

Cost and Reimbursement as Determinants of the Quality of Diabetes Care:

3. Reimbursement Determinants

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Earlier articles in this series have noted that diabetes care in the United States involves the evolution of more and more complex tasks for less and less reimbursement per task. At the same time, there has been an appropriate movement to demand increased provider adherence to standards or guidelines to improve the quality of care delivery. These guidelines have further increased the complexity of care delivery.

When these trends are analyzed from a business perspective, one must ask whether these increasing demands for service for decreasing reimbursement are undermining their own success. This consideration of the delivery of diabetes care strictly from a business perspective suggests that the current system actually rewards less-excellent providers and penalizes more-excellent ones. This article will consider whether that business situation actually exists and, if so, what remedies may be implemented to alter the situation.

Current Costs Versus Revenue for Diabetes Care

The present climate represents a difficult economic environment for the clinical practice of diabetes. As shown in Table 1, the profit margin for rendering quality diabetes care on an ongoing basis is very narrow.

These costs can increase with a variety of factors, many listed in the two earlier articles of this series.^{1,2} Common cost increments include missed appointments; costs of handling forms and documentation, such as forms from mail-order providers of diabetes supplies; and

excessive patient utilization of services. Costs also increase with the complexity of clinical problems. The more diagnoses, and the more complicated the clinical situation, the greater the cost of service will be.

Revenues are fixed with the level of service that may be documented for each visit and justified by the acuity and complexity of the clinical situation and codable diagnoses. For follow-up outpatient diabetes care, rates of payment vary from ~\$17 to \$50 per visit. Currently, there is a proposal before Congress to further reduce Medicare reimbursement by 5.4%.

Obviously, the more complex the clinical problem set, and the more documentation of billable modalities of service, the greater the level of reimbursement will be. However, there are limits to this formulation. Many insurers balk at paying for high levels of service. They may demand detailed documentation before paying for high levels of service, or they may attempt to “downcode” the bill—justify payment at a lower level of service. In addition, many insurers, including Medicare, audit the frequency with which individual providers bill at a high level of service (Levels 4 and 5). Providers who “fall out” by computer

Table 1. Costs for Outpatient Follow-up Diabetes Care Visits*

Item	Estimated cost** (dollars)
Physician Time (15 min)	18.00
Nurse Time (10 min)	3.85
Other staff time (10 min)	1.54
Supplies, including those for fingerstick glucose readings	1.20
Rent and overhead	4.33
Compliance with Health Employer Data and Information Set guidelines	1.00
Patient educator***	2.71
Malpractice and liability insurance	1.00
Total cost	34.63
Total revenue	22.00 to 50.00

*Estimates are based on costs in Columbus, Ga., and are set for a 15-min follow-up visit. Estimates for other localities will vary.

**Physician time is based in an annual calculated hourly basis of 2,080 hours per year for an experienced physician earning \$150,000 per year. Nurse time is based on an annual compensation of \$40,000. Estimates include fringe benefit costs. The apparent excess of staff and health professional time noted over the 15-min visit period accounts for time spent in preparing for the visit of the patient and time spent in follow-up efforts after the visit is over.

***Estimates for time spent by nurse educator in *supporting the care process* are in addition to estimates for time and effort by other staff members.

profiling of the frequency of service face the risk of chart audits. Thus, for most encounters, revenue will be paid at a low rate of service, narrowing the margin of profit.

Consequences of Adverse Cost/Reimbursement Ratios

At present, there are only a few direct, quantitative studies of the possible consequences of these fiscal patterns in diabetes care and in all health care. However, there are important suggestions in care trends to raise questions about their possible importance. A recent study³ suggests little progress in improving rates of delivery of specific care modalities to diabetic people. It also suggests that minorities fare less well than Caucasians in receiving this care.

These gaps may be fiscally based, at least in part. A large study from Texas⁴ suggested that gaps in the quality of diabetes care in South Texas reflected practical obstacles in the delivery of care—especially financial issues—more than a lack of intellectual recognition and understanding of existing guidelines. Studies in ophthalmology and orthopedic care suggest that reductions in fee schedules are associated with a reduction in physician services.⁵ A study of Texas physicians⁶ found that low reimbursement rates for childhood immunization reduced adherence to guidelines for immunization. And one study of patterns of care of older patients with diabetes⁷ demonstrated that general physicians use ophthalmology examination, lipid screening, and HbA_{1c} determination less often than specialists do. To some degree, the narrowing of reimbursement patterns may discourage primary physicians from attending to the complex needs of older diabetic patients.

Cost issues may have a greater effect on less educated and less affluent patients. A study of preventable hospitalizations among older Americans⁸ found that being college educated and affluent was associated with reduced rates of hospital admissions. Another study of

urban primary care physicians⁹ found that the majority did not participate in Medicaid at all, or restricted acceptance of Medicaid patients in New York. These sorts of cost issues would be expected to affect diabetic patients.

Possible Remedies

Insurers, managed care organizations, and voluntary health organizations are all concerned about improving the quality of diabetes care. Yet in all their discussions and efforts, none of these concerns has focused on fiscal issues related to provider costs versus reimbursements. Increases in organizational requirements for care in the face of declining reimbursement patterns may affect complex care such as that needed for diabetes more than less complex care required for other conditions. Evidence in the literature suggests that these financial obstacles do affect the delivery and quality of diabetes care.

Until now, the pattern of increasing demand for services in the face of declining revenue for those services represents, in a business sense, a shifting of risk from the payors to the providers. Payors believe the quality of diabetes care may be improved by demanding more as a condition to providers of participating at all while reducing the financial support for what they require from providers. That there may be limits to the success of this strategy are suggested by studies such as the analyses cited above of diabetes care patterns in South Texas and participation in Medicaid in New York. In fact, limitations imposed by adverse reimbursement structures may become a primary limitation to the delivery of effective care. The present model may reward those who deliver the least care and punish those who provide the best care.

Therefore, alternate models of reimbursement may benefit our national picture of diabetes care. One model may provide increasing levels of reimbursement based on two functions: 1) the assumption of responsibility for the most

complex patients who represent the greatest risk for resource utilization and cost; and 2) the achievement of outcomes that fulfill nationally accepted guidelines. This sort of model will reward providers who are willing to assume the greater risk of caring for complex diabetic patients and who are willing to provide patients with the highest quality of care.

Of course, other considerations may be suggested to alter the current pattern of care. However, unless some alteration in care patterns are implemented, the sickest, most complicated, and most socially disadvantaged patients with diabetes may suffer more and more with our current care trends.

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