Reduction in Emergency Room Visits, Hospital Admissions, and Clinical Outcomes After Enrollment in a Medication Access Program

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Research Objective

To determine change in emergency room visits, hospital admissions, and clinical outcomes for participants in the Cenla Medication Access Program (CMAP) in rural central Louisiana.

Study Design / Methods

- Participants are enrolled in the CMAP at LSUHSC-HCSD Huey P. Long Medical Center and begin receiving chronic care prescription medications at greatly reduced costs ($3 per prescription)
- Pre-post longitudinal cohort where outcomes for participants are assessed before and after enrollment to look for change
- Through February 2005, there have been 7615 participants enrolled, with mean age (SD) 49.72 (12.11), 70.27% female, and 44.57% African-American
- Data presented are on subsets of the total population

Outcomes:

1. Emergency Room (ER) Visits and Hospital Admissions
2. Chart Abstraction Data: Blood Pressure (Systolic and Diastolic), Blood Glucose, Hemoglobin A1c, and Total Cholesterol

Analysis:

- Generalized Estimating Equations (GEE) were used to analyze change in each of the 5 chart abstraction outcomes from 6 months prior to enrollment compared to the time period after enrollment (adjusting for age, race/gender and disease condition)

Principal Findings

Emergency Room Visits and Hospital Admissions

- Unadjusted analysis shows reductions in ER Visits and Hospital Admissions of 31.85% and 46.03%, respectively

Figure 1: Emergency Room Visits and Hospital Admissions for CMAP participants from 6 Months Pre Enrollment to 6 Months Post Enrollment (N=6939)

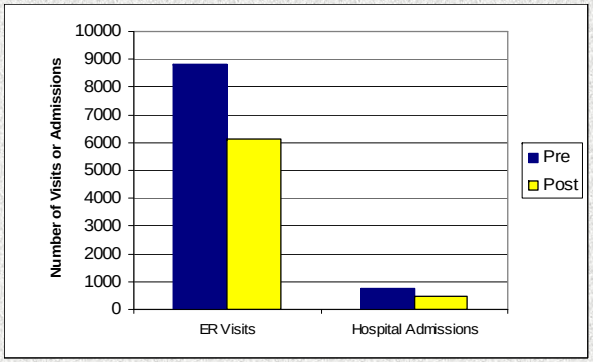

Chart Abstraction Data

- Race-gender/time interactions were significant for all 5 outcomes ($p<.05$)
- Figure 2 shows the adjusted means pre and post enrollment for each outcome by appropriate disease condition

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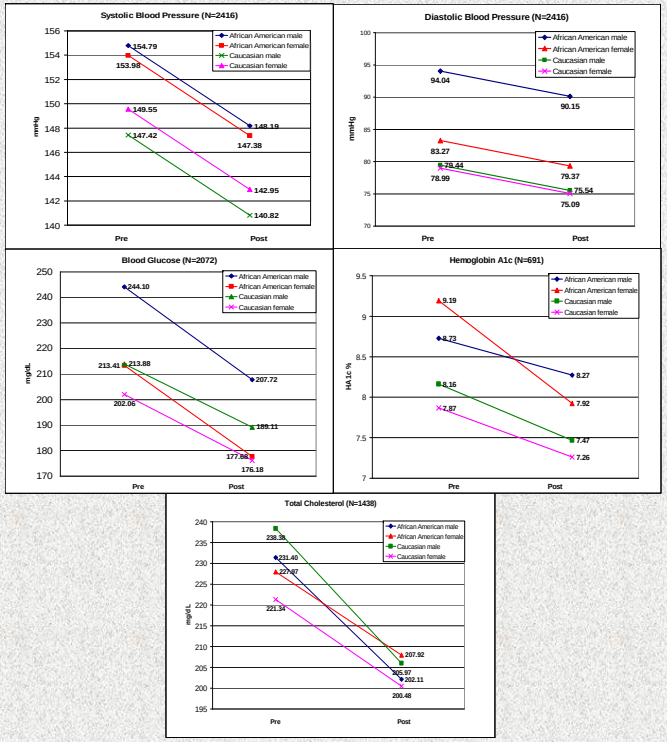
Figure 2: Adjusted change in Systolic and Diastolic Blood Pressure, Blood Glucose, Hemoglobin A1c, and Total Cholesterol for CMAP participants pre and post enrollment



Conclusions

In the CMAP there have been significant reductions in emergency room visits and hospital admissions, as well as Blood Pressure, Blood Glucose, Hemoglobin A1c, and Total Cholesterol.