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Title

Lessons from a Remote Patient Monitoring Program Implementation Among Community Clinics

Priority 1 (Research Category)

Healthcare informatics

Presenters

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Abstract

Context. Many patients at community-based health centers experience chronic conditions and face barriers in accessing technologies that can help with the management of these conditions. Remote patient monitoring (RPM) is an effective telehealth method for supporting chronic condition management, but little prior research has assessed how community clinics can implement RPM among their patients. Objective. Using lessons learned from evaluation of an RPM program in three community-based health centers, we describe the EHR tools and implementation strategies subsequently developed to better support future RPM programs in the same clinic network. Study Design and Analysis. Mixed methods explanatory sequential evaluation. Qualitative data included semi-structured interviews, analyzed thematically using an implementation framework. Quantitative data were extracted from the clinics' shared EHR and analyzed descriptively. Setting. Three community-based health care organizations from the multi-state OCHIN network. Population Studied. Health center staff and patients at clinics participating in the RPM program. Intervention/Instrument. RPM program tools and implementation strategies. Outcome Measures. RPM implementation and health impact. Results. The three participating health centers implemented the RPM programs in different ways, and only one distributed sufficient devices for outcome measure assessment. Though associated health outcomes were promising when RPM devices were fully utilized, the RPM program faced barriers to adoption including a lack of EHR tools to support device orders and reporting, difficulties with device integration, and a lack of training and educational materials for diverse different patient populations. Evaluation findings were leveraged to address these barriers in future RPM programs by developing and refining related EHR tools and program implementation supports. Conclusions. The experiences of three community-based health organizations indicate that while RPM technology holds promise for addressing their patients' chronic disease management needs, successful and equitable RPM implementation requires substantial investment in implementation support and the development of EHR tools to support the use of RPM. The new EHR tools and implementation support developed in the processes described here will be evaluated in a future prospective assessment.