

High Yield Huddle: Development of a Real Time Resident Didactic Peripartum Curriculum

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Abstract

Objectives: To evaluate the educational impact of a novel series of concise lectures with structured handouts for resident learners on topics pertinent to peripartum management.

Study Design: Using peer-reviewed resources, we created a series of ten lectures with accompanying didactic sheets. They were given to resident teams rotating on labor and delivery at Texas Children's Hospital Pavilion for Women over a four-week curriculum period. Lectures were tailored to the patients discussed at the 7AM transition of care and the 11AM clinical huddle. In order to gauge learning, we administered a qualitative survey tool following each lecture based on the Kirkpatrick Model, incorporating the first three tiers of training evaluation including reaction, learning and behavior.

Results: From April-June 2022 we completed three lecture cycles and received a total of 64 surveys. Scaled survey results revealed positive resident feedback with regard to lecture quality, clarity, relevance, and emphasis of novel concepts.

Conclusions: We designed an accessible, high quality, and flexible learning tool to augment resident learning pertinent to the real time management of patients in the peripartum period. Not only can this lecture series be implemented and referenced in a dynamic clinical environment but also utilized for in-service exams and board preparation.

Objectives

Graduate medical education programs face increasing pressure to increase resident productivity and efficiency while maintaining standards of competency and incorporation of current clinical standards of care.

Prior studies have demonstrated that learner knowledge retention increases with perceived clinical relevance¹. In a fast-paced inpatient setting, it can be difficult to balance education with service outside of the weekly formal didactic time. To address this, we sought to incorporate a real time didactic curriculum based on topics relevant to current patient care. We created a series of ten interactive lectures developed from high-quality clinical guidelines on topics specific to the care of patients in the peripartum period.

To assess resident learning, we developed a qualitative survey tool based on the tiered Kirkpatrick Model of Training Evaluation. The Kirkpatrick Model provides a standardized framework for evaluating and analyzing the results of training curriculum². Immediately following each didactic, we incorporated the first three tiers of the Kirkpatrick Model in order to evaluate learning reaction, learning and behavior.

Survey Tool

Question	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree
The overall quality of this educational activity was excellent					
This topic review is relevant to patient care					
This topic review was appropriate to my level of training					
This topic review encourages me to make changes to my clinical practice					
This topic review emphasized new concepts					
This topic review refreshed previous knowledge					
This topic review was delivered clearly and concisely					

Results

<p>Topic 1: Peripartum management of diabetes and gestational diabetes</p> <p>Number of surveys collected: 5</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 80%</p> <p>The topic review encourages changes in clinical practice: 80%</p> <p>The topic review emphasized new concepts: 80%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 2: Managing DKA</p> <p>Number of surveys collected: 2</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 100%</p> <p>The topic review encourages changes in clinical practice: 100%</p> <p>The topic review emphasized new concepts: 100%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 3: HIV and Pregnancy</p> <p>Number of surveys collected: 2</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 100%</p> <p>The topic review encourages changes in clinical practice: 100%</p> <p>The topic review emphasized new concepts: 100%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 4: HSV</p> <p>Number of surveys collected: 5</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 80%</p> <p>The topic is relevant to patient care: 80%</p> <p>The topic was appropriate to level of training: 80%</p> <p>The topic review encourages changes in clinical practice: 40%</p> <p>The topic review emphasized new concepts: 80%</p> <p>The topic review refreshed previous knowledge: 60%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 5: Thrombophilias</p> <p>Number of surveys collected: 7</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 86%</p> <p>The topic is relevant to patient care: 86%</p> <p>The topic was appropriate to level of training: 86%</p> <p>The topic review encourages changes in clinical practice: 57%</p> <p>The topic review emphasized new concepts: 57%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 86%</p>
<p>Topic 6: Chorioamnionitis and endometritis</p> <p>Number of surveys collected: 10</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 90%</p> <p>The topic review encourages changes in clinical practice: 90%</p> <p>The topic review emphasized new concepts: 90%</p> <p>The topic review refreshed previous knowledge: 90%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 7: Clinical pelvimetry</p> <p>Number of surveys collected: 18</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 94%</p> <p>The topic is relevant to patient care: 83%</p> <p>The topic was appropriate to level of training: 78%</p> <p>The topic review encourages changes in clinical practice: 78%</p> <p>The topic review emphasized new concepts: 67%</p> <p>The topic review refreshed previous knowledge: 89%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 8: Physiology of FHTS</p> <p>Number of surveys collected: 3</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 100%</p> <p>The topic review encourages changes in clinical practice: 67%</p> <p>The topic review emphasized new concepts: 100%</p> <p>The topic review refreshed previous knowledge: 67%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 9: Labor curves and definitions</p> <p>Number of surveys collected: 9</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 89%</p> <p>The topic review encourages changes in clinical practice: 100%</p> <p>The topic review emphasized new concepts: 56%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 100%</p>	<p>Topic 10: ECV</p> <p>Number of surveys collected: 3</p> <p>Percentage of respondents who "strongly agreed" that:</p> <p>The overall quality of the educational activity was excellent: 100%</p> <p>The topic is relevant to patient care: 100%</p> <p>The topic was appropriate to level of training: 100%</p> <p>The topic review encourages changes in clinical practice: 100%</p> <p>The topic review emphasized new concepts: 100%</p> <p>The topic review refreshed previous knowledge: 100%</p> <p>The topic review was delivered clearly: 100%</p>

Conclusions

In a busy inpatient clinical service, it can be challenging to integrate a formal didactic curriculum. As compared to traditional learning models, the incorporation of active learning models have been shown to improve knowledge acquisition, retention.³ One study evaluated the implementation of active learning through practice-based workshops in an inpatient psychiatric clinical setting and found that this learning model improved integration of the lecture material into practice while upholding high resident satisfaction with the learning tool.⁴ Another study examined the incorporation of a case-based reproductive endocrinology learning curriculum into OB/GYN resident didactics and demonstrated improvement in resident knowledge and clinical confidence.⁵

In this light, we developed a flexible teaching tool using high-quality references that incorporates both active resident learning and case-based clinical relevancy. Utilizing the Kirkpatrick Model framework, we evaluated resident feedback for our in-service didactic curriculum. As demonstrated by our qualitative feedback, we found highly positive reactions regarding our formal lecture series.

Further research may focus on the impact of our lecture series on the highest tier of the Kirkpatrick Model by evaluating quantitative results following implementation of our formal in-service curriculum with regard to CREOG and written ABOG performance in these relevant subsections.

References

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