Quality, Safety, Value: Impact of sudden shift to telehealth due to COVID-19 within Nurse-led care models located in Colorado rural and urban communities (Barton)

This research project will examine the impact of the sudden shift to telehealth due to the pandemic on vulnerable patients seeking nurse-led care within behavioral health, primary and prenatal care, and home visitation models in urban and rural communities across Colorado. Using the state's innovative collaboration network, the study will examine within- and between-group telehealth innovations and challenges by using uniform and patient-level claims data, surveys and interviews based on an observational, time series design. The research will provide evidence on the consequences of the rapid shift to using telehealth on healthcare utilization, patient outcomes (intended/unintended), and provider/patient experience.

University of Colorado-Denver ($933,299)

People Are Primary Survey: Primary Care and Telehealth (Etz):

This research project will examine findings from a weekly primary care clinician-based national survey initiated at the start of the pandemic that monitors the response, challenges, and capacity of US primary care practices, and includes a complimentary patient survey. The primary aims of this project are to assess the impact of this rapid adoption on access to primary care during the pandemic, with special attention to vulnerable practices (rural, small, independent) and patient populations (minority, low SES, living with multiple chronic conditions). As well as to describe the positive, negative, and unintended consequences of rapid adoption of digital health on patient-clinician relationships and patient and clinician experience of care delivery during the pandemic.

Virginia Commonwealth University ($996,002)

Evaluating and Enhancing Health Information Technology for COVID-19 Response Workflow in a Specialized COVID-19 in a Medically Underserved Community (Kaufman):

This research project will identify whether current health information technology (HIT) meets decision-makers' needs regarding workflow integration and data access for responding to COVID-19 challenges. This will be done by analyzing applications, roles, tasks, information needs, communication, interfaces, decisions, and the sequence of activities for the emergency management response team. The project will develop a set of HIT prototypes that will include the use of dashboards, visualizations, and data integration tools to address information needs and enhance decision-making.

SUNY – Downstate Medical Center ($910,684)

Improving Safe Antibiotic Prescribing in Telehealth: A Randomized Trial (Meeker):

This study will conduct a randomized trial to identify variations in antibiotic prescribing and patient satisfaction at qualifying visits by testing the CDC Core Elements of Outpatient Antibiotic Stewardship in a representative telehealth setting that includes and evaluate the impact of behavioral variations to

interventions. Using a mixed methods approach, the study will generate a better understanding of prescribing practices in the rapidly growing telehealth sector, including what factors are most associated with antibiotic overuse. In addition, the research project will adapt interventions tested in outpatient clinics that are consistent with CDC Core Elements to telehealth, so that the findings will facilitate judicious use of antibiotics.

University of Southern California ($482,844)

A Multi-Site Evaluation of Primary Care Accessibility and Utilization during COVID-19 (Ratwani):

This research project whether patients were able to access primary care during the pandemic, and if certain subpopulations were disproportionately affected and if any were completely barred from accessing primary care. Based on , based on rich patient encounter data and administrative data and semi-structured interviews of providers, patients, IT experts, and operation managers, the study will assess the experiences of three large integrated healthcare systems (one in the east, one in the west and one in the middle of the country) by examining primary care responses to Covid-19 pandemic and the issues around innovative use of telemedicine technologies and different modalities (in-person, telehealth [video or phone], asynchronous communication, or multiple modalities]) to care vulnerable populations.

MedStar Health Research Institute ($999,380)

Florida Telehealth Shift Impact on Health (Shenkman):

The purpose of the study is to quantify the effects of ceasing in-person outpatient visits, and the resulting increased use of telehealth modalities, among patients with differing social vulnerabilities on their disease control (e.g. HbA1c, systolic blood pressure), and health care use (inpatient admissions and emergency department visits) with a study population of 14 million Floridians. The study is based on a mixed methods design that pair clinical data with interviews and surveys of health system leaders and patients, and leverages the natural experiment that occurred with the rapid transition to telehealth, and for some health systems, the transition back to in-person visits.

University of Florida ($999,840)

Leveraging Health System Telehealth and Informatics Infrastructure to Create a Continuum of Services for COVID-19 Screening, Testing, and Treatment: A Learning Health System Approach (Simpson):

This study will examine how the urgent COVID-19 requirements modified the standard telehealth or health systems processes, and describe changes to the characteristics of programmatic interventions in screening, testing, and treatment across a number of telehealth programs in a health system with a patient population that is 33% African American and at least 32% rural residents. The project will accomplish this by measuring and comparing pandemic-based changes to patient volume, service uptake, delivery learning curves, and safety/quality indicators as they changed over time. There will be

special emphasis on differences observed for underserved and high-risk populations, and specific issues emerging in rural locations and in broadband "digital deserts."

Medical University of South Carolina ($999,845)