measured confounders, B symptoms had the strongest relationship with treatment (HR=2.08) and OS (HR=1.38), which was below the E-value. DISCUSSION/SIGNIFICANCE OF FINDINGS: Patients with advanced stage HL who did not receive full chemotherapy regimens had worse 3-year OS, even after adjusting for potential confounders related to the patient and disease. The E-value analysis made explicit the amount of unmeasured confounding necessary to fully explain away the relationship between treatment and OS.

Digital Health/Social Media

Data Science/Biostatistics/Informatics

28561

Optimization of Heart Failure Treatment Using a Novel Application Programming Interface (API)

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ABSTRACT IMPACT: This project will aid in the optimization of treatment for those with heart failure with a reduced ejection fraction in order to both maximize health benefits and minimize financial burdens. OBJECTIVES/GOALS: To evaluate the accuracy and clinical applicability of a novel web-based application programming interface in the optimization of care for patients being treated for heart failure with reduced ejection fraction (HFrEF). The purpose of this validation is to ensure the translatability of this algorithm to a clinical setting using real-world data. METHODS/STUDY POPULATION: This study is a retrospective analysis of a previously created algorithm designed to optimize therapy for patients currently diagnosed with HFrEF. Patients that are seen for HFrEF treatment at Michigan Medicine are enrolled in a heart failure registry and were included in this study. Exceptions include those with heart transplants, LVAD, and those undergoing treatment with chronic inotropes (milrinone/dobutamine). Clinically relevant information (demographics, vital statistics, labs, and medications including dose and frequency) was taken from their respective electronic health record (EHR) and this data was used as the input for the algorithm. The therapy recommendations were collected and manually compared to the 2017 ACC/AHA/HFSA guidelines to verify the accuracy of the algorithm outputs. RESULTS/ANTICIPATED RESULTS: Data is currently being collected and analyzed. At first glance, our algorithm has been successful at detecting patients that are good candidates for therapy optimization. Based on inputs given, the treatment recommendations have been appropriate when compared to the most up-to-date HF treatment guidelines. The algorithm has also correctly identified levels of urgency for therapeutic recommendations. Finally, we have also shown the algorithm to have effectiveness for identifying areas of inappropriately adjusted therapy. Preliminary results have led to changes to the functionality of the algorithm, including how medications are retrieved from the EHR's and how medication doses are identified. Previous iterations created discrepancies in dosing and the algorithm has since been adjusted. DISCUSSION/SIGNIFICANCE OF FINDINGS: By verifying its validity, our algorithm can accurately flag patients with HFrEF that are eligible for therapy optimization and give providers the opportunity to make appropriate changes. Given the high health and financial burdens of HFrEF, our algorithm has the ability to provide significant morbidity, mortality, and financial benefits.

Dissemination and Implementation

95262

Making telehealth accessible for patients who are visually impaired: A scoping review

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ABSTRACT IMPACT: By outlining telehealth access disparities in the vision-impaired population, this scoping review has identified a set of effective and clinically appropriate implementation strategies and interventions for improving the technical, provider-level, and system-level accessibility of telehealth for vision-impaired patients. OBJECTIVES/GOALS: Evidence-based recommendations that ensure telehealth access for vision-impaired patients are critical to reducing health disparities. This review identifies, evaluates, and proposes strategies for public and private sector stakeholders to increase telehealth access for vision-impaired patients during the pandemic and beyond. METHODS/STUDY POPULATION: This scoping review included five steps: 1) the implementation of an iterative search strategy using relevant keywords to query 4 electronic databases (PubMed, Cochrane, Google Scholar, and Europe PMC) for relevant articles, 2) the application of a set of inclusion criteria to filter database results for article evaluation, 3) a quality assessment of the articles retained, 4) the extraction and summary of data from each assessed article, and 5) a narrative synthesis of the qualitative literature reviewed. RESULTS/ANTICIPATED RESULTS: To date, 21 articles that fit the inclusion criteria, published between 2006 and 2020, have been identified. To ensure the most robust collection of existing literature is aggregated, the iterative search strategy and inclusion criteria sorting process will be underway until December 20. The assessment of articles, and extraction and summary of data contained within said articles, will be finalized on January 20. The narrative synthesis will be complete on February 1. The poster and abstract will be complete by February 20. DISCUSSION/SIGNIFICANCE OF FINDINGS: Future research should examine outcomes associated with the implementation of accessible telehealth programs to identify remaining barriers. To improve outcomes for vision-impaired patients, policymakers, providers, payers, and industry must collaborate to promote accessibility in telehealth design and implementation.

Health Equity & Community Engagement

14820

Mental Health Mobile App Use in Integrated Primary Care Settings: Considerations for Serving Underserved Patients

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ABSTRACT IMPACT: Mobile app may help improve the depression symptoms among underserved patients OBJECTIVES/GOALS: Depression is one of most common mental health conditions and the leading cause of disability worldwide, affecting about one in 10 adults in the US. The aim of this study was to explore the factors that affect feasibility of incorporating mobile app self-management

https://doi.org/10.1017/cts.2021.532 Published online by Cambridge University Press