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oes it matter that the patient's brother also has diabetes? What do the physician's notes from the patient's last checkup say about the latest drug prescribed? Digital record-keeping is now an essential part of health care, and University of Findlay pharmacy students are in lockstep with the latest technology, thanks to Laura Perry, Pharm.D., and Suzanne Surowiec, Pharm.D., both UF professors of pharmacy practice.

Referred to in the medical world as EHR (electronic health record) systems, pharmacy majors at UF learn from a program that mimics those used by many public providers. Perry and Surowiec create pseudo patients, plug the information into the system and teach students how to identify essential facts that pharmacists need in order to dispense medication, communicate with patients, and provide advice to physicians and health practitioners on drug types, dosages, interactions and side effects.

The University incorporated this learning into its College of Pharmacy in 2009, around the time that President Obama signed into law the American Recovery and Reinvestment Act, also known as the "stimulus bill," part of which set medical record-keeping policies and outlined improvement standards.

"IN SOME CASES, A SPECIFIC LAB OR DIAGNOSTIC TEST THAT WAS PERFORMED TWO MONTHS AGO MAY BE RELEVANT, WHILE ANOTHER PERFORMED AT OR AROUND THE MOST CURRENT VISIT MAY NOT BE RELEVANT." improvement standards. The Accreditation Council for Pharmacy Education now mandates that students learn how to manage patient health care needs through medication use systems, such as technology that's incorporated into EHRs, as part of pharmacy education, Perry said.

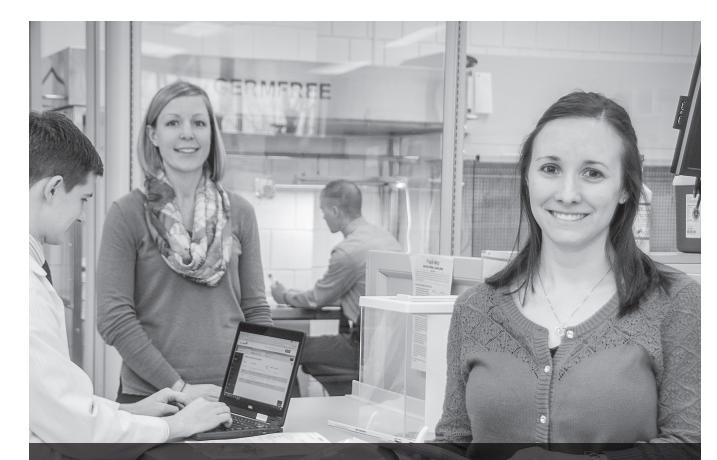
The technology UF uses "allows students to

touch and feel rather than learn it from the books," said Perry. Scrapping the traditional paper method, students are now provided with a digital patient case that includes essential and non-essential information to prioritize and assess. The pseudo cases include multiple patient encounters with health care workers, test results, lists of drugs taken and so on – a more comprehensive medical history that health care workers were ever privy to prior to electronic communication.

This records learning is part of the college's disease state module content in cardiology and endocrinology classes that teaches future pharmacists how to determine disease control measures, evaluate medication effectiveness and ensure medication safety for the various topics presented in patient cases.

"Initially it's overwhelming to them. They have to learn how to navigate the system and know what's important and what's not," Surowiec said. But the students, most coming from the tech generation, usually adjust accordingly, Perry maintained.

The assignment: examine data from the patient's most recent office visit or hospital admission. Sort through information such as lab work, diagnostic tests and doctors' progress notes,



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then report the pertinent findings that are essential to writing a proper assessment and plan for the patient's most recent visit or encounter.

"In some cases, a specific lab or diagnostic test that was performed two months ago may be relevant, while another performed at or around the most current visit may not be relevant," said Perry.

Sometimes, the system works better than intended. A few students, while scrutinizing the cases assigned to them, have identified additional information that, in the real world, would be helpful to the patient and his or her team of health care providers. For instance, one student this semester found that the patient's health insurance would not cover most of the cost of the anticoagulant being prescribed. Even though patient affordability issues weren't a part of the class's learning outcomes, the student's perceptiveness illustrates the benefits of the EHR system and the effectiveness of UF's pharmacy studies.

Becoming knowledgeable about digital record keeping better prepares students for their sixth year of rotations, Perry and Surowiec noted. It also makes them more aware of errors that are still bound to occasionally occur as people use the system.

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