**Title of Intervention:** The Asheville Project: Clinical and economic outcomes of a community-based long-term medication therapy management program for hypertension and dyslipidemia

**Intervention Strategies:** Individual Education, Supportive Relationships, Environment and Policies

**Purpose of the Intervention:** To assess clinical and economic outcomes of a community-based, long-term, pharmacist-driven medication therapy management (MTM) program for patients with hypertension (HTN) and/or dyslipidemia who were employees, spouses, or covered dependents of two large employers with self-insured health plans.

**Population:** All patients covered by two participating employers’ self-insured health plans with a diagnosis of HTN and/or dyslipidemia regardless of their baseline control.

**Setting:** Twelve community and hospital pharmacy clinics in Asheville, North Carolina, over a six year period from 2000 through 2006.

**Partners:** Educators at Mission Hospitals; 18 certificate-trained community and hospital pharmacists

**Intervention Description:**

The Asheville Project is a community-based, pharmacist-directed, medication therapy management (MTM) program provided for several employers in the Asheville, North Carolina, area. Previous projects demonstrated significant improvements in diabetes and asthma outcomes while reducing the total health care costs paid by participating employers. Based on the successes of the prior Asheville Project programs and the need for improved care of cardiovascular disorders, a HTN and dyslipidemia program was implemented for employees of the City of Asheville in 2000 and expanded to employees of Mission Hospitals in Asheville in 2001. The employers agreed to compensate educators and pharmacists for regularly scheduled face-to-face patient consultations and to waive or reduce disease-related medication copayments as a means of promoting participation in the program.

**Theory:** Not mentioned

**Resources Required:**

- **Staff:** Educators at Mission Hospitals; 18 certificate-trained pharmacists at 12 locations
- **Training:** Pharmacists were certificate-trained in national HTN and dyslipidemia guidelines
- **Space:** These one-on-one appointments were conducted in a semiprivate or private counseling area.

**Evaluation:**

- **Design:** Quasi-experimental, longitudinal, pre-post study
- **Methods and Measures:**
  - Two employers who were already providing long-term MTM programs for patients with diabetes or asthma began offering a similar program for covered health plan members with HTN or dyslipidemia.
  - Participating pharmacists received cardiovascular certificate training recognized by the North Carolina Center for Pharmaceutical Care, a service of the North Carolina Association of Pharmacists. All services and incentives were paid by the employers’ health plans.
  - Outside funding was provided by Novartis to cover the costs of independent data extraction from medical and prescriptions claims.
  - Counseling sessions averaged 30 minutes in length and most often occurred every three months. Patients could withdraw at any time but would forfeit future reduced medication copayments.
  - Intention-to-treat methodology was used.
Outcomes:

- **Short term Impact:** The overall number of CV events per year in the historical period ranged from zero to five; this decreased to zero to two per year in the study period.
- **Long Term Impact:** Several indicators of cardiovascular health improved over the course of the study including mean systolic blood pressure, mean diastolic blood pressure, percentage of patients at blood pressure goal, mean LDL cholesterol, percentage of patients at LDL cholesterol goal, mean serum triglycerides, mean HDL cholesterol, CV event rate, and mean cost per CV event. Although CV medication use increased nearly threefold, CV-related medical costs decreased by 46.5 percent. CV-related medical costs decreased from 30.6 percent of total health care costs to 19 percent. A 53 percent decrease in risk of a CV event and greater than 50 percent decrease in risk of a CV-related ED/hospital visit were also observed. Also, the number of myocardial infarctions (MI) decreased significantly in the program period as compared to the historical period.

**Maintenance:** Not mentioned

**Lessons Learned:** Not mentioned

**Citation(s):**