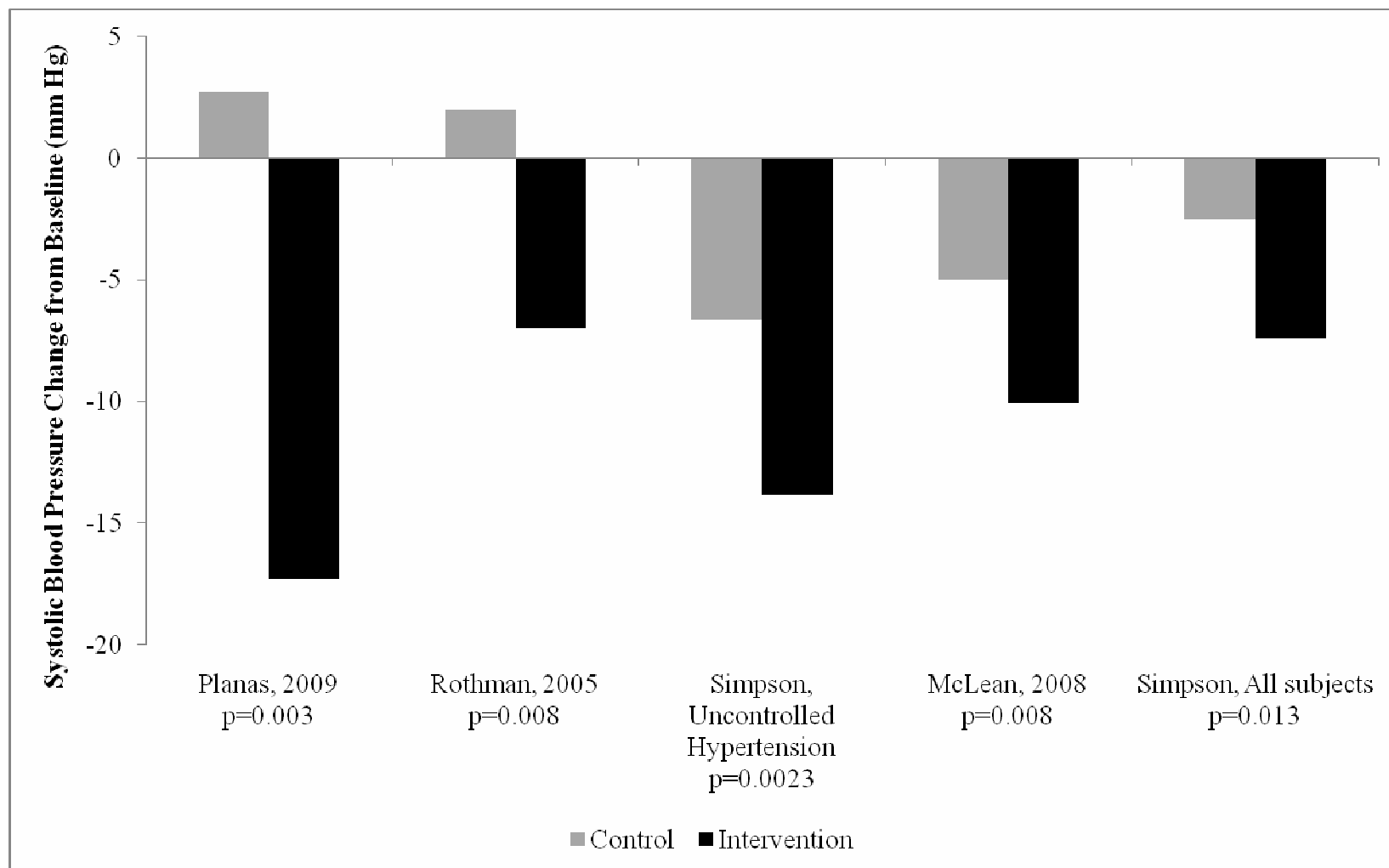


Supplementary Table 1. Randomized Controlled Trials Examining the Effect of Pharmacist Intervention on Blood Pressure Management in Diabetes as the Primary Outcome (Study Characteristics)

Study	Setting / Inclusion Criteria / Sample Size Estimate	# Patients (withdrawals)	Duration (months)	Pharmacist's Activities
Rothman RL, 2005 USA	University-based General Internal Medicine Practice Patient referred to a Pharmacist-led diabetes management clinic $A_{1c} \geq 8\%$ Based on 10 mmHg difference in SBP and 1% absolute difference in A1c	217 (23 [11%])	12	<ul style="list-style-type: none"> • 3 specially trained (Certified Diabetes Educator) pharmacists • 1-hour patient educational session • Evidence-based treatment algorithms for BG, BP, lipids • Follow-up every 2-4 weeks either by phone or in-person • Medication changes made by pharmacists through a collaborative agreement for prescriptive authority
McLean DL, 2008 Canada	Pharmacist-Nurse team in community pharmacies $BP > 130/80$ Based on 10 mmHg difference in SBP	227 (16 [7%])	6	<ul style="list-style-type: none"> • Pharmacist-Nurse team provided education on BP: as a risk factor, causes of high BP, consequences of high BP, diabetes & BP, lifestyle strategies to decrease BP • Medication management recommendations sent to physician
Planas, 2009 USA	Community pharmacies Sub-study of a diabetes management study $A_{1c} > 7\%$ (main study) $BP \geq 130/80$ or using an antihypertensive medication Sample size not estimated	52 (12 [24%])	9	<ul style="list-style-type: none"> • Medication therapy management program • Brief physical exam with BP measurement • Education on role of medications & encouraged adherence • Medication management recommendations sent to physician

Supplementary Figure 1. Systolic Blood Pressure Changes (Primary Outcome) in Randomized Controlled Trials of Pharmacist Intervention in Diabetes Management



Supplementary Table 2. Changes in Cardiovascular Risk Factors

Parameter	Mean Change from Baseline* (95% CI)		Mean Difference†
	Control Group	Intervention Group	(95% CI)
A1c (%)	0.03 (-0.22 to 0.28)	-0.15 (-0.36 to 0.05)	-0.18 (-0.51 to 0.14)
Systolic BP (mmHg)	-2.5 (-5.2 to 0.1)	-7.4 (-10.2 to -4.6)‡	-4.9 (-8.7 to -1.0)§
Diastolic BP (mmHg)	0.6 (-1.4 to 2.6)	-2.3 (-4.3 to -0.4)‡	-2.9 (-5.6 to -0.2)§
Total Cholesterol (mmol/L)	-0.09 (-0.25 to 0.07)	-0.23 (-0.41 to -0.05)‡	-0.14 (-0.38 to 0.10)
LDL (mmol/L)	-0.10 (-0.24 to 0.05)	-0.23 (-0.38 to -0.08)‡	-0.14 (-0.33 to 0.07)
HDL (mmol/L)	0.02 (-0.01 to 0.06)	0.01 (-0.02 to 0.04)	-0.02 (-0.06 to 0.03)
Triglycerides (mmol/L)	0.09 (-0.09 to 0.27)	-0.09 (-0.26 to 0.07)	-0.18 (-0.43 to 0.06)
Total/HDL Ratio	-0.16 (-0.29 to -0.03)‡	-0.25 (-0.39 to -0.11)‡	-0.09 (-0.28 to 0.11)
UKPDS Risk Engine Score(19) (%)	-1.2 (-2.4 to 0.1)	-2.7 (-3.9 to -1.5)‡	-1.5 (-3.3 to 0.2)

95% CI = 95% Confidence Interval; BP = Blood Pressure; LDL = Low Density Lipoprotein; HDL = High Density Lipoprotein

*Negative values indicate decrease from baseline, Positive values indicate increase from baseline

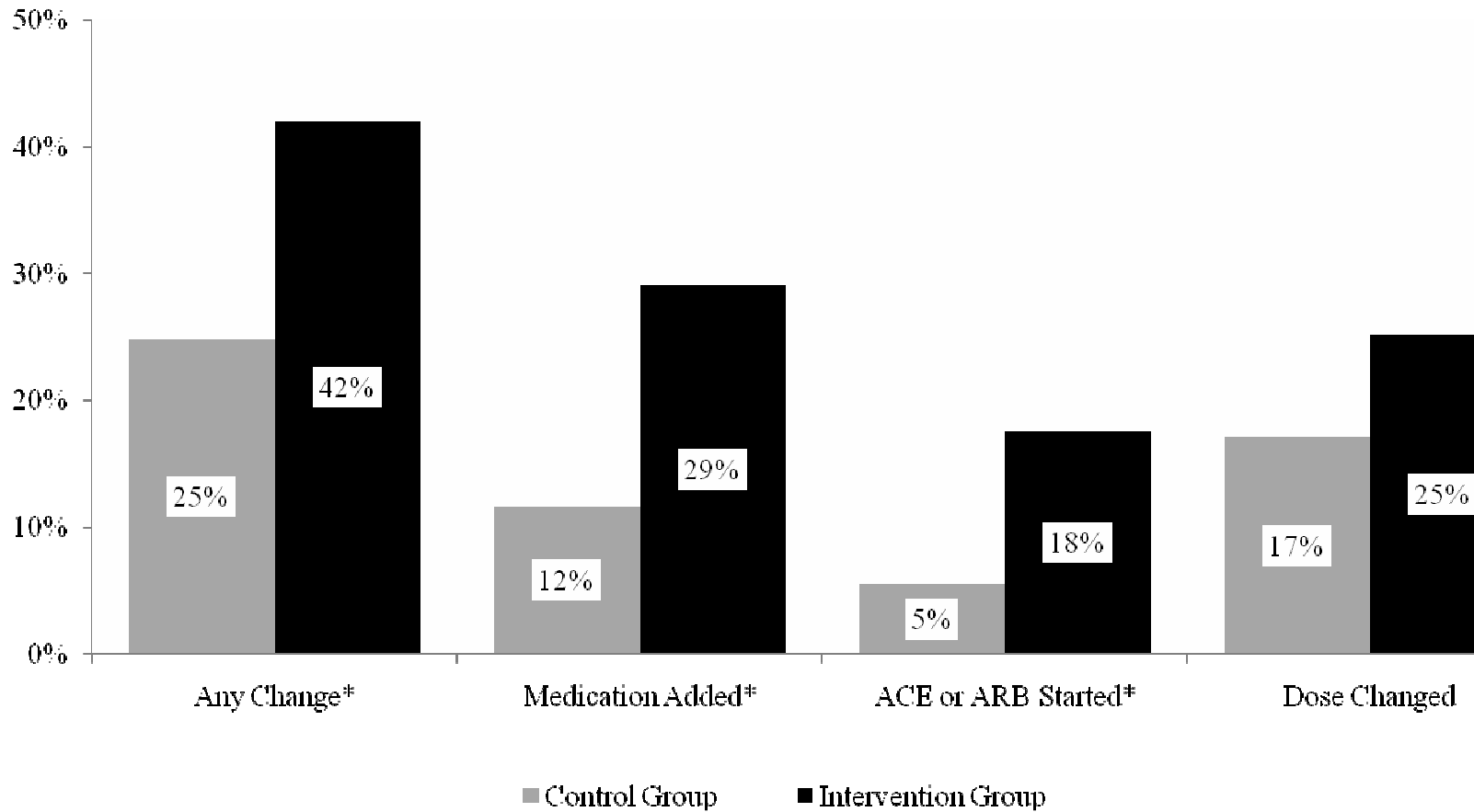
†Negative values indicate Intervention Group has larger change, Positive values indicate Control Group has larger change

‡paired t-test, p<0.05

§ANOVA, p<0.05

||Mann-Whitney U, p<0.05

Supplementary Figure 2. Proportion of Subjects Who had Changes to Their Antihypertensive Medications



*p<0.05 (Chi Square)

Supplementary Table 3. Healthcare-Related Contacts Recorded During Study

Healthcare Resource	Intervention (n=131)			Control (n=129)		
	Number of Patients with ≥ 1 Contact	Total Number of Contacts	Contacts Per Patient*	Number of Patients with ≥ 1 Contact	Total Number of Contacts	Contacts Per Patient*
All Resources†	131	1439	10 (7-15)	129	438	2 (2-4)
All Resources (excluding pharmacists)	131	238	3 (1-6)	129	197	2 (2-5)
Study Pharmacist†	131	1201	9 (6-12)	129	241	2 (2-2)
Nurse	18 (14%)	47	2 (1-4)	28 (22%)	47	2 (1-3)
Dietician	10 (8%)	16	1 (1-2)	13 (10%)	15	1 (1-2)
Optometrist	30 (23%)	38	1 (1-1)	25 (19%)	22	1 (1-1)
Podiatrist	8 (6%)	31	3 (1-6)	6 (5%)	7	1 (1-1)
Endocrinologist	5 (4%)	13	3 (2-3)	9 (7%)	18	2 (1-2)
Cardiologist	5 (4%)	8	1 (1-2)	8 (6%)	15	1 (1-2)
Nephrologist	4 (3%)	7	2 (2-2)	1 (1%)	2	2
Ophthalmologist	31 (24%)	42	1 (1-1)	39 (30%)	47	1 (1-1)
Diabetes Education Centre	3 (2%)	4	1 (1-2)	7 (5%)	8	1 (1-1)
Health Link	1 (1%)	1	1	1	1	1
Emergency Room Visit	11 (8%)	26	1 (1-3)	11 (9%)	11	1 (1-1)
Hospitalization	4 (3%)	5	1 (1-2)	5 (4%)	4	1 (1-1)

*Reported as Median (Interquartile Range) per patient

†Mann-Whitney U Test (p<0.01)