

## **Pieces™ Software Platform to Be Featured in Prestigious Multi-Institution NIH Trial to Improve Chronic Disease Management across Multiple U.S. Populations**

Dallas, October 15, 2014 /PRNewswire—PCCI and the University of Texas Southwestern Medical Center announce the award of a UH2 grant from the National Institutes of Health (NIH) to engage in a collaboration to improve chronic disease management for patients with chronic kidney disease (CKD), diabetes mellitus and hypertension. The nearly \$5.8 million grant, "[Improving Chronic Disease Management with Pieces™](#)," is coordinated by the NIH Common Fund, which supports "exceptionally high impact, trans-NIH programs."

The grant builds on a 2011 NIH grant-funded project, "[Improving CKD Detection and Care in a High Risk and Underserved Population](#)," in which Pieces™ identifies patients with CKD and assists in implementing recommended practices at Parkland Health & Hospital System in Dallas, TX. This new NIH funded collaboration will expand PCCI's work in population health across multiple chronic diseases, patient populations and health systems nationwide.

The Pieces™ platform will utilize the electronic medical record (EMR) for data collection, early disease detection and monitoring and care coordination for patients with chronic medical conditions (CMC). Pieces™ helps patients get care sooner to reduce hospitalizations, unplanned readmissions, and cardiovascular events and deaths.

"It is well known that patients with multiple chronic conditions suffer disproportionately from the compounding impact of their illnesses. Assistive predictive technologies like Pieces™ could make a decisive impact. We are thrilled to test this premise as part of this rigorous national trial led by Dr. Vazquez," states Ruben Amarasingham, MD, MBA, president and chief executive officer of PCCI and Co-PI on the study.

The study will be conducted in partnership with four healthcare systems: Parkland Health & Hospital System (Parkland) in Dallas, TX; ProHealth Physicians Group (ProHealth) in Farmington, CT; Texas Health Resources (Texas Health) in Arlington, TX and Veterans Affairs North Texas Health Care System (VA) in Dallas, TX.

"Texas Health Resources continues to benefit from our collaboration with PCCI and UT Southwestern," said Ferdinand Velasco, MD, chief health information officer for Texas Health Resources. "We believe this project, which leverages our investment in health information technology, will help us enhance care for patients with chronic diseases. The study aligns well with Texas Health's focus on physician-directed population health that helps our patients live healthy and productive lives."

CKD, diabetes mellitus and hypertension are three CMCs that increase morbidity, mortality, resource utilization and costs. Among adults in the United States, the prevalence of CKD has increased from 10% to 14% over the past two decades, and diabetes mellitus and hypertension are the two leading causes of CKD and end-stage renal disease.

Susan Hedayati, MD, MHSc, nephrologist and chief, Nephrology section at VA North Texas Health Care Center, associate director of the Nephrology Fellowship Training Program and Co-PI on the study at the VA states, "We are so excited that VA North Texas Health Care System is included as a site as the VA is the largest integrated healthcare delivery system in the U.S. that provides care to CKD patients."

Currently 8,404,602 Veterans are enrolled in the VA system nationally. The prevalences of CKD, diabetes and hypertension are 20%, 34% and 68%, respectively, which are all higher than corresponding percentages of patients enrolled in Medicare.

Dr. Hedayati adds, "Although effective treatments for these three conditions have been established, the challenge remains in widely translating such treatments to clinical practice and affecting clinical outcomes. Effective treatment of these three comorbid conditions by primary care physicians in turn may lessen the rate of progression to ESRD and use of specialized healthcare resources and lead to not only decreased morbidity and mortality, but also overall decreased health care costs."

John Lynch, vice president of research and government affairs and Co-PI on the study at ProHealth says, "In this new era of population health management, ProHealth cares for an outpatient population of approximately 350,000, including 90,000 with hypertension, 26,000 with diabetes, and 25,000 with kidney disease."

"In order for us to provide optimal patient-centered care," Mr. Lynch continues, "it is essential for us to identify disease at its earliest stages, segment our population by predictable risk, identify the optimal interventions by risk category and adjust care plans for patient specific circumstances, especially accounting for interactions for those with multiple chronic conditions, and achieve the triple aim – appropriate access, highest quality, at lowest possible cost."

Miguel Vazquez, MD, medical director of kidney transplantation and professor of internal medicine at UT Southwestern and PI on the study asserts "The NIH Health Care Systems Research Collaboratory provides a unique opportunity to study how we can provide better care to patients with multiple chronic conditions under real world circumstances."

"We are looking forward to see the findings of this pragmatic clinical trial helping not only to improve the care of patients with CKD, diabetes and hypertension but also to establish a foundation for study and implementation of best care models for patients with other chronic conditions. We are honored to have the support from NIH and to be able to partner with PCCI to have the opportunity to do this work at 4 large health care systems committed to excellence in patient care."

## **The National Institutes of Health's (NIH) Health Care Systems (HCS) Research Collaboratory and the NIH Common Fund**

This grant is funded through the National Institutes of Health's (NIH) [Health Care Systems \(HCS\) Research Collaboratory](#), which engages health care systems as research partners in conducting large-scale clinical studies.

Created by NIH in 2012, the HCS Research Collaboratory currently supports five large-scale clinical trials with partnering health care systems across the United States, and a Collaboratory Coordinating Center at Duke University, Durham, North Carolina. The funds are managed through the NIH Common Fund, which encourages collaboration and supports a series of exceptionally high-impact, trans-NIH programs.

The overall goal of the HCS Research Collaboratory is to strengthen the national capacity to implement cost-effective, large-scale research studies that engage health care delivery organizations as research partners. The aim of the program is to provide a framework of implementation methods and best practices that will enable the participation of many health care systems in clinical research, not to support a defined health care research network. Research conducted in partnership with health care systems is essential to strengthen the relevance of research results to health practice.

### **PCCI**

PCCI is a non-profit research and development company in Dallas, TX focused on real-time predictive and surveillance analytics for healthcare. PCCI's software interprets EMR data in real time and translates it into useful intervention warning tools that assist physicians and hospitals on complex clinical decisions in every field of medicine to better treat patients.

This study is supported by grant number UH2DK104655 and will be primarily overseen by the National Institute of Diabetes and Digestive and Kidney Diseases and secondarily by the National Heart, Lung, and Blood Institute.