

THE HICKORY PROJECT¹

An Employer and Health Plan Diabetes Collaboration

Description:

A longitudinal, 3-year (2007-2009), quasi-experimental, multisite, pre-/post-enrollment study was conducted to assess the long-term clinical and financial outcomes of a chronic care management model for patients with diabetes, using the Asheville care management model that was successful in the management of several chronic diseases.

The Hickory Project study is a report on the results of the first 3 years of working with Hickory Springs Manufacturing Company, headquartered in Hickory, NC. The company has 4,500 self-funded health plan members located in more than 60 operational facilities in the United States. American Health Care, a clinical pharmacy services provider, recruited, trained, and monitored healthcare professionals (aka, intensive chronic care managers) in best practices, patient counseling, and documentation.

Interventions:

Similar to the Asheville Project, participants received the following:

- One-on-one counseling
- Blood pressure assessment
- Medication assessment
- Laboratory review
- Health knowledge assessment
- Lifestyle education
- Goal-setting guidance

The intensive chronic care manager's role was to schedule sessions with patients on a regular basis (ie, an average of every 3 months) to determine if there was a treatment plan in place by their physician and to determine:

- What is the plan?
- Is the plan appropriate?
- Does the patient understand the plan?
- Is the patient following the plan?
- Is the plan working?

The patients' physicians remained the primary decision makers; however, recommendations were made to physicians when deficiencies were identified. When deficiencies warranted further assessment or when therapy changes had to be considered, patients were referred back to their physicians.

Results:

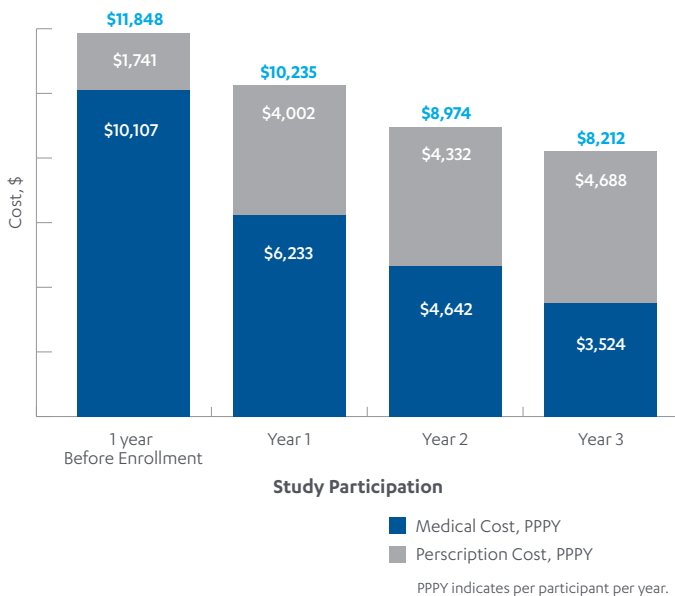
A total of 95 patients were in the program for 1 year or longer. Of these, 54 patients participated all 3 years and had at least a 1-year history of claims data plus 3 years of program period claims data. The results were as follows:

- The percentage of patients who achieved the American Diabetes Association's (ADA) A1C less than 7% goal increased from 38% at the start of the study (or at enrollment) to 53%.
- The percentage of patients who achieved the recommended LDL-C goal of less than 100 mg/dL increased from 46% to 67%.
- The percentage of patients achieving the recommended systolic blood pressure goal of less than 130 mm Hg increased from 55% to 72%.
- The percentage of patients achieving the recommended diastolic blood pressure goal of less than 80 mm Hg increased from 60% to 71%.
- Only 37% of patients entering the study had the ADA-recommended annual eye examination in the year before the study, which increased to 61% by the end of the study.
- The number of patients regularly self-testing blood glucose levels increased from 79% at baseline to 97% at the end of the study.

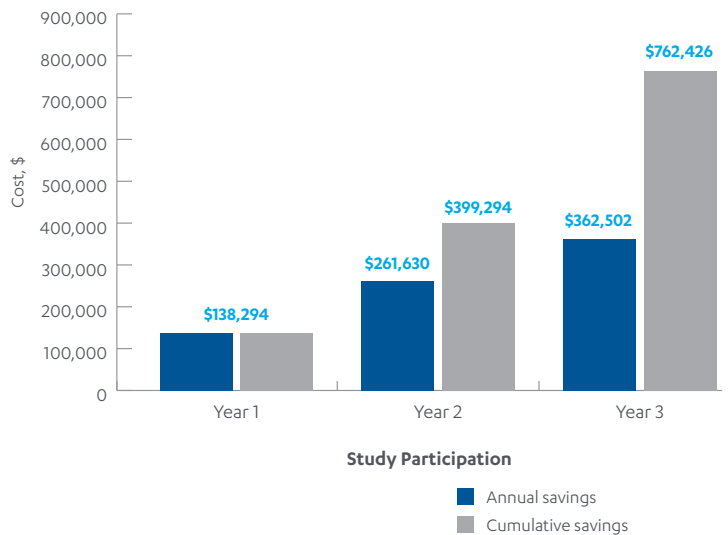
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The return on investment average during the 3 years of this study was \$8.48 for every \$1 spent on the program using a trended/projected cost comparison.

Medical and Prescription Costs for Patients Enrolled for 3 Years



Projected Annual and Cumulative Savings for 54 Participants Enrolled for 3 Years



These results demonstrate that it may be possible to produce improvements in clinical outcomes and reductions in healthcare costs for patients with diabetes using a chronic care model that offers frequent patient follow-up, a focus on appropriate medication therapy, adherence to clinical practice guidelines, and a reduction in prescription co-payments for antidiabetes medications as an incentive for participation.

Reference: 1. Bunting BA, Lee G, Knowles G, Lee C, Allen P. The Hickory project: controlling healthcare costs and improving outcomes for diabetes using the Asheville project model. *Am Health Drug Benefits.* 2011;4(6):343-350.