAR) tool, (3) early team implementation of Surviving Sepsis Resuscitation Bundle(s) (''Surviving Sepsis'', 2012), (4) feedback to the treating team from the observing team with an IPE checklist and (5) team management of sepsis using clinical bundles.

## Discussion

Restructuring an existing SIM experience with retrofitting of IPE goals and objectives is a strategy not to be taken lightly and yields a number of potential liabilities. Amongst these are compromise in process and quality from retrofitting, and tensions amongst

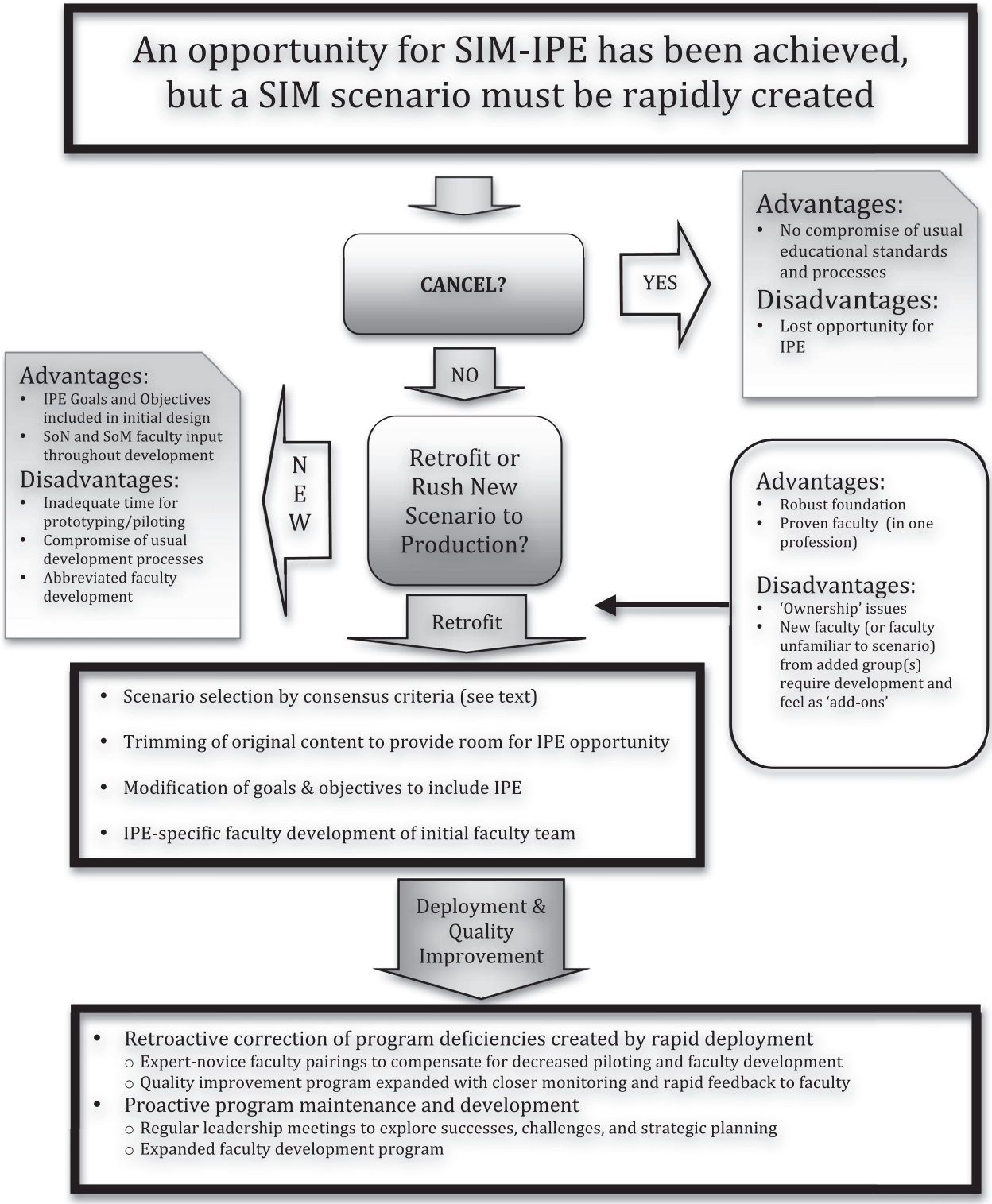


Figure 1. An algorithm to approach the challenges of time-urgent implementation of SIM-IPE scenarios. The central arrows depict the pathway described in the text. Lateral arrows represent options that were considered and rejected. Particularly important considerations are noted at each decision point.

faculty due to the change of an established profession-specific experience to IPE. Such liabilities must be addressed to ensure sustainability.

Nonetheless, the alignment of schedules for IPE faculty, learners and a busy simulation center represent an invaluable opportunity. The SIM-IPE experience described has, in general, been a great success. Feedback from students of both schools has been uniformly positive with the most common suggestion being more SIM-IPE experiences. The scenario has subsequently served as the basis for external funding[1] of IPE initiatives.

The SIM-IPE team believes that this success is related to what they have come to term ''Educational IPP'' (EIPP), with IPP

[1]Pfizer Pharmaceutical Grant for continuing IPE and Josiah Macy Foundation Grant for SoN and SoM IPE.

competency parallels. A few important challenges may illustrate this point. The cultures of SIM education were different in the two schools' centers, and this led to an ''uneasy guest'' feeling for some SoN faculty. MSC policy limited group size and created scheduling challenges for the SoN. SoM faculty were concerned about loss of medical content in the retrofitting. Despite these and other issues, success was achieved because faculty effectively practiced communication, professionalism, shared problem solving and decision-making and conflict resolution. This teamwork has maintained a robust and high quality experience. SIM-IPE program development now begins with frank discussion of the importance of EIPP for SIM-IPE sustainability.

SIM-IPE is in its formative stages and remains unproven (Masiello, 2012). Encouraging validation is emerging that SIM-IPE can affect the attitudes (Sigalet, Donnon, & Grant, 2012) and performance (Pemberton, Rambaran, & Cameron, 2013) of healthcare professional teams. The 2012 Simulation IPE symposium jointly sponsored by the National League for Nursing and the Society for Simulation in Healthcare reflects the efforts and enthusiasm for IPE amongst simulation educators.

Given this environment, more MSC's will likely be called upon to provide SIM-IPE. This report describes the challenges, processes and success of retrofitting an existing simulation experience. This may be an efficient and effective strategy for other simulation educators, particularly when rapid deployment is required to utilize a fleeting IPE opportunity.

## Declaration of interest

The authors alone are responsible for the content and writing of the article.

## References

Masiello, I. (2012). Why simulation-based team training has not been used effectively and what can be done about it. *Advances in Health Sciences Education*, *17*, 279–288.

Pemberton, J., Rambaran, M., & Cameron, B.H. (2013). Evaluating the long-term impact of the Trauma Team Training course in Guyana: An explanatory mixed-methods approach. [Research Support, Non-U.S. Gov't]. *American Journal of Surgery*, *205*, 119–124.

Sigalet, E., Donnon, T., & Grant, V. (2012). Undergraduate students' perceptions of and attitudes toward a simulation-based interprofessional curriculum: the KidSIM ATTITUDES questionnaire. *Simulation in Healthcare: The Journal of The Society for Medical Simulation*, *7*, 353–358.

Surviving Sepsis Campaign. *Surviving sepsis resucitation bundles.* Retrieved May 22, 2012 from http://www.survivingsepsis.org/Bundles/Pages/SepsisResuscitationBundle.aspx

University of Virginia. *Interprofessional core competencies*. Retrieved May 22, 2012 from http://ipe.virginia.edu/what-is-ipe