They say it takes a village to raise a child. In terms of healthcare, perhaps a new saying should be coined: it takes a healthcare team to raise standards for medication safety.

Because of improved healthcare, people are living longer and taking more prescribed and over-the-counter medications than ever before. According to a recent survey published in the Journal of the American Medical Association (JAMA), among 2,590 participants aged at least 18 years, 81 percent used at least one medication in the preceding week and, among prescription drug users, 16 percent also took an herbal/supplement.¹

An important, yet rarely discussed, part of the team effort to enhance patient care is the dentist’s role in medication safety. The frequency and length of visits give dentists a unique opportunity to take an active role in improving patient safety and overall patient care by documenting medical histories, checking for drug interactions and doing due diligence to ensure any procedures or medication prescribed by the dentist are in the best interest of the patient given his or her overall health.

According to John Flucke, DDS, a Lexi-Comp user for more than 10 years, “Dentists see patients every six months with average office visits lasting approximately 35-40 minutes, compared to six or seven minutes at a physicians office. Taking a proper medical history, including asking for the full ‘grocery’ list of medications the patient is taking, is not only the right thing to do, it’s a necessity.”

A dentist, like any other prescriber, is legally liable if an adverse drug event were to occur under his or her care. They have a responsibility to their patients to ensure prescribed medications and dental procedures are calculated based on their drug regimens and medical history, and “do no harm,” as the Hippocratic Oath says. Many dentists are redefining the standard of care in dentistry by going above and beyond what their predecessors had done – and many are doing this through enhanced technology.

“People are living longer and have more complex medical histories as a result,” Flucke said. “It’s not a situation that dentists can continue to ignore. It is our responsibility to keep our patients safe.”

An Ounce of Prevent: Information Technology in Dental Practices

One study on medical errors indicated 70 percent of adverse drug events found in a review of 1,133 medical records were preventable, 6 percent were potentially preventable, and 24 percent were not preventable.²

As the nation searches for ways to prevent medication errors, many dentists are assuming their roles in the fight by integrating electronic drug information tools into their daily workflow. Because of the increasing longevity of people and the consequent complexity of dental care, many dentists are turning to drug information databases, such as Lexi-Comp® ONLINE™ for Dentistry, to proactively search for possible drug interactions and warnings to help make educated point-of-care decisions and improve patient safety.

“With so many different drugs on the market, and more entering the scene every day, it’s impossible for any one person to be up on all possible side effects and interactions that occur,” said Scott Benjamin, DDS. “Having a resource that warns you of any possible complications due to medications is paramount and may cause you to change the treatment method. For example, a patient who is taking a blood thinner will be more prone to bleeding, so invasive procedures, such as tooth extractions, will need to be done with special care – or the prescribed treatment may need to be changed altogether.”

Traditionally, dental offices relied on printed drug references that can quickly become outdated or were inconvenient to reference at the point-of-care. Lexi-Comp® ONLINE™ for Dentistry is the only Internet-based program that offers dental-specific pharmacology information in an easy-to-use and easy-to-access format. With a subscription, Lexi-Comp can be accessed from any computer with an Internet connection.
“For such a relatively small investment, Lexi-Comp® ONLINE™ gives you peace of mind that you are making the right medication decisions for your patients,” said Michael Dorociak, DDS. “I use it every day and appreciate its accessibility, ease of use and the nearly error-proof way drugs are entered. It’s become an important part of my daily workflow, as well as my staff.”

**How Lexi-Comp® ONLINE™ Works**

When a user enters a drug name, a drop down list appears that helps avoid confusion related misspellings and “sound-alike” drugs. This functionality, according Benjamin, helps office personnel avoid entering the wrong drug due to misspellings.

Screening a patient’s medication regimen is quick and easy with Lexi-Comp’s “Dental Alerts”. Users are provided with instant warnings of medication and natural products that could affect dental treatment and include information such as:

- Use of drugs (what they are used to treat)
- The drug’s effect on dental treatment
- Local anesthetic precautions
- Dental comments related to a specific drug
- Effects on bleeding

Checking for drug interactions is also simplified. In the Lexi-Interact module, the user enters the drug name and selects the appropriate drug in the drop-down list. After each drug is entered, an instantaneous analysis shows which drugs have the potential to interact, as well as the likelihood and the potential severity of the interaction.

To help dentists ensure patient safety and avoid dangerous drug interactions, it is recommended that the use of Lexi-Comp databases be integrated into the office workflow as part of a standard operating procedure that includes:

1. Inputting the patient’s list of medication (prescriptions, over-the-counter and herbal supplements) each time he or she visits the office. Because of the system’s ease-of-use, this can be done by the receptionist or office personnel at admitting.
2. Having the full list reviewed by the dentist at the point-of-care. This includes checking for potential interactions and checking the “Dental Alerts” field for any issues that may affect treatment. For example, there are more than 400 drugs on the market that can cause dry mouth, which can be a potential issue during some dental procedures.

Dr. Benjamin, Dr. Dorociak and Dr. Flucke have made referencing Lexi-Comp® ONLINE™ standard operating procedure in their practices, and have been loyal Lexi-Comp clients for more than 10 years.

“While I am consulting with a patient I always have Lexi-Comp® ONLINE™ open on my computer right beside me,” Dr. Benjamin said. “I once had a patient who was on 29 different medications. Without Lexi-Comp, I wouldn’t have been able to accurately identify medication-related issues that could have come up and I would have been liable if something had gone wrong.”

Dr. Flucke’s dental assistant references Lexi-Comp® ONLINE™ for Dentistry every time a patient walks through the door. “With six months or more between visits, a lot can change. I had a patient come in recently and when I asked if his health has changed, the patient answered, ‘I had a little heart attack last week, but that’s about it.’ It’s amazing what patients will think is unimportant, so I ask every time I see a patient. Lexi-Comp gives me confidence that I am doing everything I can to protect the safety of my patients.”

Also unique to Lexi-Comp® ONLINE™ is its inclusion of foods and herbal supplements. Benjamin noted that many don’t realize that every drug counts.

“Sometimes you get a full list of prescribed medications, but there are the drugs patients don’t tell you about because they may not think they are relevant. There are many cases where drug interactions can occur due to over-the-counter medications and herbal remedies,” Dr. Benjamin said. “We use Lexi-Comp® ONLINE™ to check for drug interactions every time a patient visits our office. I like that Lexi-Comp includes all drugs in their databases. It really helps us take out the guesswork because you know you are getting the most complete and up-to-date information.”

**Integration on the Horizon**

Dental Practice Management Systems have come a long way over the years. Many dental practices have become virtually “paperless” because patient information, including insurance policies, billing records, medical histories, and x-rays can all be
stored electronically. Because Practice Management Systems are now functional in so many ways, many dentists are asking, “why can’t I access drug information and interactions with my system?”

“Lexi-Comp has dramatically improved my workflow, but I still have to cut and paste drug information from my practice information system in to Lexi-Comp® ONLINE™,” Dr. Flucke said. “I do it because I honestly feel it’s the right thing to do for my patients, but I would love to see it integrated into my Practice Management System.”

Practice Management Systems for pharmacists, physicians and entire health systems have already successfully integrated with Lexi-Comp’s databases. This means that when a drug name is entered into a patient record it is automatically linked to that monograph in Lexi-Comp’s system, providing one-click access to point-of-care information from the patient’s record. These are the types of strategic partnerships that Lexi-Comp enters into to improve patient care, while streamlining the workflow of clinicians.

Currently, Lexi-Comp is working toward partnering with Dental Practice Management System providers to seamlessly integrate drug information into existing programs. The company hopes to have this functionality available to dental professionals in the near future. Dentists are encouraged to request this functionality from their Practice Management System providers.

“Lexi-Comp is out there making this happen,” Dr. Benjamin said. “I appreciate the company’s initiatives to help us create a higher standard of care in dentistry, and healthcare as a whole. We have a responsibility to use all the tools necessary to give our patients the best possible care; having Lexi-Comp makes it easier.”

**A Team Approach**

From the family practitioner to the cardiologist, or the oncologist to the dentist, any one person can receive treatment from a number of physicians at a given time. Additionally, that same person is likely seeing a number of pharmacists on his or her way home from each doctor’s offices.

Dentists have a unique opportunity to be the hub of all of the medications prescribed by every practitioner. After all, if a medication prescribed by the dentist interacts with other medications, the dentist will be liable.

“Being as thorough as possible is a must in today’s dynamic healthcare industry,” Dr. Benjamin said. “We all need to do our part to ensure patient safety. Lexi-Comp helps me feel confident that I’m doing all I can to protect my patients.”

**Cited Sources:**


**About John C. Flucke, DDS**

Dr. John Flucke was born and raised in Kansas City. He received his DDS degree from the University of Missouri - Kansas City in 1987. He has practiced in Lee’s Summit, Missouri, since 1989 and was pleased to open his new state of the art facility in 2007. Dr. Flucke’s passion is technology and he is always looking for the latest development to benefit his patients. His knowledge on technology makes him a frequent lecturer at major dental educational events, contributing editor to dental publications, and an internationally recognized opinion leader.

**About Scott Benjamin, DDS**

Dr. Scott Benjamin practices in Sidney, New York, and is a graduate of SUNY Buffalo, School of Dental Medicine. He has been in full-time private practice for more than 25 years. He has been a leader in computerized dental practice management since its’ infancy. Dr. Benjamin has presented internationally at major dental meetings, universities, workshops, study clubs, and user meetings and has published more than 100 articles on dental technology in over a dozen publications on topics ranging from computerization, and the Internet to micro air abrasion, diagnostic modalities, and lasers. Dr. Benjamin is presently the Technology Editor of “The Journal of Practical Hygiene” (JPH), the Section Editor of Advanced Technologies for “The Journal of Practical Procedures & Aesthetic Dentistry” (PPAD), and is on the editorial board of “The Journal of the Academy of Laser Dentistry” (JALD).
About Mike Dorociak, DDS
Dr. Dorociak is general dentist practicing in Sarasota, Florida.

Access Additional References with Lexi-Comp® ONLINE™ Subscription
If you work in the dentistry field, chances are you have used one of Lexi-Comp’s printed references. The Drug Information Handbook for Dentistry is now in its 14th edition and is the best selling dental pharmacology book with over 400,000 copies sold! Additional titles published by Lexi-Comp include: Oral Soft Tissue Diseases, Oral Hard Tissue Diseases, Dental Office Medical Emergencies, Clinicians Endodontic Handbook, Manual of Dental Implants, Manual of Clinical Periodontics, Oral Surgery for General Dentists and the Illustrated Handbook of Clinical Dentistry.

What many don’t realize, is that Lexi-Comp’s printed diagnostics tools and reference are also available in an electronic, user-friendly format as part of Lexi-Comp® ONLINE™ for Dentistry – meaning all subscribers also have access to these important diagnostics tools.

“Lexi-Comp’s diagnostics modules, such as ‘Oral Soft Tissue Diseases,’ provide clear and concise information on diseases and issues that may not be seen every day,” said Michael Dorociak, DDS, a long-time Lexi-Comp user. “Often the information is accompanied by photographs and treatment options. I use this information several times a month to help confirm my diagnosis. It’s like having a second, highly credible opinion on my desktop.”

Dr. John Flucke also accesses these databases regularly. “It’s impossible to stay on top of everything. When you come across a condition you may not have seen since dental school, you must be able to identify it to properly treat the patient. It’s great to have photos and treatment information easily accessible at the point-of-care.”

For more information on all available electronic references, visit Docseducation.com/lexicomp

At-A-Glance: Lexi-Comp Tools for Dental Professionals
Lexi-Comp supports dental professionals with drug, disease, and related clinical information. Our resources are available electronically and in print, and applicable in both the dental practice and academic setting.

Lexi-Comp’s references are written by dentists for dental professionals. We set the industry standard for point-of-care content and innovative technology. Elevate the standard of patient care in your practice with our comprehensive, dental-specific information. Our drug information Dental Alerts include information on:

- Vasoconstrictor/Local Anesthetic Precautions
- Effects on Dental Treatment
- Effects on Bleeding
- Dental Comment
- Dental Usual Dosing, Use, and Dosage Forms

In addition to dental drug information, we offer resources that address the following areas and more:

- Oral Pathology
- Periodontics
- Endodontics
- Clinical Dentistry
- Emergency Protocols

Lexi-Comp’s resources are available in the following formats:

- Internet-based Platform – Lexi-Comp® ONLINE™
- PDA / Mobile Software – Lexi-Comp® ON-HAND™
- Local PC/ Internet Solution – Lexi-Comp® ON-DESKTOP™
- Printed reference handbooks, including the Drug Information Handbook for Dentistry, the premier dental reference with over 400,000 copies sold.