Leveraging telehealth partnerships, remote patient monitoring, and medication reviews to improve chronic disease outcomes in rural Iowa

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Objective

1. Use remote patient monitoring (RPM) and telehealth (TH) to improve chronic disease outcomes.
2. Reduce medication misadventures through medication safety reviews (MSR).
3. Reduce hospitalization and emergency visits

Background

Access to care in rural Iowa is a challenge for many patients. Due to access limitations, poor chronic disease outcomes occur resulting in increased hospitalizations, and emergency department visits. Telehealth using health coaches and RPM can improve outcomes in patients. Data from studies of enhanced medication therapy management using MSR show decreased medication misadventures. By joining these modalities and providing them to rural Iowa clinics, we designed an unique approach to the delivery of telehealth to rural Iowans. The purpose of the project, funded by the Health Services and Resources Administration (HRSA) is to improve safety and outcomes in individuals with chronic diseases.

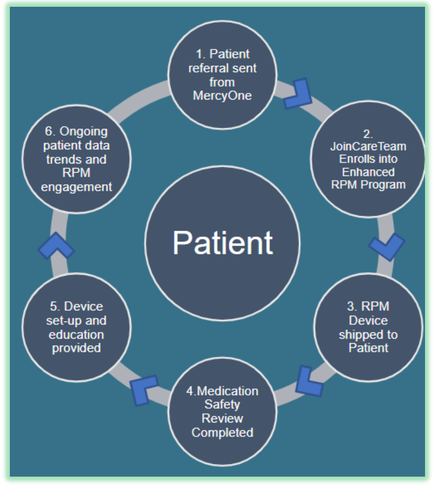
Actions Taken

1. Brought Certintell, a telehealth company in Des Moines that provides RPM, together with TabulaRasa Healthcare, a company with a proven MSR platform, for an unique TH approach.
2. Obtain funding from HRSA Office for the Advancement of Telehealth.
3. Partner with 3 MercyOne clinics in northern Iowa rural communities for patient referrals.
4. Contact referred patients for enrollment.
5. Deliver RPM equipment and instruct on its use.
6. Monitor RPM data and intervene with patient or provider as needed.
7. Perform MSR on patients meeting set criteria.
8. Communicate with provider and patient medication adjustments to reduce risk.

Metrics

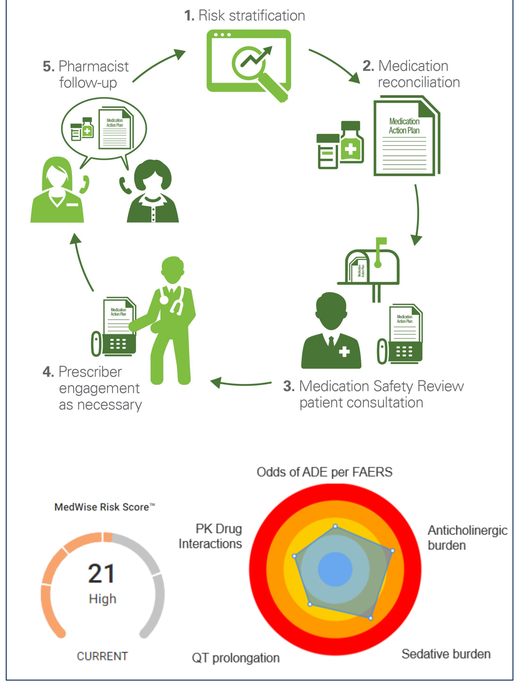
1. Improved outcome measures of chronic disease (e.g., blood pressure, glucose, weight)
2. Decreased MSR scores and number of medications.
3. Decreased hospitalizations and emergency visits.

Figure 1: Workflow Summary



Patient Story:
Male – 84 years old
Reported taking his blood pressure daily has enhanced his ability to remember to take his blood pressure medication.
He stated that he feels better and can now enjoy working outside more.

Figure 2: Medication Safety Review Process



Analysis

Figure 3: Blood Pressure Trends for One Clinic

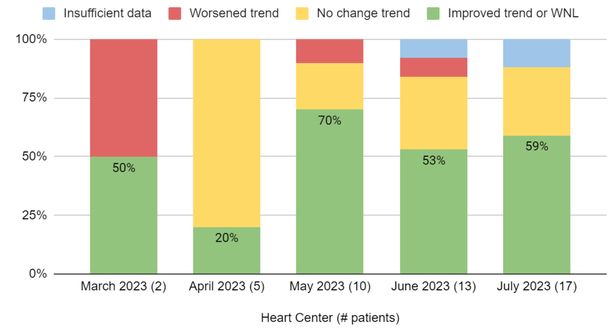
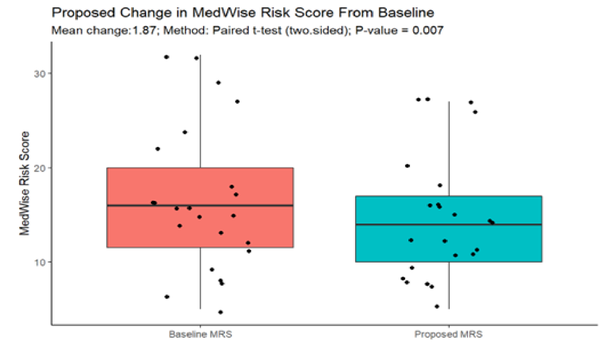


Figure 4: MSR Data from TRHC



Next Steps

1. Continue patient enrollment in project.
2. Contract with additional clinics and communities for patient referrals.
3. Develop an effective marketing strategy for the program.
4. Develop a sustainability plan for the program after the grant ends.
5. Ongoing data analysis.

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