



California Health Improvement Project (CHIP) Diabetes Care Program

Tarek Mahdi, MD, CMD, FAAFP
Riverside Family Physicians, Riverside



Problem Statement and Underlying Causes

In Riverside, nearly one out of five people live in poverty, and one out of thirteen have diabetes, both of which are higher than the state averages of one out of six and one out of fourteen, respectively. (City-Data). Diabetes continues to be an increasing cause of death in Riverside, (CDC, 2014) and poverty can limit the quality of care diabetics receive, including barriers to education and exercise.

Project Description

A subset of Riverside Family Physicians' Diabetic Population was identified using our EMR system, then encouraged to enroll in exercise and/or nutrition classes funded by a grant. Classes initially focused on closely managed and directed care by a provider. After several months, a shift in strategy was recommended and the Stanford Diabetes Self-Management was then utilized. Outcomes were measured utilizing EMR data and patient learning outcome surveys.

Goal and Objectives

Goal: To study and better understand cost-effective interventions leading to improved outcomes for a subgroup of RFP diabetics from May 2014 to May 2015.

Output-oriented Objective: Utilizing information from health plans, to construct a cohort of RFP's "underserved" low income diabetic population.

Outcome-oriented Objective: An initial cohort of 227 members was selected and put into a patient registry.

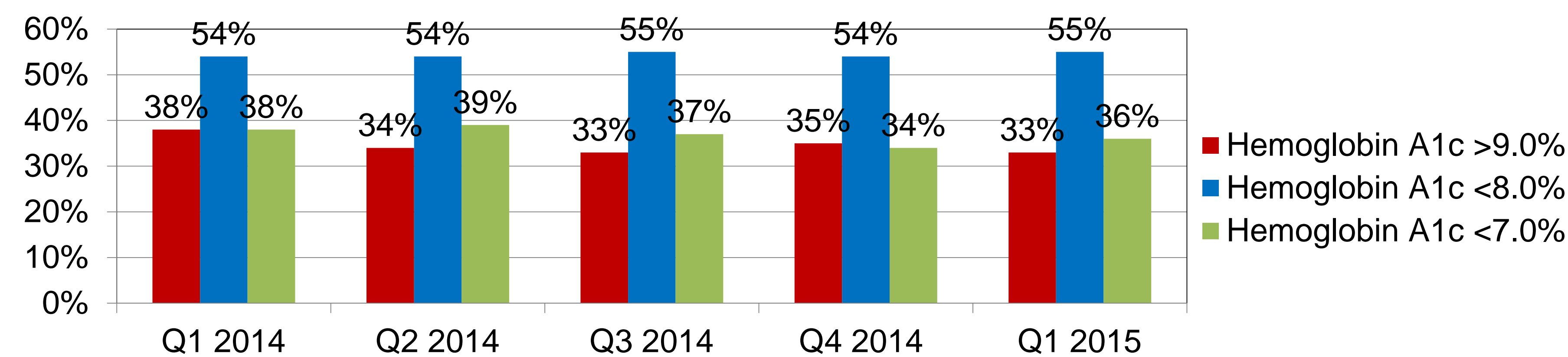
Output-oriented Objective: To monitor and evaluate clinical data utilizing EMR data from May 2014 to May 2015 for 100% of the cohort.

Outcome-oriented Objective: NCQA DRP 2015 metrics were chosen to measure progress of the cohort.

Output-oriented Objective: To identify exercise and nutrition classes that would help change participants behavior.

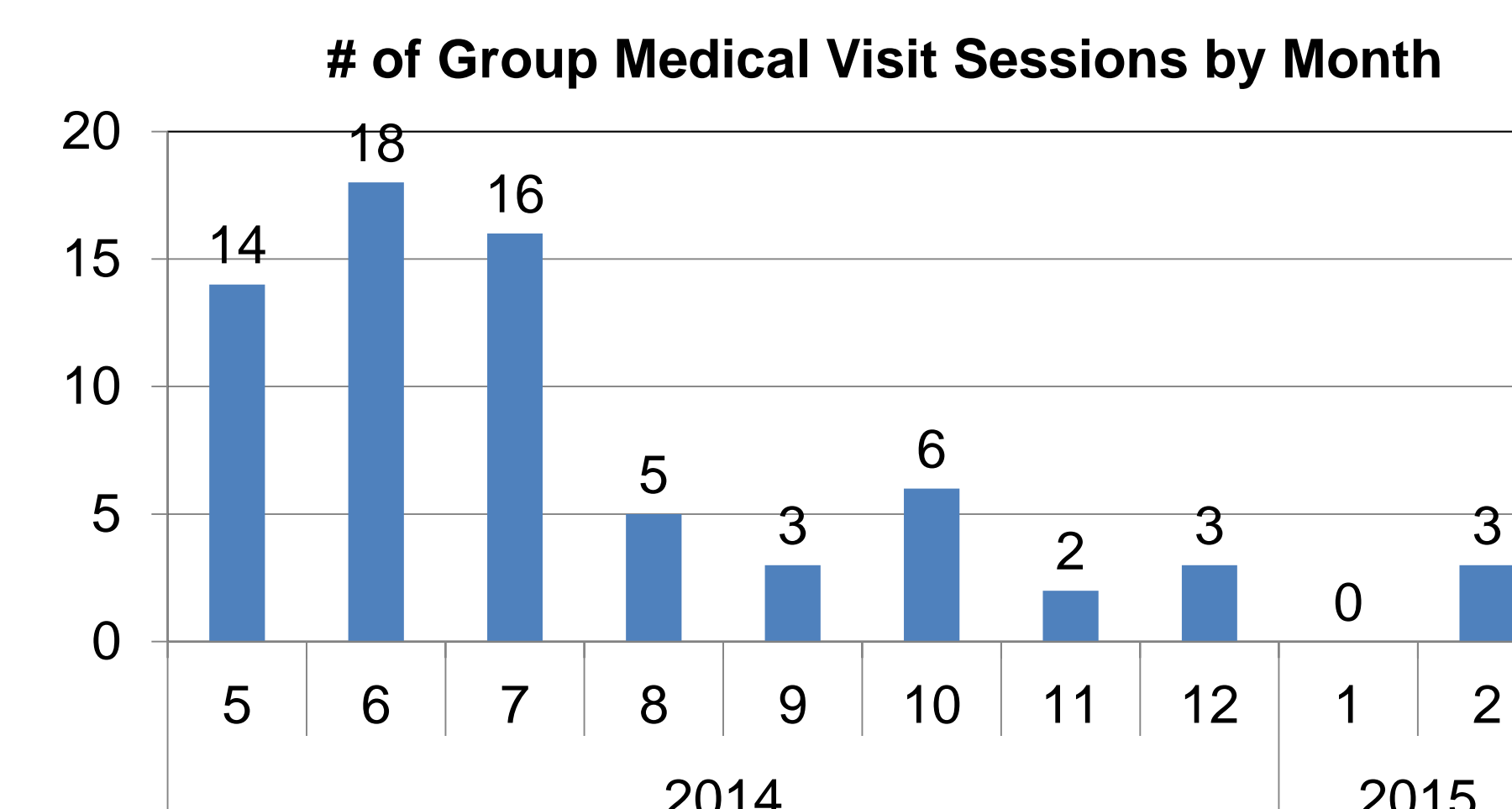
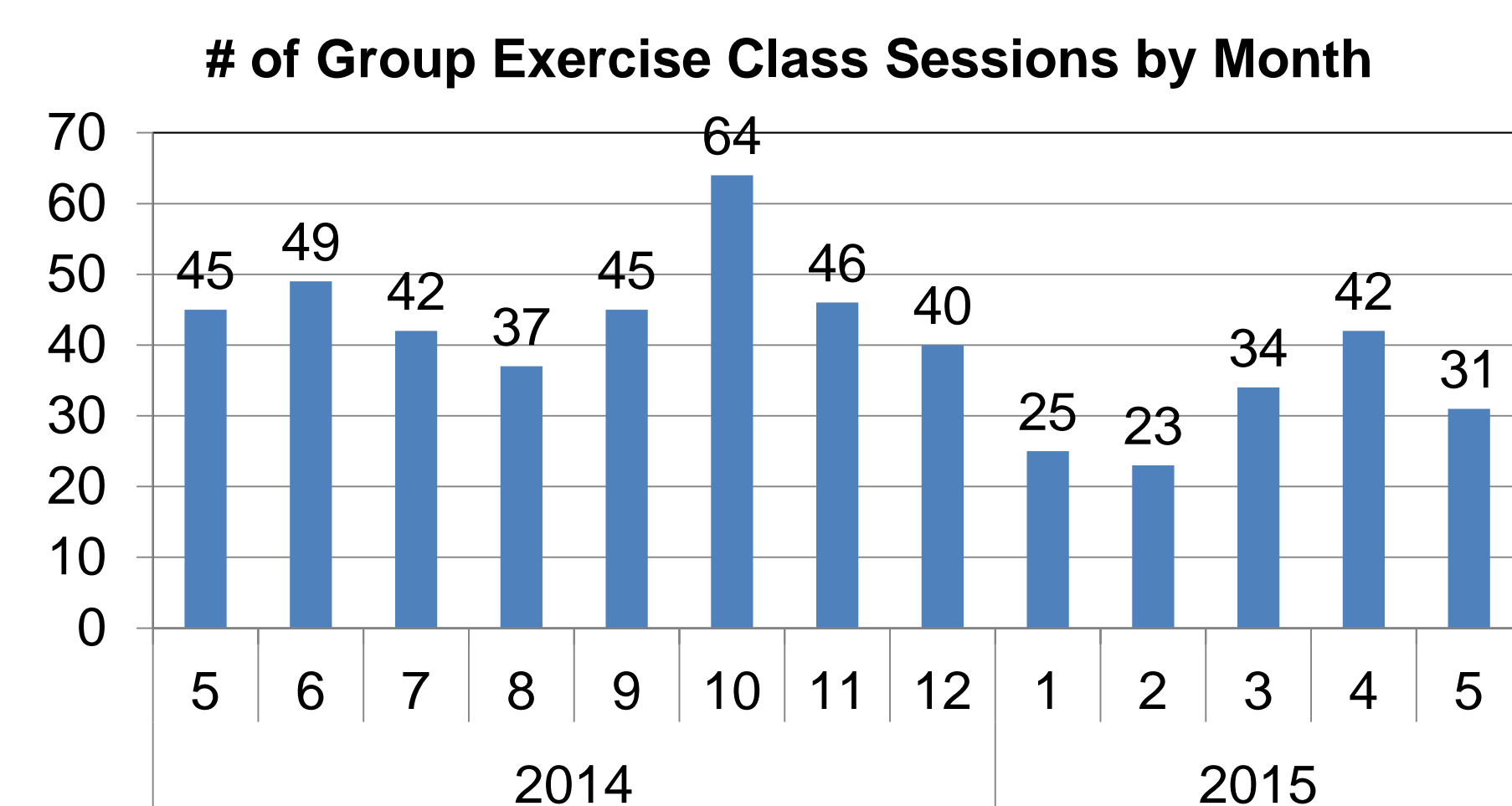
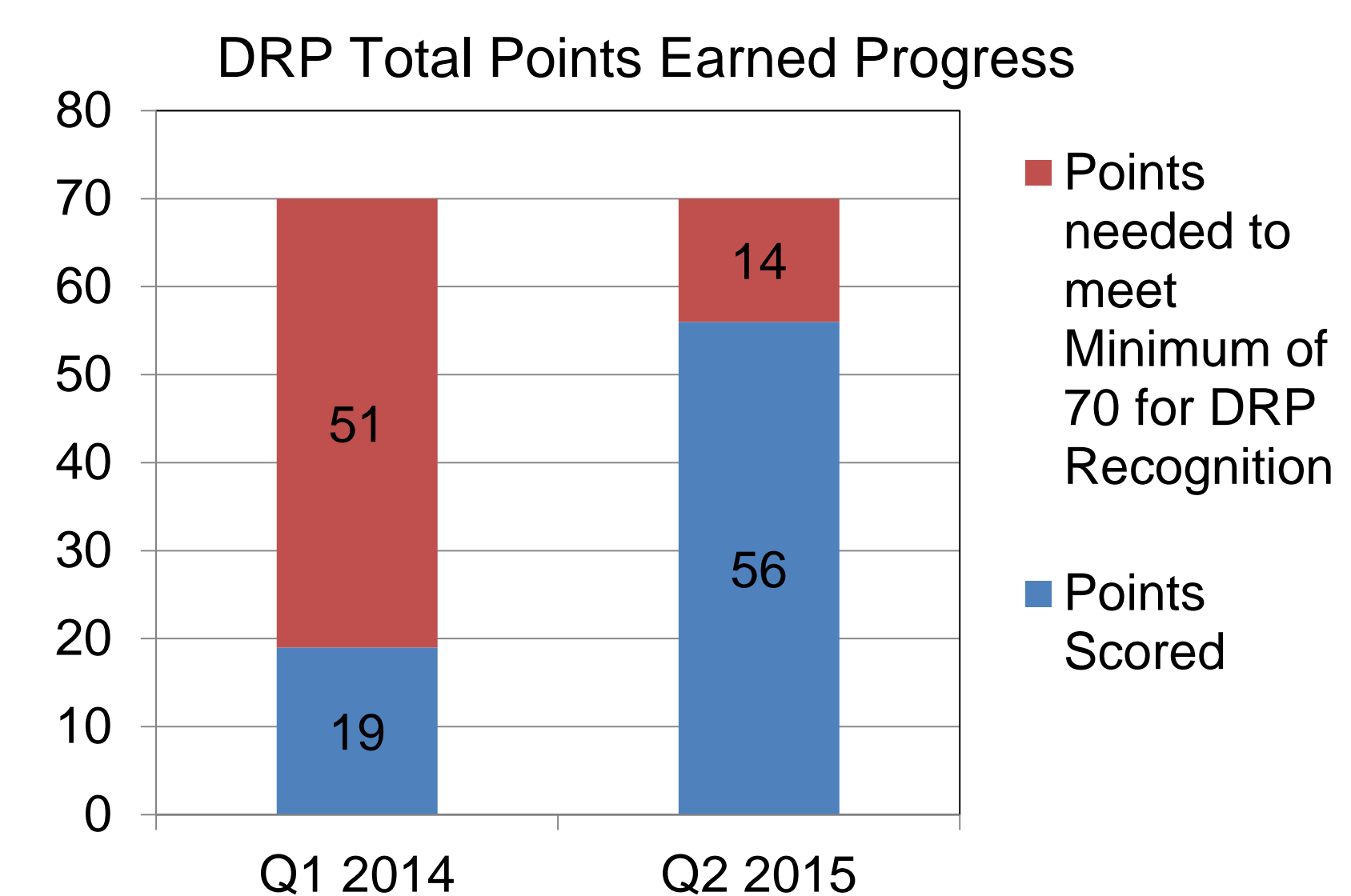
Outcome-oriented Objective: Analyzing the number of participants in exercise and nutrition classes, as well as the total costs involved.

Outputs & Outcomes



DRP Sampling*	RFP %	DRP Threshold	Points Earned / Total
Survey Date: 05/31/2015			
Hemoglobin A1c > 9.0%	25%	<= 15%	0/15
Hemoglobin A1c <8.0%	60%	>= 65%	0/10
Hemoglobin A1c <7.0%	36%	>= 40%	0/7
BP >= 140/90	28%	<= 35%	30/30
Eye Exam	16%	>= 60%	0/12
Tobacco Counseling	99%	>= 85%	12/12
Nephropathy	87%	>= 85%	7/7
Foot Exam	85%	>= 80%	7/7
		Points Earned	56
		Points Needed	14

*NCQA Approved



Sample questions taken from Stanford

	Grant Amount	Average # of days	
		Pre-Survey	Post-Survey
In the last week, how many days did you eat five or more servings of fruits or vegetables?	\$31,900	1.8	5.3
In the last week, how many days did you exercise for at least 30 minutes?	227	2.5	3.9
In the last week, how many days did you test your blood sugar?	18 months	3.6	5.4
In the last week, how many days did you take your diabetes medication as ordered by your doctor?	\$ 7.02	3.7	4.7
In the last week, how many days did you check your feet?	\$9.17	2.0	3.9

Outcomes Achieved

- Improved Diabetic wellness (as measured through Stanford model, NCQA DRP).
- Increased collaboration between patients, practice, health plans and specialists.
- Diabetes care became a central focus for the practice.
- Stanford Diabetic Model is potential way of measuring diabetic wellness by assessing their knowledge and correlating it to their lab results.
- Acquired a full time Statistician.
- Renewed grant funding for further two years.
- RFP spent an average of \$7.02 PMPM to enroll in the program, but had budgeted approximately \$9.17 PMPM. With better enrollment, future costs PMPM will decrease
- Embarking on the task of population management in a group practice.
- Multiple staff developing self-sustaining model for diabetic programs in the future.

Excerpts from Participants' Letters

- "We have learned so much about managing diabetes – from nutrition to relaxation techniques."
- "Learning the [appropriate] combination of protein, carbohydrates and fat has been very helpful. The stress management portion is also useful. I learned a lot doing action plans, with my monitoring as well as adding a minimum three days exercise a week."
- "I learned how many grams to eat with each meal. I learned what the numbers are suppose[d] to be on the glucometer before and after you eat. I learned some of the causes of what will make your [blood] sugars go up. I learned that you need to get a foot checkup yearly. I learned breathing exercises that make me go to sleep."
- "Over the last six weeks I have been reminded of the actions that I have to take to control my diabetes that I had seemed to lose contact with. I have learned that I must watch my food intake and reduce the servings size to regain control of my blood sugar."

Lessons Learned

- Future identification and utilization of community resources may be a way of encouraging member enrollment and retention.
- Promoting self-management and placing the burden of responsibility upon the participant is a more cost-effective way of sustaining a diabetes program.
- It was difficult to enroll and retain patients throughout the program's duration.
- Staff engagement resulted in achieving higher levels of motivation, involvement, higher self-esteem among staff, and greater confidence.

About My Organization

Riverside Family Physicians is dedicated to providing personalized, exceptional patient-centered primary health care and health awareness services promoting access, treatment, education and prevention to help people achieve and maintain health lives and restore wellness to maximum levels. RFP is committed to creating a learning environment for all staff. RFP is a leading health care provider and employer recognized for quality customer service, clinical excellence, comprehensive care, and responsiveness to community needs. RFP manages a very diverse group of patients. By payor type, RFP sees Medi-Cal, Medi-Cal managed care, Medicare, PPO/FFS, and traditional HMO managed care patients.

Contact Me

For more information, contact me:
Tarek Mahdi, MD, CMD, FAAFP
Riverside Family Physicians
951.781.6335
drtmahdi@famdoc.org



To learn more about CHCF go to:
<http://futurehealth.ucsf.edu/>