

# Treating Obesity and Preventing Costly Chronic Health Conditions

Data from AMGA Member Groups on Ongoing Weight Management Treatment Programs

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This article highlights a number of AMGA member facilities with established obesity treatment programs that achieve clinical and financial results surpassing others' in the field. With patients currently maintaining an average weight loss of 44 pounds, these AMGA member facilities are at the forefront of treating obesity and preventing costly chronic health conditions. Facilities such as Palo Alto Medical Foundation, Sharp Rees-Stealy Medical Group, Luther Midelfort Mayo Health System, Sansum Clinic, Alegant Health, and Quincy Medical Group have chosen to deliver the same intensive, evidence-based weight management program.

These facilities are at the forefront of treating obesity and preventing costly chronic health conditions.

A recent AMGA survey made it clear that members recognize the need for effective obesity treatment programs but few offer an evidence-based treatment program in their facility. Obesity is a challenging medical condition and, just like hypertension and diabetes, it needs a documented diagnosis and a prescribed treatment plan that is both proven and evidence-based.

## Outcome Data from AMGA Members

Data from AMGA member facilities that have implemented the HMR Program for Weight Management™ show an average weight loss of 44 pounds that has been maintained for 3 years. These results demonstrate best-in-field treatment including substantial reductions in all co-morbidities and medication use. Based on a study of 422 patients across 10 AMGA member groups, 74.2% have lost and are keeping off an average of 57 pounds, or 22% of initial body weight. While the international standard defining successful weight loss as 5%-10% of initial body weight certainly confers positive health benefits,<sup>1</sup> research indicates that greater weight loss provides even greater medical benefits. Additionally, numerous studies have demonstrated that losing more weight improves the amount of weight kept off over time.<sup>2</sup> Given the growing incidence of obesity across all groups in the U.S.,<sup>3</sup> most patients will require more substantial weight loss for maximum health benefits.

Table 1 reflects decreases in medical risk factors and reductions and/or elimination of medications for patients in this study of AMGA member facilities. Of medications reported at program inception, 34.5% were totally eliminated at follow-up. More specifically, 30.2% of patients eliminated cholesterol medications, 33% eliminated blood pressure medications, 50.8% eliminated oral diabetes drugs, and 29.4% eliminated insulin.

**TABLE 1**  
**Average Results: AMGA Facilities Delivering the HMR Program**

	A Study of 10 Programs, 422 Patients				
	Initial	Follow-up	Change		Medications Eliminated
Weight	248 lbs.	204 lbs.	↓ 44 lbs.		• 30.2% cholesterol medications eliminated
Total Cholesterol/HDL	3.93	3.54	↓ 9.90%		• 33.0% blood pressure medications eliminated
Triglycerides	149	116	↓ 22.10%		• 50.8% oral diabetes
Systolic BP	130	123	↓ 7 mmHg		• Various medications
Diastolic BP	79	75	↓ 4 mmHg		• 29.4% insulin eliminated
Fasting Blood Glucose	103	97	↓ 5.80%		

- 34.5% of medications reported initially were totally eliminated at follow-up. This is in addition to substantial decreases in medications.
- 74.2% are keeping off an average of 57 lbs. (22% of initial body weight).
- 90% of HMR patients have significant reductions in all medical risk factors.

### Weight Management Is Health Management

It is widely agreed that the obesity epidemic has fueled a diabetes epidemic. According to data released in January 2011 by the Centers for Disease Control and Prevention (CDC), 105 million Americans, nearly 45% of adults, now have pre-diabetes or diabetes.<sup>4</sup> Healthcare costs for a person with diabetes are 2.7 times greater than for a person without diabetes, and for those with complications, they are 4.7 times greater.<sup>5</sup> Over 90% of type 2 diabetes can be prevented with lifestyle changes and weight loss. Of patients who entered these AMGA member programs on diabetes medications (oral or insulin), 44% were completely off those medications at follow-up (many others had decreased medication dosages, which is not reflected in this article). Even more important in terms of preventing chronic disease is that 97.3% of those with pre-diabetes were medication-free at follow-up. One can conclude that this weight management program prevented the progression from pre-diabetes to diabetes for these patients.

### How did these AMGA member groups achieve these results?

Table 2 is an example of one AMGA facility, Palo Alto Medical Foundation, which has been treating patients through the HMR Program since 1989. These data reflect medical changes for program participants at an average follow-up of 2.5 years. Notably, 49% of all medications reported initially were totally eliminated at follow-up. Also eliminated were 56% of cholesterol medications, 42.4% of blood pressure medications, 50% of oral diabetes medications, and 100% of insulin. Furthermore, patients who entered with pre-diabetes lost an average of 61 pounds in the program and 100% were not on medications at the time of follow-up. This is a clear example of how significant weight loss, coupled with lifestyle changes, can help prevent costly and chronic health conditions such as type 2 diabetes. In fact, the most recent published study of HMR patients showed an average cost savings on medications ranging from \$952 for obese and \$1,883 for severely obese individuals in the

first year. Both groups experienced even greater savings each subsequent year, ranging from \$1,152 to \$2,064, respectively.<sup>6</sup>

“Palo Alto Medical Foundation is committed to preventing and treating obesity through a comprehensive array of safe, effective, affordable and high-quality services,” said Karen Handy, M.P.H., program director, Palo Alto Medical Foundation. “This program fits perfectly with our mission. We have found that not only do our patients lose and keep off a significant amount of weight, but other health improvements are equally as compelling with substantial reductions in medical risk factors and medications.”

### How AMGA Member Groups Achieve These Results

How did these AMGA member groups achieve these results? What sets these programs apart is that they all use an evidence-based treatment developed by HMR. The HMR Program includes a structured diet and behavioral component that teaches patients how to make realistic and sustainable lifestyle changes. The program focuses only on those defined behaviors that impact weight

**TABLE 2**

**Average Results: Palo Alto Medical Foundation (N = 76 Patients)**

	<b>Initial</b>	<b>Follow-up</b>	<b>Change</b>	<b>Medications Eliminated</b>
Weight	248 lbs.	195 lbs.	↓ 53 lbs.	• 56.0% cholesterol medications eliminated
Total Cholesterol/HDL	3.97	3.46	↓ 12.80%	• 42.4% blood pressure medications eliminated
Triglycerides	147	93	↓ 36.70%	• 50.0% oral diabetes
Systolic BP	135	124	↓ 11 mmHg	• Various medications
Diastolic BP	101	92	↓ 8 mmHg	• 100% insulin eliminated
Fasting Blood Glucose	101	92	↓ 8.90%	

- 49.2% of medications reported initially were totally eliminated at follow-up. This is in addition to substantial decreases in medications.
- 68.4% are keeping off an average of 57 lbs. (22% of initial body weight).
- 99% of HMR patients have significant reductions in all medical risk factors.

loss and weight loss maintenance, such as increased physical activity, increased vegetable and fruit intake, and the use of portion-controlled, low-calorie meal replacements. Having specific and measurable behaviors enables programs to collect ongoing patient data and contribute to a national data system. This, in turn, allows them to regularly evaluate their results against established benchmarks and continually improve patient outcomes.

**Ongoing Assessment and Evaluation**

The data system, managed by HMR, evaluates program performance monthly on 26 clinical, operational, and marketing variables. Clinic staff can review the performance of their program and establish goals to improve patient care. Marketing and management strategies are also explored to enhance overall efficiency and program effectiveness. Periodic audits are made available to update administrators and senior management. The reports include a data summary and action plan with goals and objectives for the following six months. This helps to ensure continued quality improvement, program growth, and financial viability.

“To be able to track outcomes as patients move through this program is critical,” said Louis Violi, M.D., medical director, Alegant Health Weight Management. “The benchmarks focus on variables that are highly predictive of patient success. They also provide a standard of comparison we all can use to monitor our patients’ progress in the program. Our team can implement strategies with our patients aimed at strengthening participation and improving compliance. In this way, we continually push to improve our patients’ chances of long-term success.”

Mark N. Jabro, M.D., medical director, Sharp Rees-Stealy Medical Group, emphasized the impact on patients’ quality of life: “Given today’s culture, making these types of lifestyle changes is seldom easy for our patients and the challenge of maintaining them for a lifetime never goes away. However, what is rewarding as a clinician is to see the immediate reductions in medications and health improvements that many of these patients are able to sustain well into the future.”

**Quality Patient Care Leads to Financial Viability**

A clinically effective program is also the key to financial viability. The better patients do, the greater the program revenues. This is because successful patients stay in the program longer to lose more weight, thereby generating more revenues. Better treatment outcomes also generate significantly more referrals from healthcare professionals and patients without the need for direct advertising.

Overall better patient care leads to greater profitability and program viability. For example, one clinic’s data showed a monthly attrition rate of 14.5%, a rate much higher than the HMR national average of 9.5%. If patients are not staying in the program, then they are not losing the expected amount of weight. Two of the variables that can affect the attrition rate are weekly attendance and compliance with the diet. By working to increase these two variables, this program was able to lower its attrition rate to the national average. For this program, this decrease in attrition increased revenues by \$225,000 annually and further improved patient outcomes.

According to Paul Jaconette, chief administrative officer and executive vice president, Sansum Clinic, “As a medical foundation, part of our mission is to provide health education, prevention, and treatment. Our weight management program is a key component of these services. We can provide significant results to patients and their treating physicians in a way that impacts quality of life and quality of care. In terms of the bottom line, even with the downturn in the general economy, we have been able to keep the program viable and actually grow. Our gross annual revenues from our weight management program exceed \$1.5 million, so we are pleased with the financial performance.”

### Summary

Obesity is a major driver of co-morbidities and high health care costs. An effective treatment program is the solution.

Weight management is health management. The number of Americans with three or more chronic illnesses has risen by 85% in the past decade. Most of this increase is due to increases in obesity and sedentary lifestyles.<sup>7</sup> Effective treatments are possible, as shown by the outcomes from the AMGA member facilities highlighted. These programs are providing a critical service to their community and patients. Medical risk factors can be

decreased, medication use eliminated or avoided, and overall health and quality of life improved.

## Weight management is health management.

Carol Lewis, executive director, operations, Quincy Medical Group, noted, “When we first explored launching a comprehensive obesity treatment program, we were looking for something that was based on research and data. This program focuses on measurable clinical and financial outcomes with an effective model that has been virtually turnkey. We didn’t have to reinvent the wheel.”

“You can’t argue with data and we have it,” commented David Usher, M.D., medical director, Luther Midelfort Mayo Clinic Health System. “Mayo Clinic recently did a study comparing our HMR patients to other patients in popular programs. Our patients lost an average of 41 pounds compared to those in other programs who gained 2 pounds.<sup>8</sup> It doesn’t surprise me that our patients have nothing but wonderful things to say about the program. They say it changes their life, giving them a set of skills to manage their health and well-being. I think people find it astounding still to think that a program can do so well and have the evidence to back it up.”

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