Pilot safety protocol could help dentists reduce errors

Pilots and dentists have more in common than one might think: Both jobs are highly technical and require teamwork. Both are subject to human error where small, individual mistakes may lead to catastrophe if not addressed early.

A dental professor at the University of Michigan (UM) and two pilot-dentists believe that implementing a checklist of safety procedures in dental offices similar to procedures used in airlines would drastically reduce human errors.

Crew Resource Management empowers team members to actively participate to enhance safety using forward-thinking strategies, said Russell Taichman, UM dentistry professor and director of the Scholars Program in Dental Leadership.

Taichman co-authored the study, “Adaptation of airline crew resource management (CRM) principles to dentistry,” which will appear in the August issue of the Journal of the American Dental Association.

Airlines implemented CRM about 30 years ago after recognizing that most accidents resulted from human error, said co-author Harold Pinsky, a full-time airline pilot and practicing general dentist who did additional training at UM dental school.

“Using checklists makes for a safer, more standardized routine of dental surgery in my practice,” said David Sarment, a third co-author on the paper. Sarment was on the UM dental faculty full time before leaving for private practice. He is also a pilot and was taught to fly by Pinsky.

CRM checklists in dentists’ offices represent a major culture shift that will be slow to catch on, but Pinsky said he thinks it’s inevitable.

“It’s about communication,” Pinsky said. “If I’m doing a restoration and my assistant sees saliva leaking, in the old days the assistant would think to themselves, ‘The dentist is king, he or she must know what’s going on.’ But if all team members have a CRM checklist, the assistant is empowered to tell the doctor if there is a problem. “Instead of dentists saying, ‘Don’t ever embarrass me in front of a patient again,’ they’ll say, ‘Thanks for telling me.’”

At each of the five stages of the dental visit, the dental team is responsible for checking safety items off a codified list before proceeding. Pinsky said that while he expects each checklist to look different for each office, the important thing is to have the standards in place.

Studies show CRM works. Six government studies of airlines using CRM suggest safety improvements as high as 46 percent. Another study involving six large corporate and military entities showed accidents decreased between 36 percent and 81 percent after implementing CRM.

In surgical settings, use of checklists has reduced complications and deaths by 36 percent.

Many other industries — hospitals, emergency rooms and nuclear plants — look to the airline industry to help craft CRM programs, but dentistry hasn’t adopted CRM, said Pinsky.

For the next step, the co-authors hope to design a small clinical trial in the dental school to test CRM, Taichman said.

For more on Taichman, visit www.dent.umich.edu/pom/faculty/links/rtbio.

For more on UM dentistry, visit www.dent.umich.edu.
AGD and AGD Foundation provide free oral health care in New Orleans

**Nation of Smiles, One Smile at a Time event provides care for 181 patients**

The Academy of General Dentistry (AGD) and the AGD Foundation recently teamed up with the Louisiana State University (LSU) School of Dentistry to hold an outreach project. The event provided underserved residents of New Orleans with free dental care from volunteer dentists, hygienists and dental assistants from around the nation.

The event, called Nation of Smiles, One Smile at a Time, was the first of its kind for both the AGD and the AGD Foundation. It brought together more than 140 volunteers from around the country and provided care for 181 patients from New Orleans. Patients received a wide range of treatments, from extractions to restorations.

Upon reviewing the procedures that were completed that day, and based on a general range of fees accepted for each procedure, it is estimated that between $70,000 and $100,000 of free oral health care was given, averaging approximately $500 per patient.

“It is difficult to put a price on giving back to a vibrant community such as New Orleans, and it was our pleasure to be there for the AGD’s first outreach program,” said AGD President Fares Elias, DDS, JD, FAGD. “Our members went above and beyond to ensure that each patient received quality care, and it was an immense honor to treat the patients at LSU’s facility.”

Patients were scheduled for treatment through multiple charitable New Orleans organizations, including the Ozanam Inn, Grace House and Dream Center and its affiliates. In addition to supplying free care, the AGD is now responding to requests from some patients who are interested in follow-up and post-operative care.

“Being able to provide the residents of New Orleans with a new outlook on their oral health is one of the most rewarding elements of this project,” said AGD Foundation Immediate Past President Mark Buczko.

“Some patients reported not visiting the dentist for more than 20 years, and spearheading a project that has opened patients’ eyes to quality, accessible care is what the AGD Foundation is all about.”

The outreach event in New Orleans was held on July 8.