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Financial Sustainability in Transplant Programs

Ian R. Jamieson, Paul Lipori, and Richard J. Howard

Expanded patient and donor selection criteria and changes in donor allocation systems are likely to increase the number of high-cost cases in transplantation. A careful managed care contracting strategy must be employed to counter the potential huge losses of such cases. Three broad categories of financial information must be combined to determine a contracting strategy that will provide financial sustainability: determination of price, performance benchmarks, and management strategies.

Introduction

Transplantation is unique in the field of health care finance because it is high cost and low volume, and the timing of transplant procedures is unpredictable. Competition is also different because it is on a regional and national basis. Only a handful of transplant centers have the experience, volume, and a cost-based accounting system to use financial information in a meaningful way. The Shands Transplant Center at the University of Florida (Shands/UF) is fortunate to be one of these centers. Shands/UF uses this information to direct a contracting strategy that guards against the financial impact of the extremely high-cost catastrophic case. In doing so, other advantages have been realized.

Financial information can be classified into 3 broad categories:

1. determination of price,
2. performance benchmarks, and
3. management strategies.

Determination of Price

The 1st category—determination of price—is required for managed care contracting and is traditionally divided into 5 phases:

- Phase 1: patient screening and evaluation,
- Phase 2: care for the patient while listed,
- Phase 3: organ procurement,
- Phase 4: transplant episode, and

- Phase 5: posttransplant care.¹

Each phase can be reimbursed a number of ways—*discount-off-charges*, a *case rate* (a single fixed price for facility only), or a *global rate* (a single fixed price for both facility and physician services). When all 5 phases are grouped together as a single amount, the term *global case rate* is used. Historically, transplant centers placed less emphasis on rational, sustainable pricing and more emphasis on getting contracts. Centers kept score by their number of contracts and, to be competitive, felt obliged to accept a global case rate. Managed care insurers were happy to offer this because it significantly minimized their risk.

Ironically, the success of transplantation will increase the number of high-risk patients. Patient acuity before transplant is increasing, and transplant programs have become aggressive in patient and donor organ selection to meet the needs of their patients and to maintain or increase volume. Changes in the allocation system, especially liver, will also promote the transplantation of sicker patients. The price tag of this is staggering—high-cost cases often cost 400% more than the median. Nor can these cases be hidden behind transplant volume. Compared to other surgical procedures, the number of transplant cases will always be small, the severity of patients' illnesses and lengths of stay variable, and the probability of a high-cost case relatively high. Under a global case rate contract, a single high-cost case can easily erase the margin made on all other cases.

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A specific contracting methodology for each transplant phase is one hedge against the high-cost case. Global rates should be limited to Phase 1, Phase 4, and procedural "products" such as ventricular assist devices for heart transplant patients, and in living donor transplantation (where the donor and recipient are typically healthy and the transplant can be planned more carefully). Pretransplant care while a patient is on the list and immediate and long-term posttransplant care lend themselves to discount pricing. Organ procurement (Phase 3) is generally contracted as a cost pass-through. Adequate reimbursement for high-cost cases must be included in the contract. Discount-off-charge pricing after an outlier length of stay has been triggered offers the best security. Contracts that offer fixed daily outlier payments provide only a false sense of security.

Centers must also understand the reimbursement methodology. Global or case rates are a fixed amount of reimbursement for a transplant phase. The payment is the same regardless of length of stay (LOS). Consequently, centers can benefit from savings associated with decreases in LOS. Savings are not linear; reducing LOS from 10 to 9 days does not reduce costs by 10%, as the last day of an episode of care is usually the least costly. Indeed, our internal studies at Shands/UF have shown that more than two-thirds of Phase 4 costs occur in the first 24 h. This awareness of where costs are and the ramifications of high-cost cases have trimmed the variability at Shands/UF. Such savings in the global or case rate phases directly benefit the bottom line.

Another issue is the use of a marginal pricing strategy. Should a center accept a contract that provides additional patients but pays at a much lower rate than average? The existing patient base covers the center's fixed cost whether the contract is accepted or rejected, so these costs are not relevant to the decision. If the reimbursement is more than the direct variable cost of each additional patient, then an argument can be made to accept the contract. The downside is the long-term implications associated with this decision. The smart payor who negotiates such a contract will flood the center with patients. As the center's volume increases, revenues will not cover the increasing program costs such as staffing and space. Compounding this will be pay-

ors who will learn about the contract and will want to renegotiate their contracts with the same, or even greater, discount. Many health care administrators have lost their jobs by accepting marginal pricing contracts.

Performance Benchmarks

There are a number of transplant-specific financial performance benchmarks available to assist transplant professionals. Such reports aid not only the determination of price but also management strategies. Sources include the Milliman & Robertson Transplant Research Report,² the Center for Health Industry Performance Studies Clinical Assessment profiles (cost, charge, and reimbursement data for Medicare patients),³ the University HealthSystem Consortium Managed Care Contracting Database,⁴ and financial comparators available through the Agency of Health Care Administration. Reden & Anders, Ltd.,⁵ recently released a well-designed report of service utilization and claim costs for transplant patients from more than 200 million months of commercial and managed care members. Charges, costs, and reimbursement data are detailed for all providers associated with transplant care (facilities, physicians, pharmacies).

Management Strategies

Completing the 3 broad categories of financial information is management strategy. Transplant professionals are interested in how costs are affected by changes in the organization's activity. This relationship between cost and activity—called *cost behavior*—is used in decision making, planning, and control. Cost control depends on financial and clinical benchmarking. Administrators have limited control over major expense items such as organ acquisition. Staffing, marketing, travel, and data collection, however, are all controllable expenses that are subject to the strategic direction and financial health of the facility.

Program expansion, establishing a new transplant program, or purchasing a sophisticated database must be justified by clinical necessity and adequate reimbursement. A number of tools can be used to assist this decision making. Shands/UF uses a model that predicts revenue over expenses based on the current payer mix of listed patients. This model

uses the previous year's reimbursement rate for each payer type in each transplant phase. Planning is then based on transplant volume and payer mix. Results from this type of planning can direct the strategic intent of a program, whether it is to make a million dollars a year by transplanting paying patients only, to serve all the state's citizens and break-even, or to become the largest transplant program through aggressive, below-cost contracting.

Conclusion

Despite increasing financial pressures in the healthcare environment, the demand for organ transplantation continues on an upward trend. Transplant programs are attempting to meet the needs of their patients by becoming more aggressive in their patient selection and use of marginal donors. This further increases the number of high-cost cases and level of unpredictability. To counter this, programs must apply a contracting strategy based on price, benchmarking, and strategic management tools to achieve financial sustainability.

REFERENCES

1. Evans RW. The socioeconomics of organ transplantation. *Transplant Proc* 1985;17(Suppl 4):129-36.
2. Hauboldt RH. Cost implications of human organ and tissue transplantation, an update: 1999. *Milliman & Robertson, Inc.; 1999*.
3. The Center for Healthcare Industry Performance Studies (CHIPS), *Clinical Assessment Profile; 1999*.
4. Managed care contracting database products. Comparative reports 2000; Packaged pricing model 2000. *University HealthSystem Consortium; 2000*.
5. Reden & Anders, Ltd. *Transplant Analysis*. April 5, 2001.