

# Review of: "Development of a Curriculum for Emergency Physicians to Teach Transesophageal Echocardiography for Cardiac Arrests: A Kern Six-Step Model"

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The article explores the development of a curriculum using the Kern Six-Step Model to teach emergency physicians the use of transesophageal echocardiography (TEE) in managing out-of-hospital cardiac arrests. The Kern model, which links curricular content to healthcare needs through a systematic approach, provides a structured framework for creating effective educational programs. This curriculum addresses a critical need for practical TEE training in emergency settings.

## Strengths

### Systematic Approach:

The use of the Kern Six-Step Model ensures a comprehensive and structured development process. Each step from problem identification to program evaluation is methodically addressed, which enhances the clarity and effectiveness of the curriculum design.

### Alignment with Professional Guidelines:

The curriculum is based on the American College of Emergency Physicians' recommendations, ensuring relevance and adherence to professional standards. This alignment bolsters the credibility and applicability of the training program.

### Innovative Educational Strategies:

The combination of asynchronous pre-didactic learning and synchronous didactic and simulation-based training is a notable strength. This blended learning approach caters to different learning styles and promotes flexibility and depth in knowledge acquisition.

### Focused Training for Practical Application:

Emphasizing the practical use of focused TEE with a limited number of views is pragmatic. This targeted approach ensures that emergency physicians can quickly and effectively utilize TEE in critical scenarios without being overwhelmed by extensive and complex imaging techniques.

### Comprehensive Needs Assessment:

The dual needs assessment—general and targeted—ensures that the curriculum addresses both broad and specific educational gaps. This thorough analysis supports the creation of a relevant and impactful curriculum.

### Clear Goals and Objectives:

The article clearly defines the goals and objectives of the curriculum, providing a solid foundation for both educators and learners. This clarity helps in measuring the success and effectiveness of the educational program.

Emphasis on Program Evaluation:

Including program evaluation as a key component ensures continuous improvement and adaptation of the curriculum. This focus on feedback and assessment is crucial for maintaining high educational standards and effectiveness.

Opportunities for Improvement

Implementation Details:

While the article outlines the steps of the Kern model, more detailed implementation strategies would enhance its practical utility. Providing specific examples, timelines, and resources needed for each step would be beneficial for educators looking to adopt this curriculum.

Scalability and Adaptability:

Although the article suggests a “train-the-trainer” model for dissemination, further discussion on scalability and adaptability to different healthcare settings would strengthen the curriculum's applicability. Addressing potential barriers and solutions for diverse emergency departments could make the curriculum more universally accessible.

Integration with Existing Training Programs:

Additional insights into how this TEE curriculum can be integrated with existing emergency medicine training programs would be valuable. Highlighting potential synergies or conflicts with current educational frameworks could guide smoother implementation.

Evaluation Metrics:

More detailed information on the specific metrics and methods for program evaluation would be helpful. Defining quantitative and qualitative measures of success, such as competency assessments, learner feedback, and patient outcomes, would provide a clearer picture of the curriculum's impact.

Long-Term Follow-Up:

Including plans for long-term follow-up and support for trained physicians would ensure sustained competency and integration of TEE skills into routine practice. Continuous professional development opportunities and refresher courses could be considered.

Conclusion

The article presents a well-structured and thoughtfully designed curriculum using the Kern Six-Step Model to teach emergency physicians the use of transesophageal echocardiography for cardiac arrests. Its strengths lie in the systematic approach, alignment with professional guidelines, innovative educational strategies, and focus on practical application. However, providing more detailed implementation strategies, addressing scalability, integrating with existing programs, defining clear evaluation metrics, and planning for long-term follow-up could enhance the curriculum's effectiveness and

adoption. Overall, this curriculum has the potential to significantly improve the management of cardiac arrests by emergency physicians through effective TEE training.