

# Simulation-Based Continuing Medical Education: Reducing Barriers for Providers and Supporters



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## Challenge

Simulation has gained traction as an innovative tool for continuing medical education programs across the healthcare sector. It utilizes adult-based learning theories to engage the provider through repetition within practice-based scenarios. Participants make decisions as they would in real life, experience the consequences of those decisions, and receive adaptive feedback to accelerate learning and increase confidence. Opportunities remain to increase the use of this modality in both the program delivery and utilization by providers.

M-Consulting conducted a survey among CME providers and supporters in 2017 to better understand the perspectives and opportunities for simulation-based education.

## Results

### Frequency Threshold

Close to 50% of CME providers deployed between 1-5 simulation CME activities in the past two years. The participation rate decreases significantly to 17% for those taking 6-10 simulation CME activities in the past two years. This may indicate a threshold for how many simulation-based CME activities providers can accept in a period of time. Further exploration on minimum thresholds is needed to better understand periodicity, length, and content associated with simulation-based CME's.

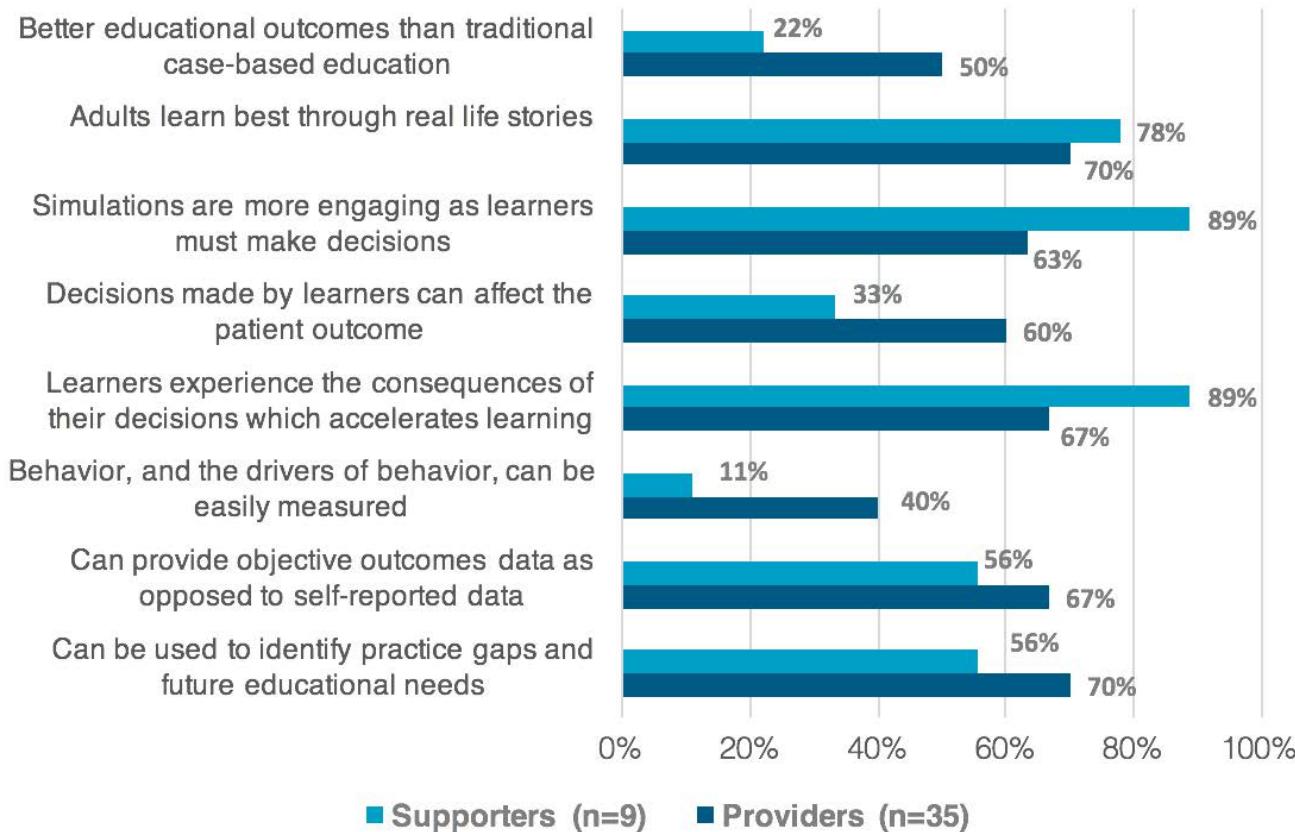
### Perceived Value

Both CME providers and supporters view simulation as an effective learning tool that is superior to linear education approaches. This trend has not changed from a similar assessment conducted in 2015. In addition, there is no change in either group's perception on the superiority of simulation-based.

### Value Drivers

Respondents were asked to rate why they believe simulation-based CME are valued. CME supporters rated engagement in learning, feedback loops for corrective action, and real scenarios as the top three assets of simulation-based learning. In contrast, CME providers were more evenly distributed across response options with the top assets as: real scenarios, ability to identify practice gaps, and objective outcome data. (Figure 1)

**Figure 1: Value drivers of simulation-based CME**



## Barriers and Challenges

Perceptions around limitations of using simulation in an education activity vary widely across providers and supporters. CME providers view simulation activities as costly (52%) and too much work on them (62%); whereas supporters perceive providers as lacking capabilities to build effective simulation activities (67%) followed by cost (67%).

**Table 1: Comparisons of barriers towards Simulation-based CME among providers and supporters**

		Barrier 1	Barrier 2	Barrier 3
Providers	Previous assessment	Cost of developing and sustaining the programs	Lack of financial support	Lack of skills in simulation development
	Current	More work for the providers	Cost of developing and sustaining the programs stories	Supporters don't appreciate the value of simulations
Supporters	Previous assessment	Cost of developing and sustaining the programs	Lack of skill in simulation development	Lack of evidence for effectiveness of simulation in CME
	Current	Cost of developing and sustaining the programs	Providers lack the capability to build effective simulations	Data too hard to understand/interpret

There has been no significant increase in perception of difficulty in developing simulation-based CME's. Slight increase may be due to assessment of a different group of providers and supporters.

## Conclusions and Recommendations

Despite the overwhelming evidence in the literature of the value and impact of simulation-based learning, this educational design is underutilized in the CME industry. There is a significant opportunity to advance learning design from didactic formats to more engaging formats like simulation for both online and live delivery, especially given the ability for simulation-based educational programs to not only capture the decision/behavior of participants but also uncover the rationale for their decision and the confidence in their decision.

Simulation can be highly effective when applied in the correct situations based on the, a) goal of the program, b) need and gap being addressed, c) platform functionality and d) capability of the CME provider. A significant gap in CME program management is the ability to measure outcome, impact and effectiveness. Programs must show the value-add to the providers and participants. Applying proven methodology and measurement from various disciplines must be at the forefront of any CME program and must be directly linked with program objectives.

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