Transforming Healthcare Delivery Systems

INITIATIVE

The Regenstrief Center for Healthcare Engineering (RCHE) was established in 2005 by the Regenstrief Foundation with a mission of transforming the healthcare delivery system. The center works with Purdue faculty and research partners around the country to apply ideas from academic research to challenges in healthcare. The intent is to resolve issues by providing access to new perspectives and research resources.

RCHE’s partners include more than a dozen regional and national healthcare providers and professional organizations, ranging from Ascension Health to the U.S. Department of Veteran’s Affairs. These partners provide living laboratories in which research is conducted, and their healthcare providers offer clinical feedback on projects. They also assist in the dissemination of research findings.

The center focuses its research efforts in the areas of care coordination and population health. Projects currently underway are addressing challenges in ACO development, resource utilization, preventable readmissions, IV medication safety, patient centeredness, and health disparities, among others.

RCHE projects are selected and designed to both contribute new knowledge to the field as well as result in healthcare system impact. In 2010, the center launched CatalyzeCare, an online hub for disseminating results, and connecting researchers and providers dedicated to transforming healthcare delivery.

IMPACT

More than 60 Purdue University faculty members are affiliated with the center.

Through RCHE’s Infusion Pump Informatics project, 16 hospital systems across four states are improving patient safety through data sharing and collaboration. The center’s research in this area impacts over 400,000 hospitalizations each year.

The center’s external partners include more than a dozen provider and professional organizations around the country, including St. Vincent Health, Mayo Clinic, American College of Physicians, and the U.S. Department of Veterans Affairs. These partners enable the center’s research to be translated into practice and have impact on improving care.

RCHE has contributed to the establishment of the healthcare engineering signature area in the College of Engineering, healthcare systems concentration in the School of Biomedical Engineering, and Doctorate of Nursing Practice in the School of Nursing.

RCHE is a founding member of the Healthcare Systems Engineering Alliance, a network of healthcare engineering researchers and programs across the country whose membership includes such schools as the University of Michigan, University of Arkansas, University of Missouri, University of South Florida, and Texas A&M University.