



**COMMUNITY PHARMACY FOUNDATION  
COMPLETED GRANT SYNOPSIS**

**Extended Diabetes Care through Diabetes Center-Community Pharmacy Collaboration**

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<b>Objectives</b>	
1) To evaluate the effect of extended diabetes care on primary clinical outcomes (hemoglobin A1c, LDL cholesterol, blood pressure), and 2) To assess the impact of extended diabetes care on patients’ performance of diabetes self-management activities.	
<b>Methods</b>	
Design	Randomized controlled study that compared extended diabetes care to usual care. Extended diabetes care was provided by trained community pharmacists over 12 months during quarterly visits. Pharmacists evaluated the drug therapy, educated patients as needed, and recommended drug therapy changes to physicians when they judged a change was needed. All study subjects had at least two formal diabetes education sessions at the Finley Diabetes Center (FDC) prior to the start of the study. Data were collected by a research nurse at the FDC at baseline and after 12 months of extended diabetes care. The study involved 12 pharmacists at 8 community pharmacies. Paired t-tests were used to compare baseline and 12-month endpoints within the study groups, and at baseline across the two groups.
Study endpoints	<ul style="list-style-type: none"> <li>• Comparison of baseline and 12-month hemoglobin A1c</li> <li>• Comparison of baseline and 12-month systolic and diastolic blood pressure</li> <li>• Comparison of baseline and 12-month LDL cholesterol</li> </ul>
<b>Results</b>	
Of the 78 patients who agreed to participate in the study, a total of 67 subjects completed the study. The mean age of the subjects was 60.4 years, and 44 (56.4%) were women. Neither study group (treatment or control) showed a significant change in mean hemoglobin A1c levels. Conversely, both groups showed a significant decrease in LDL cholesterol levels. The mean in the control group decreased by 11.2 points, while the treatment group decreased by an average of 19.1 mg/dL. The average diastolic blood pressures did not change significantly for either group. In contrast, the mean systolic blood pressure levels increased significantly in both study groups. However, the 12 month means for both groups remained below the target of 130 mm Hg. The extended diabetes care also showed a significant improvement in aggregate patient self-management of diabetes, while the control group did not.	
<b>Conclusion</b>	
The extended diabetes care model studied here had positive effects on cholesterol levels and patient performance of diabetes self-management activities. However, no significant impact on blood glucose control or blood pressure levels was found. More frequent visits may be needed to improve glucose control. Also, future research is needed to better evaluate the ability of extended diabetes care to improve blood pressure management. Overall, the extended diabetes care helped reduce the cardiovascular risks of patients receiving it.	

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