When it comes to clinical research, finding patients to participate can be sometimes be the biggest challenge. Despite advances in electronic medical records, there is no universal system that researchers can search to find the perfect matches for clinical trial participants.

Dr. Vivian Fonseca says a $93.5 million effort to set up a national system will improve the efficiency and scope of clinical trials research. He is currently recruiting volunteers to participate in a study of diabetes medications. (Photo by Paula Burch-Celentano)

That is about to change, says Dr. Vivian Fonseca, a professor of medicine who holds the Tullis–Tulane Alumni Chair in Diabetes. Tulane University is part of a collaboration to create a Louisiana health data network that is part of an ambitious new $93.5 million effort to set up a national system to improve the efficiency and scope of clinical trials research.

During the next year, the Louisiana Public Health Institute, Pennington Biomedical Research Center and Tulane are working to build the Louisiana Clinical Data Research Network, which will be part of PCORnet, the National Patient-Centered Clinical Research Network. The system will be a secure data network that improves the speed, efficiency and use of patient-centered clinical research.

It will enable investigators to review health data from electronic health records in real time to gather accurate information on treatments and prevalence of diseases such as diabetes, hypertension and cancer to more easily design and launch new studies. The system will also allow investigators to more easily recruit patients for clinical trials, Fonseca says.

“We could contact everyone in the network electronically based on specific health criteria,” says Fonseca, who is leading the Tulane portion of the project. He is currently recruiting volunteers to participate in a diabetes study that will determine which combination of two medications is best for glycemic control, has the fewest side effects and is the most beneficial for overall health.

“We have never been able to do research on this scale before.”

Lizheng Shi, Regents Associate Professor of Global Health Systems and Development, also will be heavily involved in developing the network. Tulane staff will provide the clinical expertise to help network designers create a system that protects patients’ privacy while working with different medical records systems used by healthcare providers.