The Ochsner MedVantage Network Innovation Project: Bridging the Digital Divide for Vulnerable Patient Equity

Project lead

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Abstract

The MedVantage Clinics (MVC) at Ochsner Health (OH) care for patients of advanced age, those with complex medical issues, expressed low health literacy, and/or experienced financial, housing, and transportation insecurity. COVID-19 and the telehealth shift disproportionately impacted these patients. Medical students rotating in MVC began a dedicated telemedicine training program, spending 358.5 hours training 309 patients. At the end of this period, only 18.8% of these patients could virtually connect to a provider. The time burden spent on telemedicine training was an insufficient solution, with persisting socioeconomic, structural, and literacy barriers in our patients. An outcome of this outreach is the ongoing development of Ochsner MedVantage Network Innovation (OMNI) project. Medical students created the first telehealth literacy screening tool, facilitated the adaptation of user-friendly tablets with simplified interface for MyChart log-in, and received an innovation grant from OH to determine if OMNI interventions will improve health outcomes for vulnerable patients.

Project addressed/problem discovered

A consequence of many hospital and clinic services transitioning to virtual services was disparate access to technology due to finances and/or literacy. Our project identified the telehealth access inequity in geriatric and complex populations during the COVID-19 pandemic. Identifying this void in the area of "population, public and social determinants of health" was an important health systems concept, as we saw the direct impact of social determinants of health on health access. The domain of "health care structure and process" revealed to us that without a specific project or workforce dedicated to our patients during this time, there would be a high possibility for loss of patients to follow up and inadequate response to patient needs as a system.

Approach

The initial approach to telehealth training involved telephone outreach to each patient or patient support person for the 309 high-risk patients on the MVC panel who had never performed virtual visits. These phone calls not only functioned to train the patients and families in virtual visits, but also included questions to monitor chronic medical conditions, compliance and access to medications, acute changes in health status, social isolation and socioeconomic barriers to care. These calls also screened for mental health issues and assessed access to food, transportation, and safe accommodation. We also managed records of successful contact, barriers to care and contact, and the needs of patients going forward.

The domain of "change agency, management and advocacy" was central to our motivation to perform this outreach to our highest need patients. We worked closely with the MVC nurses, social workers, pharmacists, medical assistants and physicians to assess those patients for safety and connect them with care. We advocated for patient needs by triaging them to the MVC staff when we identified a need for appropriate health care and social resources.

Outcomes

As described, our project uncovered areas for "health system improvement" as we identified a care gap and disparity in access to telehealth for low health literate and socioeconomically challenged patients. We brought forward our ideas on how to bridge this gap in access with the concept of "clinical informatics and technology." This resource gap in tools to measure and predict telehealth literacy led to our development of the first telehealth literacy screening tool, which is currently under review for publication. We collaborated with Innovation Ochsner (iO) and Information Systems (IS) departments to create solutions by simplifying our MyChart log-in process and provision of tablets designed for low telehealth literate patient access. We received a small innovation grant from OH called the Excellence Fund to purchase tablets for a pilot program. There are implications that the results from these interventions may be scalable for the OH Community Health Centers.

An often-overlooked health system science concept that is subtly woven throughout our project is "patient, family and community.' This has included maintaining regular communication with socially isolated and high-risk patients, engaging in difficult conversations about end-of-life care, and managing expectations during a health crisis. Improving patient outcomes required encompassing all aspects of a patient's life to have a sustainable impact on their care. The medical students coordinated calls with patients and their caregivers, ensuring they had the information to access community resources and urgent support systems. Having medical students serve as reliable points of contact for patients and their families connected patients to the MVC despite the uncertainty of COVID-19.

Personal impact

The major takeaway of this experience is the inseparable impact of psychosocial and socioeconomic determinants in shaping patient ability to partake in health care and overall health outcomes. This principle informs coordinated social service interventions in primary care for the medically complex populations that is compounded by socioeconomic barriers to health. However, as medical students, this concept was quite abstract to us prior to our work in the MVC and creation of the OMNI project during the COVID-19 pandemic. We realized not only the disproportionate morbidity and mortality COVID-19 had on patients with financial insecurity, low health literacy, mobility issues and limited access to housing or transportation, but the inefficacy of telehealth as a 'one-size-fits-all' solution.

The significant time burden spent on telemedicine training was alone an insufficient solution to telehealth adoption, with socioeconomic, structural, cognitive and literacy barriers in our patient population adamantly persisting as barriers. The conclusion here as a developing physician is that time input alone is not a uniform solution to patients with structural barriers to health care, and that the structural predeterminants of technological access and literacy must be addressed for such solutions to be successful in medicine. These solutions are otherwise not equitable in a system that favors patients with access to such privileges as smart devices and social networks of support and disadvantages those without such resources. We are inspired in acknowledging innovation is not simply the development and implementation of technology, but redesigning traditional systems surrounding that technology toward patient-centered care.