Patients in a Virginia Commonwealth University project using a Web-based system that interacts with their medical records may find their doctors offering more preventive health services.

A patient enrolled in the study could sit at home and answer health questions on a password-protected Web site. The site would then check the patient's electronic records and, for example, let her and her doctor know she needs a mammogram or information on heart disease.

"It really provides a tool for not just storing and collecting information about preventive care," said Dr. Alexander Krist, an assistant professor in the VCU School of Medicine's department of family medicine, who is leading the study. "We've created a logic to tell the patient and the doctor about what things they need to be looking at or working on."

Many diseases and disorders can be prevented or lessened in severity if detected early. Preventive care can be key to staying healthy. The project focuses on 18 areas of preventive care, such as immunizations, cancer screening, medication and health behaviors.

The VCU study will involve eight doctors' offices with 5,500 patients, half of whom will be randomly selected to use the Web-based system called My Preventive Care. The three-year project begins enrolling patients this September in Northern Virginia and may expand later to other parts of Virginia.

The project is funded by a $1.2 million grant from the federal Agency for Healthcare Research and Quality.

New York City officials on Feb. 25 announced a similar project on a grander scale, involving 200 doctors with 200,000 patients. The city hopes to have 1,000 doctors with 1 million patients using the computerized system by the end of the year.

Krist said a recent study found that Americans receive only 50 percent of recommended preventive services because of numerous barriers.

"It's everything from access to care to not knowing that people need preventive services to fears about tests and fears about results," Krist said. "There's a whole host of barriers that contribute to this."

In addition to reminding patients and doctors about measures such as flu shots and Pap smears, My Preventive Care will give patients tailored health recommendations, provide links to
information resources and decision tools, and help assess certain risks, such as heart disease and breast cancer.

"Some of the hope is that this is going to bring up things that doctors aren't very good at asking," Krist said.

Steven Thompson, an assistant professor of management at the University of Richmond, studies health-care information systems. He says the VCU project will take e-health to the next level.

"This system will bring e-health to the masses and enable patients and their doctors to better manage highly treatable diseases such as hypertension and high cholesterol," Thompson said. "In addition, it will help individuals make sure they follow medical guidelines for disease prevention."

Still, he pointed out, the My Preventive Care system works only as long as patients use it.

"The challenge will be to get people using the system not for just [six] months or a year but for their entire life."

As part of the federal grant, participating patients and doctors will evaluate the system to determine whether My Preventive Care increased delivery of recommended preventive services and whether it improved patient knowledge, doctor-patient communication and shared decisions.

The participating physician offices are part of the Virginia Ambulatory Care Outcomes Research Network, which uses a common electronic medical record. The network is administered by VCU's department of family medicine.

The project does not require the doctors' offices to purchase new equipment, although there is some initial cost to link to the Web site, Krist said.