

Skills labs in a growth spurt

By Terry Stanton

As facilities abound nationwide, leaders look to set standards for quality and consistency

The medical training facilities known as skills laboratories have proliferated in recent years, offering orthopaedic surgeons and other physicians welcome access to high-quality educational opportunities in conveniently located, up-to-date facilities. But most who venture to these facilities for training sessions that routinely involve the use of cadaver specimens, animal parts, and fluoroscopy are probably unaware that the labs fall under no single set of standards, safety regulations, or certification process.



At the Orthopaedic Learning Center, physicians can sharpen their surgical skills, learn new approaches and techniques, and work with equipment from various manufacturers. Courtesy of the Orthopaedic Learning Center

To address that issue, many of those who operate skills labs are taking steps to create a process and structure for establishing universal standards for how they are run. Among those seeking to impart some structure and consistency to the field is Pat Cichlar, RN, executive director of the Orthopaedic Learning Center (OLC) in Rosemont, Ill.

The OLC, which was established by the AAOS and the Arthroscopy Association of North America (AANA) in 1994, was among the first skills labs to be established and today is still one of the largest. Its status as a model for how hands-on training facilities should be run means that Ms. Cichlar fields plenty of inquiries from other lab directors.

“We get numerous calls wanting to know about our policies, how we do things, how we clean things, what the process is for handling instruments or a body part. There’s no place where you learn that. There’s no one law, one standard, for running a lab,” she says. “There are a lot of details that some people might never think about because they’ve never been in the business. They’ve just opened up the lab, and they’re trying to run it for the doctor.”

Meeting of the minds

Lab directors and others will tackle these issues when they gather in May for the first-of-a-kind Management Symposium for Bioskills Facilities Professionals. Les Jebson, executive director of the University of Florida

Orthopaedics and Sports Medicine Institute, which is sponsoring the symposium, says he and his lab staff field the same questions as Ms. Cichlar, especially in regard to using cadaver and animal tissue. He agrees that surgical training facilities need clearer standards, both for safety requirements and for the quality of the educational experience.

"If we're going to bring C-arms or X-ray equipment and fluoroscopy into these labs, what are the safety mechanisms for the emissions generated? These labs are popping up all over, and there is little consistent regulation," he says. Absent statewide or national rules, skills laboratories look to a hodgepodge of guidelines—from the Occupational Safety and Health Administration (OSHA), the Association of Operating Room Nurses, state anatomy boards, and other agencies.

Mr. Jebson says uniformity is also needed for the quality of teaching and training.

"How do we measure the efficacy of the structural experience? Is there some kind of certification or competency checkout?" he asks. "Very defined curriculums need to be established. It should be a structured, certified environment."

He says that the general surgery field has been the most impressive in certifying surgery labs and establishing quality standards. "I'd like to see the same thing happen in orthopaedics," he says.

The trend in training

Although the challenge to establish a set of standards has gained urgency as new labs continue to open, the mushrooming of facilities is a positive trend, and one that is likely to continue, says Mr. Jebson, who estimates that there are approximately 150 skills labs for physicians in North America.

"These are the wave of the future," he says. "Clinician training is going to be driven by these facilities, where new techniques and new devices are going to be honed and perfected. This will produce better-quality surgeons who master complex orthopaedic procedures by actually performing them."

Ms. Cichlar agrees that the proliferation of facilities is good for the profession, even if the new labs have affected the number of courses being conducted at the OLC. She notes that local facilities offer many surgeons access to training without having to travel.

"Time is valuable for surgeons," says Mr. Jebson. "They want to learn in a high-quality facility near their practices."

For its part, the OLC, which operates independently under a board of directors with equal representation from the AAOS and AANA, has branched out to other disciplines, offering courses in oral and maxillofacial surgery, gynecology, and neurology. The OLC also touts its proximity to Chicago's O'Hare Airport. Furthermore, in contrast to skills labs operated by industry companies, the OLC is a neutral site.

"Surgeons come here to learn from experienced faculty and to access a wide range of devices," Ms. Cichlar says. "We try to be fair and balanced by having all the orthopaedic manufacturers here. We'll have company x, y, and z, and surgeons can see what is available to work with in the marketplace."

In addition to industry, owners and operators of laboratories include universities, hospitals, and orthopaedic surgeons themselves. Some labs are for-profit enterprises, although Mr. Jebson says he questions their prospects.

"I'm not sure they are going to be sustainable," he says. "There are huge fixed costs." Instead, he believes philanthropy will play an increasing role in sustaining skills labs. "Big hospitals are going to support these labs as part of their investment in their medical staffs."



The skills laboratory at the University of Florida Orthopaedics and Sports Medicine Institute, which is staging a meeting of bioskills facilities professionals May 27–28, 2010. Courtesy of University of Florida

The role of video

Of growing importance is the skills lab's role as originator of video transmitted to other sites. Facilities now are equipped "so a physician can demonstrate a procedure in the operating room, and it can be shown in the skills lab where surgeons are working on cadaver specimens, while another group of surgeons or residents are observing in another geographic location," Mr. Jebson says.

Accommodating for broadcast capability is an important part of designing a lab. Many institutions installing labs in existing buildings have found their infrastructure lacking in terms of network capability, bandwidth, and the requirements of high-definition broadcasting. The facilities may look like healthcare spaces, but to provide the optimal educational experience to those viewing off-site, they must function well as TV studios.

The AAOS and the American Association of Hip and Knee Surgeons will be taking advantage of the OLC's video capability later this month. The third annual "Challenges and Controversies in Total Joint Arthroplasty" continuing medical education course will take place concurrently in Rosemont, Ill., Baltimore, and San Francisco, April 30–May 1.

The course will include not only panel discussions, case presentations, question-and-answer sessions, and faculty surgical demonstrations, it will also have on-site surgical skills training. Surgical demonstrations performed at the OLC will be transmitted in real time to East and West Coast course participants via satellite.

For more information about the Orthopaedic Learning Center, visit ortholearnctr.org

[The Biomedical Skills Laboratory Management Symposium](#) will be held May 27 and 28 in Orlando, Fla.

Terry Stanton is senior science writer for AAOS Now. He can be reached at tstanton@aaos.org

AAOS Now

April 2010 Issue

<http://www.aaos.org/news/aaosnow/apr10/clinical9.asp>

6300 North River Road Rosemont, Illinois 60018-4262 Phone 847.823.7186 Fax 847.823.8125

© 1995-2012 by the American Academy of Orthopaedic Surgeons. "All Rights Reserved." This website and its contents may not be reproduced in whole or in part without written permission. "American Academy of Orthopaedic Surgeons" and its associated seal and "American Association of Orthopaedic Surgeons" and its logo are all registered U.S. trademarks and may not be used without written permission.