

Ye Olde Pharmacy  
5320 N. Port Washington Rd.  
Glendale, WI 53217  
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### **Final Report**

Project Title: Help Your Heart

Development:

Help Your Heart was a community-based program that was designed to identify at-risk patient in the Milwaukee area with cardiovascular disease. Ye Olde Pharmacy's managing pharmacist, Dan Zatarski, PharmD, RPH was the primary investigator of the project. Mr. Zatarski directed the help of two pharmacy students for this project. Amy Jashinski, at the time in her fourth year clinical rotations at Creighton University, assisted in marketing development, and advertising in the community. Ms. Jashinski also developed the patient handouts discussing healthy lifestyle eating and exercising habits. The second pharmacy student involved in the success of the project was Katherine Kinowski. Ms. Kinowski assisted in patient enrollment, and data collection.

Administration:

Help Your Heart was completed at the retail pharmacy location of Ye Olde Pharmacy, 5320 N. Port Washington Rd. in Glendale, WI. The patients enrolled in the project met with the pharmacist and discussed the following topics: Healthy Eating Habits; Living a Healthy Lifestyle for Your Heart, which included information on smoking cessation, exercise, alcohol consumption, stress reduction, and family support; Medication Compliance; and a Medication Compliance sample chart and blank chart.

The pharmacist met with each patient on two occasions. At each visit, the patient had blood pressure checked and cholesterol levels drawn. The cholesterol test included total cholesterol, HDL, LDL, and triglycerides. Medication compliance questions were also asked of each patient at each visit.

Operation:

During the first visit, patients were asked to complete an intake form. After gathering basic demographic data, the pharmacist asked patients if they were diagnosed with having hypertension and hyperlipidemia and whether or not they were treated for either condition. Each patient was assessed for family history of cardiovascular disease, their current medications, and their medication compliance. After all patient data was obtained the pharmacist performed a finger-stick blood draw to obtain a complete cholesterol panel. As the cholesterol panel was being analyzed, the patient had their blood pressure taken on the left arm using a stethoscope and sphygmomanometer.

## Findings:

The Help Your Heart Program's primary measurable endpoint was cholesterol and blood pressure reduction. Appendix 1 includes the data collected along with the calculated averages of the total cholesterol / HDL ratio and the systolic / diastolic for both screenings. Based on the averages, it is possible to conclude that the education provided to the participants had a relative benefit to their health. The average ratio of total cholesterol / HDL in the first screen was 4.203. On the second screening, the average was 3.95. Blood pressure, on average, was also reduced in this project. The average blood pressure for the group at the first screening was 139.89 / 79.6 mmHg. At the second screening, the average blood pressure dropped to 120.65 / 75.7 mmHg.

## Evaluations:

The Help Your Heart program, directed by a community pharmacist has a positive impact on the cardiovascular markers of cholesterol and blood pressure. Based on the data collected, 32% of the original participants were unable to be contacted for their follow up appointment. The primary investigator reasoned that if those participants had completed the program, the findings might not have been as favorable. This assumption is based on the rationale that those participants did not see the potential value of changing their behavior to mirror the educational material provided to them at the first screening.

## Conclusions:

Overall, Help Your Heart was a benefit to those that completed the project. The goal was to enroll 100 participants, however the project ended up only enrolling 34 total participants. The advertising campaign directed at the target market, the low-income residents of the Milwaukee area did not produce the results that the principal investigator anticipated. The educational materials that were prepared gave practical information to the participants that could be easily adopted into one's lifestyle. The pharmacist reviewed with participants the diet and exercise changes needed to help improve their cardiovascular health. In conclusion, the Help Your Heart project can be easily adopted into most community pharmacies with minimal resources. The most difficult barrier seen in this project was the inability to show those in greatest need the extreme value this project had to offer. If future continuation of this project were to take place, the pharmacy would have to utilize other avenues of communication to convey the value of this project.

Appendix 1														
	First Screening							Second Screening						
ID	Total	HDL	LDL	TRG	T.C./HDL	Sys	Dia	Total	HDL	LDL	TRG	T.C./HDL	Sys	Dia
1	143	47	75	106	3.1	122	88							
2	212	86	110	77	2.5	110	76	179	90	70	100	2	116	68
3	227	66	114	234	3.4	126	78	243	66	106	352	3.7	126	84
4	168	59	85	123	2.8	144	96	166	70	75	110	2.4	118	64
5	184	58	111	80	3.2	134	88	203	82	122	504	2.5		
6	194	33	136	126	5.9	0	0	240	52	153	179	4.6	112	66
7	176	64	94	90	2.8	0	0	217	64	137	78	3.4	130	65
8	118	20	79	92	5.9	0	0	155	23	98	165	6.6	112	74
9	0	0	0	0	#DIV/0!	138	92	234	83	121	148	2.8	132	86
10	205	48	141	83	4.3	0	0	248	72	158	92	3.4	128	88
11	140	28	80	161	5.0	0	0	161	29	94	191	5.5	122	82
12	169	42	113	70	4.0	0	0	196	37	143	80	5.3	110	78
13	230	41	168	104	5.6	0	0	223	47	146	238	5	116	82
14	156	32	102	115	4.9	0	0	171	30	101	204	5.8	134	78
15	162	29	115	84	5.6	124	92	184	35	139	46	5.2	116	68
16	261	67	159	176	3.9			296	83	161	261	3.6	110	78
17	191	67	63	309	2.9	0	0							
18	153	42	93	89	3.6	0	0	154	44	95	70	3.5	104	68
19	0	0	0	0	#DIV/0!	0	0	264	60	163	205	4.4		
20	161	49	96	77	3.3	165	84							
21	199	40	143	83	5.0	122	79							
22	137	82	42	152	1.7			156	92	51	68	1.7		
23	238	90	155	121	2.6			209	48	138	116	4.4		
24	174	46	97	155	3.8									
25	154	15	N/A	223	10.3	157	67							
26	114	27	51	179	4.2	147	62	132	31	71	179	4.3		
27	201	44	143	69	4.6	151	81							
28	201	60	108	164	3.4	130	55							
29	152	39	97	80	3.9	151	90							
30	169	64	N/A	45	2.6	159	81	204	59	116	45	3.4	135	80
31	190	42	133	76	4.5	124	64							
32	220	51	141	132	4.3									
33	277	64	194	92	4.3	151	63							
34	176	71	76	146	2.5	163	97	217	62	125	146	3.5	130	78
						2518	1433						2051	1287
				Ave.	4.203						Ave.	3.95		
				Ave.		139.89	79.6					Ave.	120.65	75.7