

# Engaging Quad/Graphics Employees in the Improvement of Their Health and Healthcare

*Raymond J. Zastrow, MD; Len Quadracci, MD*

**Abstract:** In an era when rising healthcare costs threaten the competitiveness of American businesses in an increasingly global marketplace, we describe Quad/Graphics on-site primary care (QuadMed) clinics tightly integrated with wellness, fitness, rehabilitation, and occupational medicine. We further describe the Lean You wellness program recently put in place to stem the rising burden of obesity. The Lean You program illustrates how an integrated employer and health provider system can become even more engaged in collaborative care with its employees. Financial and clinical data suggests that at Quad/Graphics-QuadMed, these full-service health service approaches are effective. **Key words:** *employee health service, occupational health*

**B**USINESS owners throughout the United States are increasingly voicing their frustration with the cost and quality of the healthcare they purchase on behalf of their employees. At the time of this writing, the long-term viability of one American manufacturing icon, General Motors, is in doubt, owing to the ever-escalating cost represented by employee and retiree healthcare benefits. Although this trend is only now reaching a crisis flashpoint, it has been simmering for at least a decade, during which US companies have been feeling the steadily worsening pressure of healthcare inflation.

Beginning 15 years ago, Quad/Graphics, headquartered in Southeastern Wisconsin, pioneered an approach to the on-site provision of primary care. The purpose of this article is to describe the QuadMed Model and provide specific data describing the Lean

You incentivized wellness program that invites Quad/Graphics employees to improve their health and healthcare.

## **WHY IS QUAD/GRAPHICS IN THE HEALTHCARE BUSINESS?**

In the late 1980s, the late Harry V. Quadracci, founder of Quad/Graphics, began to question the value of the healthcare he was purchasing for his employees. Healthcare costs were rising out of proportion to other overheads, and he had very little objective data to demonstrate the value of the services purchased. In 1991, he initiated QuadMed with a single physician provider. From its inception, QuadMed has focused on health and wellness and in integrating these into a primary care model that was untraditionally located on the campuses of the various Quad/Graphics printing plants.

Ever since, the motto for the employee-owners of Quad/Graphics has been "We'll keep you well; and by the way, if you get sick, we'll take care of that, too."

In addition to its 12,000 employees, Quad/Graphics, through its wholly owned subsidiary QuadMed, provides healthcare

---

*From the Departments of Family Practice (Dr Zastrow) and Internal Medicine (Dr Quadracci), QuadMed, West Allis, Wisc.*

*Corresponding author: Raymond J. Zastrow, MD, Departments of Family Practice, QuadMed, 555 S 108th St, West Allis, WI 53214 (e-mail: raymond.zastrow@quad-med.com).*

benefits for approximately twice that number of their dependents. The success of this arrangement has not gone unnoticed, especially after a 2005 front-page article in the *Wall Street Journal* (Fuhmans, 2005), and QuadMed has begun the process of diffusion of the model to other like-minded companies.

### **WHAT EXACTLY IS THE QUADMED MODEL?**

The QuadMed Model springs directly from the social contract that Quad/Graphics has with its employees. Growing as it did from a small family business, Quad/Graphics strives to maintain a culture of “family” throughout its many workplaces. Turnover is low and employee satisfaction is taken very seriously. Quad/Graphics is self-insured and the health-care benefit is structured in such a way that employees have an incentive to use the on-site clinics preferentially; typically, approximately 80% of Quad/Graphics employees and their dependents do so.

Goals for QuadMed include controlling costs by providing a full range of health-care services and enhancing the quality of care delivered by implementing best-practice guidelines and protocols. QuadMed seeks to improve patient access to care by providing convenient, high-quality facilities located at the worksite. The on-site clinics are large, open, modern, and very attractive. The QuadMed primary care model encompasses family practice, internal medicine, pediatrics, and obstetric/gynecologic services delivered on-site both by board-certified physicians and physician extenders.

QuadMed has its own full-service pharmacy tightly integrated to the clinics’ e-prescribing capability, with prescriptions shuttled to plants that do not yet have a pharmacist on-site. Selected specialties including dermatology; ear, nose, and throat; orthopedics; and general surgery are available on-site as well.

In addition to providing on-site primary care and selected specialty care, QuadMed has restructured the delivery of primary care such that providers receive salary, and are not paid based on “production.” The providers are pur-

posely unhurried, scheduled to see patients at a rate of 2 per hour. In this way, the primary focus, regardless of the presenting complaint, remains that of preventive health maintenance and the active promotion of wellness. For those patients who are diagnosed with a chronic condition, QuadMed actively engages disease state management to slow the progression of disease. Providers’ incentives are based on quality of services rendered, including customer satisfaction, adherence to guidelines, provision of preventive services, collegiality, and participation in governance.

For specialists not on site, a high-performance network of specialists has been carefully cultivated and is revisited on an ongoing basis. In addition, QuadMed has Alcohol and Other Drug Abuse and Employee Assistance Program functions integrated into the clinics. QuadMed also offers optometry and dental services in selected facilities. Quad/Graphics has developed an in-house third-party administration function as well. The in-house third-party administrative function is in close contact at all times with medical direction, and issues of coverage tend to be resolved quickly.

Patients with a potential occupational condition are encouraged to seek out the provider they feel most comfortable with for their potential workman’s comp related issue. The majority choose to use their primary provider at QuadMed. The Quad/Graphics philosophy regarding a “bad back” is that it does not matter if it developed at home while putting in the garden or lifting on the worksite—it still deserves appropriate care and attention, hence the focus on on-site rehabilitation. QuadMed consciously designed the adjacency of rehabilitation to fitness on-site to facilitate the seamless transition of patients from one discipline to the next as they return to the workforce.

### **HAS THE MODEL BEEN SUCCESSFUL?**

Performance metrics are in place to track both clinical and financial outcomes of care. QuadMed has collected data regarding average health-care costs for employees and finds that even when health-care costs are adjusted

**Table 1.** QuadMed quality of care analyses for September 2004\*

Clinic visit analysis	
Convenient location	1.6
Ease of access by phone	1.5
Wait in lobby	1.7
Wait in examination room	1.6
Time spent with provider	1.5
Adequacy of explanation	1.4
Technical skills of provider	1.6
Personal manner of provider	1.3
Overall visit	1.5

\*1 = excellent; 2 = very good; 3 = good; 4 = fair; 5 = poor

for our employees’ demographics and benefit design, the cost is consistently 17% to 20% below that which other comparable employers in the Midwest are paying. The patient satisfaction survey using Health Plan Employer Data and Information Set (HEDIS) measures rank consistently in the excellent to very good range with respect to convenience in location, ease of access by phone, waiting times, time spent face to face with the provider, adequacy of explanation, and the technical skills and personal manner of the provider. Other HEDIS measures of clinical outcomes demonstrate superior performance in clinical measures, including the provision of immunizations, cesarian section

deliveries, and hypertension management. Active disease state management programs, enabled to a very large extent by electronic medical records technology are in place for asthma and diabetes mellitus and demonstrate consistently superior results in both “process” measures as well as measures of clinical outcomes when benchmarked against our peers (Tables 1 and 2).

**ENGAGING EMPLOYEES AND DEPENDENTS IN THE IMPROVEMENT OF THEIR HEALTH AND HEALTHCARE: THE “LEAN YOU” PROGRAM**

Quad/Graphics’ goal is to improve the health of its employees whenever and wherever possible. Quad/Graphics understands that employees who are actively engaged in maintaining and improving their health will attain the best health outcomes.

Obesity is a common problem for Quad/Graphics employees. Overweight or obese employees, compared with those who are not, report higher costs of healthcare and time lost for work, more diseases and bothersome problems, more risky health habits, and less ability to manage problems. Clinical markers of disease control also tend to be worse (Table 3). Clearly, obesity is an important marker for problems that can have many adverse impacts for both the employer and employee.

**Table 2.** Comparison to guidelines and national averages (on NCQA\* measures)

	QuadMed, %	National, %
Acute myocardial infarction		
Lipid panel in the last year	98	80
LDL less than 130	81	62
On $\beta$ -blocker	100	94
Immunizations		
Age 2 up to date	98	68
Age 13 up to date	88	50
Cesarian section deliveries	12	26
Hypertension medication	92	40

\*NCQA indicates National Committee for Quality Assurance.

**Table 3.** Employees' self-report of factors associated with being overweight\*

	BMI <sup>†</sup> <25 (n = 592), %	BMI 25-30 (n = 608), %	BMI 30+ (n = 433), %
<b>Cost and healthcare utilization</b>			
Not fully functional while at work <sup>‡</sup>	8	9	11
Any days home with illness <sup>§</sup>	13	14	21
Any days in hospital <sup>  </sup>	4	5	7
Taking 3 or more medicines a day	6	7	17
<b>Disease and bothersome problems</b>			
Hypertension	6	10	24
Diabetes	2	2	5
Moderate or severe pain	4	6	9
Often or always emotional problems	4	4	8
Limited physical function	1	2	5
<b>Health habits</b>			
Not eating well or avoiding general risks	9	17	36
Smoking	13	16	17
Told to cut back on alcohol	7	11	12
Not exercising regularly	36	48	68
<b>Self-care ability</b>			
Not confident to manage health problems	35	40	55
<b>Clinical markers</b>			
Last blood pressure more than 150 (If diabetic) Blood glucose levels generally <i>not</i> 80-150	1 14	4 29	6 65
Last cholesterol level >200	5	15	15

\*Data are from www.HowsYourHealth.org.

<sup>†</sup>BMI indicates body mass index.

<sup>‡</sup>In 2 weeks.

<sup>§</sup>In 3 months.

<sup>||</sup>In 1 year.

Recognizing that obesity is a prevalent condition with important adverse consequences, QuadMed sought to undertake a program to provide incentives to QuadGraphic employees to reduce their body mass index (BMI) to healthier levels.

The first step was to document the extent of the problem. From our third-party administration function we determined that, not surprisingly, the costs incurred by obese patients was directly proportional to the amount of obesity present as measured by the BMI. Initiated in pilot fashion in 2004, the Lean You program was rolled out to all Quad/Graphics employees in 2005 and expanded to employees' spouses in 2006. In addition to weight

loss, the program focuses on achieving milestones in smoking cessation, reaching goal low-density lipoprotein (LDL) level, and early identification and management of hypertension and diabetes. Any additional preventive health screening specific to the individual is also addressed at the screening visit, such as mammography, prostate-specific antigen, colonoscopy, etc.

The enrollees are subsequently oriented to the fitness center and, as part of the program, log in at least 3 sessions of exercise a week either at the fitness center or off-site but document their exercise on their personal Web page. Lean You enrollees who meet the milestones are eligible to receive a check at the

end of the year for \$250 applied against their out-of-pocket healthcare expenditures (which keeps the amount received pretax) and are entered in a drawing for a Disney World trip for the entire family. It should be emphasized that employees who already meet the Lean You criteria at the time of enrollment are eligible to receive awards—not merely those who might benefit from weight loss. (This broad perspective makes sense because persons with “good” BMIs may have problems, poor health habits, or insufficient confidence to manage health issues [Table 3])

Of 10,500 eligible employees, 22% enrolled in the first year and 24% of these completed the program and were eligible for awards. Our experience to date indicates that the Lean You program alone will not engage all employees and that those who are obese do not participate more often than those who are not obese. However, through this and other initiatives, QuadMed is becoming more effective in addressing “what matters” to employees and dependents regardless of their BMI.

As time passes, “Lean” and “Non-Lean” employees will see how engagement in QuadMed programs is of real benefit to them. For example, during the process of performing the enrollment physical evaluations for Lean You, QuadMed providers uncovered 1 colon cancer (probable cure), 2 breast cancers (probable cures), and 1 renal cancer (hopeful cure). In addition, 86 enrollees with hyperlipidemia (LDL >160), 18 with hypertension (systolic BP >150), and 16 potential diabetics (glucose >150) were uncovered. In the first year of operation, Lean You cost the Quad/Graphics corporation \$240,000 above and beyond its usual healthcare expenditure, which was broken out as follows: administration, \$35,000; support/professional staff time, \$45,000; supplies, communication, and promotion, \$30,000; and awards (incentive), \$130,900. If one uses a conservative estimate

of \$550,000 saved from the early detection of each cancer, based entirely on the case finding of the 4 cancers, Lean You in its first year of operation already demonstrated a positive financial return to Quad/Graphics of \$1,959,100.

## CONCLUSION AND FUTURE PLANS

The QuadMed model integrates under one roof preventive care and wellness, occupational health services, and direct contracting with a narrow network of high-performing, high-quality, cost-effective specialists. Workman’s compensation is integrated into primary care services on-site, supported by robust information systems that provide measurable outcomes of success, both clinical and financial.

As part of its “Lean You” program, QuadMed is engaging its employees in the “production” of good, collaborative care. As QuadMed moves into the production of collaborative care, it is learning that

- It will need to continuously test methods to increase employees’ participation. We believe that incentives work well over time in a setting where the employer and the healthcare system create seamless, “user-friendly” ways to meet the employee “where they live.”
- It must make sure that “what matters” to the employee is central to any plan for effective self-care. For example, QuadMed plans to fully exploit information technology by facilitating employees’ access to care and information tailored to their needs via an Internet-based patient portal.
- It must be prepared to continuously assess, respond to, and support a broad spectrum of issues and concerns of employees at the worksite, in the clinic, or at home.

---

## REFERENCE

- Fuhrmans, V. (2005, February 11). One cure for high health costs: In-house clinics. *Wall Street Journal*, CCXLV(30), 1.