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ABSTRACT

Objectives: *(1) To report the results of a pharmacist-directed cardiovascular risk management program; and (2) to identify obstacles faced by the pharmacists in the program implementation.*

Methods: *The collaborators in this study included two local unions, a health benefit consulting company, and a community pharmacy. A total of 750 union workers with cardiovascular risk were informed about the cardiovascular risk management program. The program lasted six months, and the participation was voluntary. There were three group educational sessions with each session followed by a medication management service.*

A staff person of the health benefit consulting company and two pharmacists were interviewed via telephone. The interview questions were created according to the Gaps Model of Service Quality. The Gaps Model theorizes five gaps among consumer expectations, consumer perceptions, management perceptions of consumer expectations, service quality, service delivery, and external communications to consumers.

The following data were collected: (1) types and quantity of drug therapy problems, (2) pharmacists' recommendations and prescribers' response, (3) patients' quality of life, disability days, and sick days, and (4) the experience of involved parties. Descriptive statistics were calculated.

Results: *Fifteen union workers participated in the program. For the participants, 35 drug-related problems were identified, with "need for additional therapy" and "dose too low" being the most common problems. To address these drug-related problems, pharmacists made 33 recommendations to prescribers, and prescribers accepted 55% of the recommendations.*

According to the interviews, there were three barriers faced by pharmacists to implement the program: lack of consensus about the recruitment, union workers' unawareness of the program's benefits, and limited support from the unions and the health benefit consulting company.

Conclusions: *It was difficult to recruit participants into the program. Clear agreement among collaborators on both the program's benefits and the specific roles of each collaborator may be the key to successfully implement similar programs in the future.*

Keywords: Cardiovascular disease, community pharmacy, disease state management

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Introduction

Seventy-nine million Americans suffer from cardiovascular diseases (CVD), and both the direct costs and indirect costs of CVD in the U.S. were estimated to be $432 billion in 2007.[1] Lost productivity was one primary cause for such economic burden [1], indicating that CVD is common among U.S. workers. CVD risk factors include modifiable and non-modifiable

factors. Modifiable factors such as elevated cholesterol and blood pressure can be treated or controlled long before the onset of CVD. To avoid the negative outcomes of CVD for at-risk workers, health professionals need to conduct interventions to manage modifiable CVD risk factors. Community pharmacists have effectively provided cardiovascular risk management services. For instance, community pharmacists contributed to improved patients' health outcomes, in the Asheville Diabetes Management Program and Project ImPACT: Hyperlipidemia.[2,3] The Asheville Diabetes Management Program used a longitudinal pre-post cohort design, and reported improvement in hemoglobin A1c for patients and a reduction in direct medical costs for employers.[2] Project ImPACT was an observational study, in which patients achieved high persistence and compliance with dyslipidemic therapy.[3] In addition, community pharmacists have provided workplace-based CVD risk management programs.[4,5] In one on-site CVD risk management program, Heart Smart, pharmacists provided disease and lifestyle education, identified drug therapy problems, and measured blood pressure, pulse, and weight.[4] Similarly, in another on-site program, pharmacists provided education about heart disease, identified drug therapy problems, and performed routine blood pressure, pulse and weight measurements.[5]

Yet, according to our knowledge, only two studies have reported the implementation and impact of a pharmacist-directed cardiovascular risk program tailored for working adults.[4,5] Lack of such evidence is important, because, until the services are established and the positive impact is revealed, interventions by community pharmacists to address cardiovascular risks for the workforce will have little support. Therefore, studies are needed to develop the procedure or assess the impact of pharmacist-directed services to reduce cardiovascular risk.

This study was a pilot project to evaluate a new pharmacist-directed cardiovascular risk management program for union workers. The care model relied on both group education and medication management services provided by community pharmacists. Pharmacists were used in the program because pharmacists are able to manage CV conditions, especially the medication-related component of care. The specific objectives of this study were to:

(1) report the results of the program in terms of drug-related problems and patient quality of life; and
(2) identify obstacles faced by the pharmacists in the program implementation.

Methods

Program description

The collaborators in this program included one local union of electricians, one local union of plumbers, a health benefit consulting company, and a community pharmacy. Different from previous workplace-based CVD risk management programs [4,5], the emphasis on the partnership of the three parties made this program unique. First, the unions, the pharmacy, and the health benefit consulting company discussed the feasibility of this program and how to ensure confidentiality of patients' information. After obtaining the unions' approval for the program, the pharmacy and the consulting company determined the inclusion and exclusion criteria of potential participants (Appendix A). The inclusion criteria were proposed according to the inclusion criteria of Iowa Medicaid Pharmaceutical Case Management.[6] The exclusion criteria were proposed to ensure the cardiovascular risks of participants were manageable by the program. Using diagnostic codes of medical claims, the consulting company identified 750 union workers with cardiovascular risk. All 750 union workers met both the inclusion and exclusion criteria. Next, the pharmacy conducted a mass mailing, sending the identified workers a letter describing the cardiovascular risk management program and inviting them to participate (Appendix B). In addition, the pharmacy made follow-up phone calls to these workers, inviting them to participate. The participation was voluntary.

The cardiovascular risk management program lasted six months, and all sessions of group education and medication management services took place in the union halls. There were three group educational sessions that were approximately an hour in length. Each education session was conducted by a pharmacist and topics addressed included dietary strategies, life style changes, risk management strategies, and medication management tips. The pharmacist prepared for each session based on his or her clinical experiences. The sessions occurred during month 1 through month 3.

Following the group educational sessions, the participants met one-on-one with a community pharmacist to receive the medication management services. That is, to have all of their medications reviewed and cardiovascular risk factors monitored. When a drug-related problem was identified in the comprehensive medication review, a plan was developed by the pharmacist to address it, and then the plan was implemented by the pharmacist, after working with the patient and the prescriber. The procedures and documentation of this program were standardized, based on the pharmacy's previous experience in Iowa Medicaid

Pharmaceutical Case Management.[6,7] Participants were verbally encouraged to attend all sessions of group education and medication management services, but no incentives were provided to participants.

Data collection and analyses

Data collected in the study included (1) types and quantity of drug therapy problems, (2) pharmacists' recommendations and physicians' response, (3) patients' quality of life, disability days, and sick days, and (4) the experience of involved parties. Table 1 shows the data source for each variable. A survey was used to collect patient self-reported measures including quality of life, disability days, and sick days. Descriptive statistics like frequency, means, and standard deviations were calculated.

To better understand the experience of involved parties, telephone interviews were conducted with two pharmacists employed by the pharmacy and a staff person employed by the consulting company. On average, each interview lasted about 20 minutes. A union member participant was also invited for a telephone interview, but did not respond to repeated invitations. Each interview was audio recorded in MP3 format, and the audio recordings were reviewed in their entirety by the interviewer three times. The recordings were not transcribed word for word. Instead, direct quotes were written down from the recordings when they were relevant to the interview questions. This study was approved by the University of Iowa Institutional Review Board.

The interview questions (Appendix C) were created according to the Gaps Model of Service Quality (Figure 1).[8] The Gaps Model theorizes the process of a service from the perspectives of both the consumer and the marketer. There are five possible gaps or differences in the provision of a service – Gap 1 between consumer expectations and management perceptions of consumer expectations, Gap 2 between management perceptions and service quality, Gap 3 between service quality and service delivery, Gap 4 between external communications to consumers and service delivery, and Gap 5 between consumer expectations and consumer perceptions. The Gaps Model was used because (1) the community pharmacy and the health benefit consulting company represented the side of the marketer, (2) the participants represented the side of consumer, and (3) the process of providing this program was similar to the process outlined in the model.

Different interview questions related to the Gaps Model were developed for the pharmacists and the health benefit consulting company staff person, respectively. The consulting company was considered to have a role in possible Gaps 1 and 4, and the pharmacy was considered to have a role in possible Gaps 2 and 3. This was because the consulting company worked with both the pharmacy and the unions, while the pharmacy only worked with the consulting company and did not have direct contact with the union members or management during program provision. In addition to the questions related to the Gaps Model, general questions regarding the effects of the program and lessons learned were developed for both the pharmacists and the staff person.

Results

From the 750 union workers contacted, 15 participated in the cardiovascular risk management program. These participants mentioned that they were concerned about their health and were engaged in managing their CV conditions by visiting physicians regularly. Eleven of them attended all three sessions of the program, and four did not attend the third session. For these 15 participants, 35 drug-related problems were identified during 6 months of program implementation, with "need for additional therapy" and "dose too low" being the most common problems (Table 2). To address these drug-related problems, pharmacists made 33 recommendations to prescribers, which primarily were medication addition and dose change (Table 3). Prescribers accepted about 55% of pharmacists' recommendations. For the first and second visits, the majority of participants rated their health to be good (Table 4).

The telephone interviews, with two pharmacists and a staff member from the consulting company, presented an informed view about the program implementation. Direct quotes from each interview were presented in Table 5. Such information revealed three barriers faced by pharmacists to provide cardiovascular risk management services for union workers. These barriers included lack of consensus about participant recruitment, union workers' unawareness of the program's benefits, and limited support from the unions and the health benefit consulting company.

Discussion

This program relied on group education and medication management services. Yet only 15 participants were recruited, despite the efforts of sending out invitation letters and performing follow-up phone calls. In the proposal for the program, it was expected that up to 100 participants would be recruited. Originally there was a plan to evaluate the impact of group education and medication management services on the cardiovascular risks of union workers. Due to the limited number of participants, meaningful statistical

comparisons could not be made to assess the impact of the program.

According to the interviews, there were three barriers faced by pharmacists to recruit participants or implement the program. First, among the unions, the consulting company, and the pharmacy, there was lack of consensus about the recruitment or the values of the program. The pharmacy regarded the program as an approach to improve patient outcomes and reduce healthcare costs, but this view was not well perceived by the unions and the consulting company. After getting a low response rate from eligible workers, the pharmacy put forward the idea to incentivize participants or make the program mandatory. However, the consulting company was unwilling to provide incentives due to potential concerns which could have been raised by healthy union members, and the unions' management's reluctance to ask members to "force" participation in the program (which could only be accomplished by a majority vote at a regularly scheduled union meeting).

Second, union workers did not comprehend the expected health benefits of the program and the time requirement to attend all sessions might have been an obstacle for them. When the pharmacy made follow-up phone calls, most at-risk workers did not know why they should participate in the program. Some workers also commented that it was inconvenient for them to participate because of the time needed.

Third, the recruiting efforts performed by the pharmacy, an outside source for the union workers, were mostly unilateral. The unions and the consulting company could have contributed to the recruitment. For example, the consulting company could have advocated for the program when the response rate was found to be low by participating in the mailing and follow-up phone calls.

These three barriers corresponded to Gaps 1, 3, and 4 in the Gaps Model. Lack of consensus about the recruitment was related to Gaps 1 and 4, union workers' unawareness of the program's benefits was related to Gap 1, and limited support from the unions and the consulting company was related to Gaps 3 and 4. Zeithaml et al. proposed a set of constructs which could impact each gap, with each construct consisting of multiple variables.[9] For example, for Gap 1, upward communication is a construct, and this construct has three variables: extent of employee-to-manager communication, extent to which inputs from contact personnel are sought, and quality of contact between top managers and contact personnel. In this study, it was likely that Gap 1 was caused by lack of upward communication from union workers to unions. Gap 3 was caused by lack of teamwork and role ambiguity among the pharmacy, the consulting company and the unions. Gap 4 was caused by lack of horizontal communication among the pharmacy, the consulting company and the unions.

There also were three lessons learned from the experience which could be useful for other community pharmacists who are interested in providing similar services. First, at the beginning of the program, all parties should reach clear agreement about the expected benefits of the program, specific roles of each party, and how to motivate participation. All parties should meet together to discuss these issues, document the consensus, and comply with the agreement in the program implementation. In addition, potential participants of the program should be included in the program design process. Second, in addition to invitation letters and follow-up phone calls for recruitment, pharmacists could have attended union meetings to promote the program in person. In these meetings, pharmacists could have had face-to-face contacts with at-risk workers and made them aware of the program's benefits. Moreover, those workers who signed up for the program could have encouraged their peers to participate. These two lessons can improve both upward communication and horizontal communication, and reduce role ambiguity. Therefore, Gaps 1, 3 and 4 would be addressed. Third, it may be better to provide medication management services in the pharmacy instead of union halls. It was inconvenient for the pharmacy to prepare and transport equipment and materials to union halls and some participants were confused about the time and place of appointments, as two unions, with separate locations, were involved. In addition, some participants were concerned about privacy in an open space such as the hall.

In spite of the limited number of participants, the recruitment issue did not negatively impact the relationship among all parties involved. Through the consulting company, the pharmacy provides annual health screenings for union workers. In addition, the pharmacy considered implementing the program to be a good business decision and used this program to promote similar services to other organizations.

One limitation of this study was that union workers who participated in the program, or those who did not participate, were not interviewed. That is, the consumer side of the Gaps Model was not assessed. The participants were asked whether they would like to be interviewed and only one expressed interest. However, the participant did not respond to the repeated invitations to conduct the interview. A direction for future research is to describe the experiences of participants in detail. For example, researchers can describe

a patient's drug-related problems at the beginning of a program, the recommendations made by the pharmacist for the patient, which recommendations were accepted by his/her prescriber, and how drug-related problems were addressed. Another direction is to compare the reasons of participating, versus not participating, by interviewing both participants and non-participants.

Conclusions

The development of a new pharmacist-directed cardiovascular risk management program for union workers was evaluated, which relied on both group education and medication management services. It was difficult to recruit participants in the program. Using telephone interviews with involved parties, three obstacles faced by pharmacists in the program implementation were identified: lack of consensus about the recruitment, union workers' lack of awareness of the program's benefits, and limited support from the unions and the consulting company. Clear agreement among collaborators on both the program's benefits and the specific roles of each collaborator may be the key to overcome these barriers in the future.

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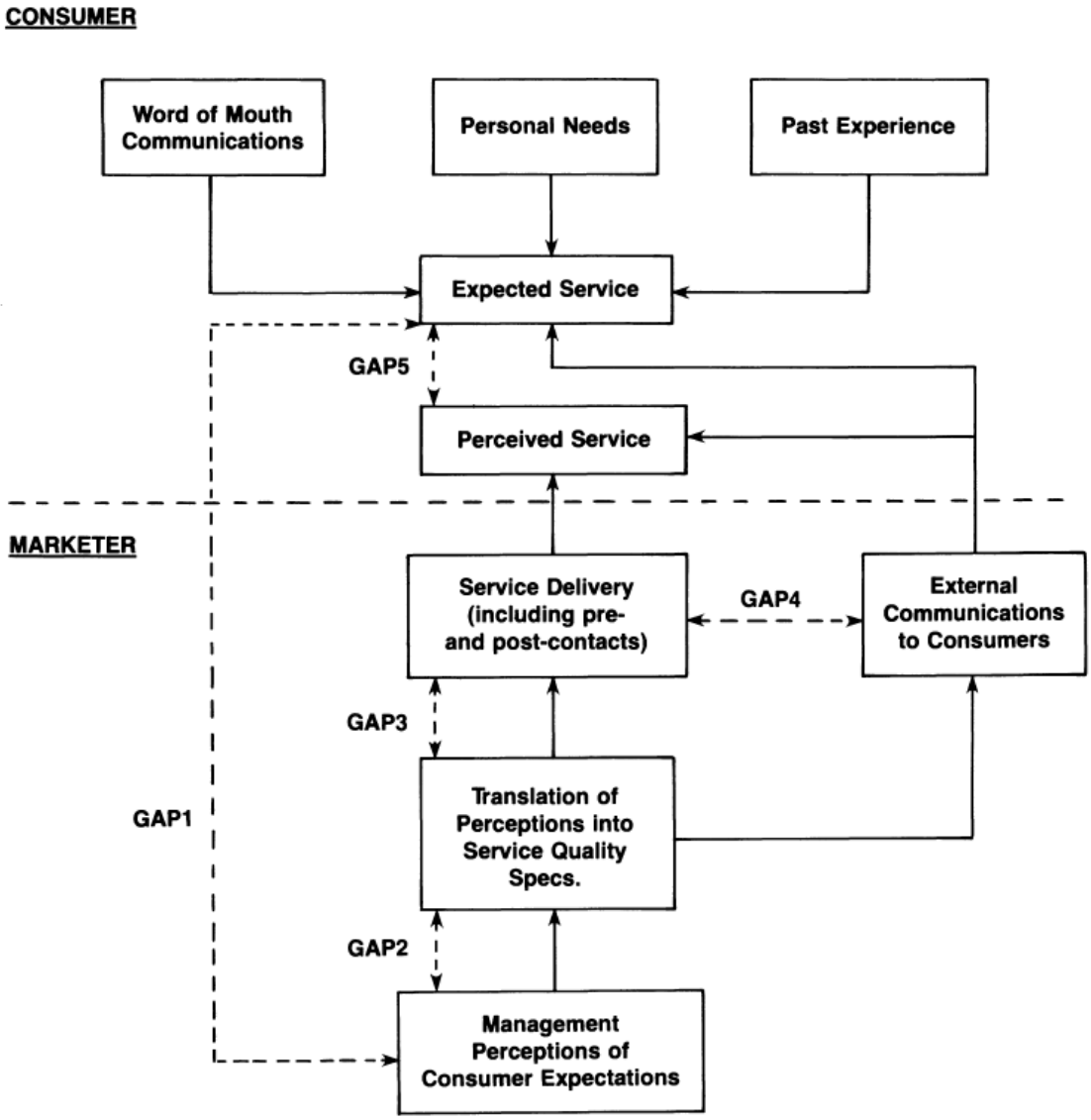
Figure 1 The Gaps Model of Service Quality



Source: Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. *J Mark*. 1985; 49:41-50.

Table 1 Variables and Data Sources

Variables	Sources
Types and quantity of drug therapy problems [a]	Patient charts from the pharmacy
Pharmacists' recommendations and prescribers' response [a]	Patient charts from the pharmacy
Quality of life [a]	Patient surveys
Disability days [a]	Patient surveys
Sick days [a]	Patient surveys
Experience of involved parties [b]	Telephone interview

Note: [a] Data collected at each participant's visit during 6 months of program implementation.
[b] Data collected after 6 months of program implementation.

Table 2 Frequency of Drug-Related Problems

Drug-Related Problem Category	Frequency (%)
Adherence	
Non-adherence	2 (5.7)
Indication	
Need for additional therapy	18 (51.4)
Unnecessary drug therapy	1 (2.9)
Duplication	2 (5.7)
Safety	
Drug interaction	1 (2.9)
Dose too high	3 (8.6)
Effectiveness	
Dose too low	8 (22.9)
Total	35 (100)

Table 3 Pharmacists' Recommendations to Prescribers and Prescribers' Response

Pharmacist Recommendation	Recommendation Made Frequency (%)	Prescriber Response and Acceptance Frequency (%)	Prescriber Response but No Acceptance Frequency (%)	No Prescriber Response Frequency (%)
Dose Change	11 (33.3)	5 (15.2)	0 (0)	6 (18.2)
Medication cessation	3 (9.1)	2 (6.1)	1 (3.0)	0 (0)
Medication addition	19 (57.6)	11 (33.3)	4 (12.1)	4 (12.1)
Total	33 (100)	18 (54.5)	5 (15.2)	10 (30.3)

Note: The total number of recommendations made, 33, was used as denominator to calculate each percentage.

Table 4 Participants' Quality of Life, Disability Days, and Sick Days

Rating health in the past month

Rating	Visit 1	Visit 2	Visit 3
Excellent	0	0	0
Very Good	5	4	3
Good	8	10	4
Fair	2	1	1
Poor	0	0	0
Non-responder	0	0	7
Total	15	15	15

Rating health in the past month compared with peers

Rating	Visit 1	Visit 2	Visit 3
Excellent	0	0	0
Very Good	4	6	4
Good	9	7	3
Fair	2	2	1
Poor	0	0	0
Non-responder	0	0	7
Total	15	15	15

Note: 1. On the first visit, 2 patients claimed to have at least 1 disability day in the past month. No patients reported disability days on the second and third visits.

2. On the first visit, 2 patients claimed to have 2 sick days in the past month. On the second visit, 4 patients claimed to have 2 sick days in the past month. No patients reported disability days on the third visit.

Table 5 Quotes from Telephone Interviews which were related to the Gaps Model[a]

Question: How did you recruit union workers for the project? Why were not more patients recruited? (Addressing Gap 1)
Answer from the staff person at the consulting company: "I had access to the medical and pharmacy claims for union workers. In meeting with the pharmacists, we determined certain ICD-9 coding that would target certain population. I had set up a computer that I could query by diagnostic codes and sort out the population. We generated a list with each of the diagnostic codes." "We ended up with 750 (people). We sent letters to those people, and then the pharmacy students who were doing the rotation at the pharmacy actually made phone calls to all those people." "We were dealing with a population with high incidence of smoking, high cholesterol, and hypertension. It was also a population, because of their work situation, that does not have exposure to wellness programs and healthy lifestyle choices. So they tended to ignore this when we sent letters out to them. The other thing is they had self-funded plans, so the people we were dealing with often times were those whom we knew on a one-to-one basis. They were hesitant to enroll in a program like this, thinking that 'big brother' is looking at this information, even though we made sure it was confidential. They think someone is looking at it and may use it against them in job placement or whatever."
Question: Did you standardize the service provision such as group education and medication management? If yes, how? (Addressing Gap 2)
Answer from Pharmacist 1: "We used the forms and processes we have developed for Iowa Medicaid Pharmaceutical Case Management. So we used basically the same processes for the cardiovascular risk management program. We used similar forms, and modified them for this program." "We also developed a protocol for us to follow as far as what we do at each visit and the documentation of the outcomes we should be collecting at each visit. We thought about the outcomes we wanted to collect before we actually started the program. The protocol was for making sure that we collected the information we should be collecting each time we saw the patient." Answer from Pharmacist 2: "We did standardize group education. We had three sessions of group education that participants were invited to." "For medication management, we had a little bit of standardization in the sense that we followed the same format and used the same forms. But obviously, people had different concerns, questions, and disease states, which led the conversation into different directions. (For medication management) It was the first time we had done a large employer group."
Question: How did you promote the service? (Addressing Gap 3)
Answer from Pharmacist 1: "We worked with the health benefit consulting company, and they gave us a mailing list. We started off by sending a mass mailing to participants who met the eligibility criteria. And then, we also called the individuals. We spent a lot of time doing phone calls to follow up people whom we did not hear anything back from." "We wanted to work with the health benefit consulting company or the unions to help promote it. But they did not

really want to be a part of the promotional process. So a lot were left to our court to figure out how to best reach out to the patients, and the only thing that was given to us was a mailing list. So the best way was – we sent out a letter and ended with follow-up phone calls."

Answer from Pharmacist 2:

"We did a larger employer mailing, advertising sort of health fair services as well as medication management services for employer group. Then we met with this particular employer group in a meeting to discuss what they were looking for and what we could offer before we set up the project."

"We didn't do traditional advertising, marketing on radio or TV. What we sent out was a packet in which we put together the information that included an introductory letter. (In the packet) We had a list of services we can offer and pricing information in there."

Question: During the project, did you contact the health benefit consulting company about the limited number of patients recruited? If you did, what was their response? Was there any barrier in the communication with the health benefit consulting company? (Addressing Gap 3)

Answer from Pharmacist 1:

"We contacted the health benefit consulting company about the limited participants. They were disappointed as well. But they really did not offer much assistance. Again, we were left trying to figure out how to increase the acceptance of it. We did the best we could to try to call people, and do follow-up phone calls."

"The other thing is, it was really besides us letting them (union workers) know what the benefits of participation might be to them. There was no incentivization by either the health benefit consulting company or the unions for participants. Because of that, people did have to come to the sessions on their own time. We had to figure out a spot which might be convenient for them."

"I don't think there were barriers in the sense of communication. I think it was more of what we valued as pharmacist, compared to what they valued as the health benefit consulting company, and compared to what the unions valued. I don't think we were on the same page as far as what could be the benefits of the program."

"It would be better if the unions or the health benefit consulting company were involved with the mailing, or even the follow-up phone calls. Because we were outside source, and most union workers did not know who we were to begin with."

"I don't think we did a good job communicating what the value (of the program) could be, and what we need them to do to make it successful. Again, it was not a barrier for communication, maybe just the right thing not communicated."

Answer from Pharmacist 2:

"We were in contact with the health benefit consulting company throughout the whole process. The recruiting process was left to us. They gave us a list of names of people that would be eligible based on the criteria we set forth, and then me and some pharmacy students did the most of the calling".

"When we were getting poor response, we did have phone conversation with them. They were not surprised about that response from that population as much as we were. But there was no real help from that end, kind of 'you get what you get'. There was no way they were willing to come in to add motivation or incentive for people to join the program."

"I think they wanted to recruit more people, but they were not sure how to proceed. When we were talking about

incentive, their concern was 'how do you incent someone to be in the program and not incent those who don't qualify for the program'. Because it was like saying to someone 'Hello, you are healthy, and you are going to be punished because these people who are not healthy are costing us money and we are going to incent them'. "I believe the unions talked about the program in their union meetings. They talked about it, but there was no real campaign, I guess, that was able to sway the members' feeling towards participating. When we talked to people, it was mostly 'I see a doctor. I'm OK. I don't need to see you'. Kind of the response we got." "From the beginning toward the end of project, there was a change in staffing (at the health benefit consulting company). The person whom we were dealing with initially left the company. They did not really replace her, at least not right away, with anybody. So trying to communicate on things that she had done, nobody really knew what was going on. That was kind of a barrier. But for most part that happened, the project was wrapped up."
Question: Prior to or during the recruitment, how did you promote the service among union workers? (Addressing Gap 4)
Answer from the staff person at the consulting company: "We initially sent a letter out, explaining the program to the selected population. Not to all participants to the plan, just to those we had selected according to the ICD-9 codes. That was the really only promotion the health benefit consulting company did."

[a] See Appendix C for interview questions. Pharmacists were asked questions addressing Gaps 2 and 3. And the staff person at the health benefit consulting company was asked questions addressing Gaps 1 and 4.

Appendix A. Patient Inclusion and Exclusion Criteria

Patient inclusion criteria:

—Diagnosis of cardiovascular disease (e.g. diabetes, coronary heart disease, hypertension, and dyslipidemia)
—Age ≥ 18
—Taking four or more chronic oral medications

Patient exclusion criteria:

—Renal dysfunction (CrCl<30 ml/min) or dialysis patient
—Hepatic disorder (liver function test > 3 x normal)
—Significant cardiac complications (Stage IV HF)
—Legal blindness
—Dementia

Appendix B. Letter Sent to Eligible Union Workers

Date

Name
Address 1
Address 2
City, State, Zip

Dear Title Last Name:

Participating Body Names, in collaboration with *Health Benefit Consulting Company Name* and *Pharmacy Name*, is excited to announce a new health-related service available to eligible participants. This service is a pharmacist-directed cardiovascular risk and medication management program that includes group education and one-on-one medication management meetings with trained pharmacists.

Cardiovascular disease (CVD) continues to be a leading cause of death in the United States—claiming over 900,000 lives annually. Approximately 70 million Americans have some form of CVD—including hypertension, coronary heart disease, and high cholesterol. Coronary heart disease remains the leading cause of premature disability among working adults. In 2005, it is estimated that the costs of cardiovascular disease will approach $400 billion. This includes health care expenditures and loss of productivity from death and disability.

Several risk factors have been identified that increase the risk of CVD. Some risk factors cannot be changed (e.g. age, gender, and heredity); whereas others can be treated or controlled (e.g. smoking, elevated cholesterol and blood pressure, diabetes, physical inactivity, and obesity). Many of these risk factors often present early in life when preventative measures may make a large difference—before the onset of disease.

Participating Body Names believe that this new program can impact the health of the participants. The ultimate goal is to improve cardiovascular risks and promote healthier lifestyles, in a more timely and cost efficient manner, for those who participate in this six month program.

Those who sign up for the program will participate in three sixty-minute group educational programs that provide an overview on the following topics:

- Dietary Strategies and Lifestyle Changes
- Cardiovascular Risk Management Strategies
- Medication Management Strategies

These educational programs will occur during the months of September to November.

Following the group educational sessions, at pre-scheduled times at_____, participants will meet one-on-one with a clinical pharmacist to have their medications reviewed, risk factors monitored, and questions answered. These meetings will occur at the start of the program and then at 1 month and 4 month intervals. The information collected at these sessions will include risk factors, blood pressure, lipid (cholesterol) levels, blood glucose, and other pertinent clinical information. **All information is completely confidential.**

This program is available at no charge to you. The group educational and medication management sessions will be scheduled at a time and place convenient for the majority of participants.

Thank you for your timely response to this letter. If you would like to participate in this program, please return the attached form in the enclosed envelope.

If you have any questions, please call_____. We look forward to working with you to improve your risk for cardiovascular disease and to improve your quality of life.

Sincerely,

Appendix C. Interview Questions

For Pharmacists at the community pharmacy:
(1) Did you standardize the service provision such as group education and medication management? If yes, how? (Addressing Gap 2)
(2) How did you promote the service? (Addressing Gap 3)
(3) During the project, did you contact the health benefit consulting company about the limited number of patients recruited? If you did, what was their response? Was there any barrier in the communication with the health benefit consulting company? (Addressing Gap 3)
(4) What effects does the project have in your practice and your relationship with the health benefit consulting company? (General question)
(5) What lessons can be learned from the project? (General question)

For the Staff Person at the health benefit consulting company:
(1) How did you recruit union workers for the project? Why were not more patients recruited? (Addressing Gap 1)
(2) Prior to or during the recruitment, how did you promote the service among union workers? (Addressing Gap 4)
(3) What effects does the project have in your relationship with the unions and the community pharmacy? (General question)
(4) What lessons can be learned from the project? (General question)