

Chapter 10

# Innovation in Patient Care and Medical Resident Education: Using Blended Instruction to Transform Nighttime Patient Care from a Service Model into an Educational Model

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## **EXECUTIVE SUMMARY**

*Medical resident education changed dramatically on July 1, 2011 with the institution of new duty-hour work restrictions. The move to shift scheduling changed the notion of nighttime work from a time of service to one of education. The National Pediatric Nighttime Education Steering Group responded to this paradigm shift by creating a national, peer-reviewed, Web- and case-based curriculum for nighttime learning in pediatrics. Field-test results from implementation in 89 programs revealed statistically significant improvements in knowledge and confidence, but a need for improvement in usability interface, instructional design, and dissemination. Finding support to improve upon the design of the curriculum and provide a robust platform for dissemination and use by residency programs presents a significant challenge, especially in light of severe threats to graduate medical education funding at the national level.*

## **ORGANIZATION BACKGROUND**

The landscape of medical education is a wide and varied entity. Governing bodies exist at the undergraduate medical level (medical students) and graduate medical level (residents and fellows), as well as with licensure accreditation organizations for practicing physicians. Working in collaboration with these entities, both in training and in practice, are the organizations that represent the field of pediatrics (e.g., American Academy of Pediatrics [AAP]), as well as the pediatric subspecialty representative and academic organizations (e.g., Joint Council of Pediatric Hospital Medicine, formerly known as Pediatric Hospital Medicine; the Society of Hospital Medicine [SHP]; and the Academic Pediatric Association [APA]). Each of these organizations is a stakeholder in the training of medical students, residents, and fellows in pediatrics, but the organizations have varying levels of authority, funding, and resources. When they work together, however, they can often respond to national needs and impact national standards for training physicians.

Though all such organizations have paid employees to run the daily business efforts and elected officials from their memberships to administratively lead the groups, the foot soldiers for many innovations or developments are the members of the organizations. These members are often not compensated for their efforts, but instead dedicate their time out of commitment to the field and to the topics of interest. Pediatrics is a field that serves a vulnerable population, and many pediatricians select their specialties based not on salary or ability to accumulate wealth or prestige, but more often on the significant impact they can have on the lives of children. This culture of pediatrics also carries over to medical education. Most

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