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Why is the laboratory an afterthought for managed care organizations?

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Market forces have dramatically influenced the environment in which healthcare is delivered, but these changes do not need to be interpreted negatively by community laboratorians. Only total vertical integration of laboratory medicine can control episode-of-care cost. Opportunities also exist for horizontal integration with community partners to provide geographical coverage and to compete favorably for managed care contracts. Lowering cost through "economies of scale" may apply to the procurement of supplies and equipment, but the delivery of services must be considered in the context of their overall effect on episode-of-care cost. Laboratory services may make up 5% of a hospital's budget but leverage 60–70% of all critical decision-making such as admittance, discharge, and medication. Laboratory outreach can help the medical center's financial stability by: (*a*) providing tests and service that can reduce or avoid a hospital stay; (*b*) using the additional volume of testing to distribute existing fixed costs and lower unit cost; and (*c*) adding revenue as a direct contribution to margin. To successfully compete for contracted managed care services, the laboratory must network with other providers to demonstrate comprehensive access and capacity. Community hospital laboratories perform 50% of all laboratory tests in this country and have adequate excess capacity to fulfill the remaining community needs.

INDEXING TERMS: episode-of-care costs • economies of integration • risk sharing • commodity brokers • value

Over the last several years I have traveled throughout the country to meet with laboratorians, hospital chief executive officers (CEOs), and administrators, as well as health plan executives. I have learned from those conversations much about what is right and what is wrong with our systems today. These observations are, of course, anecdotal, and the plural of anecdote is not data. It remains for all of us to develop the hypotheses and protocols and to document the true value of laboratory medicine in the evolving managed care environment. However, those of us who manage community-based laboratories need to select an appropriate course of action and move decisively now to survive long enough to collect these data.

The Evolution of Managed Care

It would be wonderful if outcomes management, continuous quality improvement, measurable value, and true patient satisfaction were paramount in everyone's mind, for that is what we as healthcare providers wish to deliver and what well-informed managed care organizations want. Unfortunately, many proprietary managed care plans and purchasers concern themselves only with price. This is particularly evident in the California market today.

The definition of managed care for Mayo Medical Center is as follows: appropriate care, delivered at an appropriate time, in the appropriate place, cost-effectively, with financial incentives to the patient, and with management controls. The same definition presented by a managed care plan is very often sprinkled throughout with the words "lower price." As healthcare providers, should we charge lower prices or, instead, deliver care at lower cost? "Managed care" is everything except that which is *not* managed care. In the alphabet soup of acronyms for various plans available today, the important distinction is between providers of cost-effective care and mere brokers of services purchased at lowest price.

In our experience, laboratory costs contribute <5% of total benefit costs for managed care. This, in a nutshell, is why laboratories are an afterthought for managed care—they are too small a piece of the pie to become a priority. At the same time, we haven't been at the forefront in the debate on healthcare reform. Instead, we allow the laboratory to be characterized in the media as a source of fraudulent revenue. We know that, although the laboratory represents a small percentage of medical center costs, it leverages 60–70% of all critical decisions, e.g., admission, discharge, and drug therapy. The most important costs to consider in the laboratory are related to total episode of care and the effects of unnecessary or inappropriate testing on subsequent procedures.

Investigators seeking the source of an illicit transaction follow the money. We must do the same if we are to understand the current incentives in the design of managed care plans. All areas of the country are in various stages of

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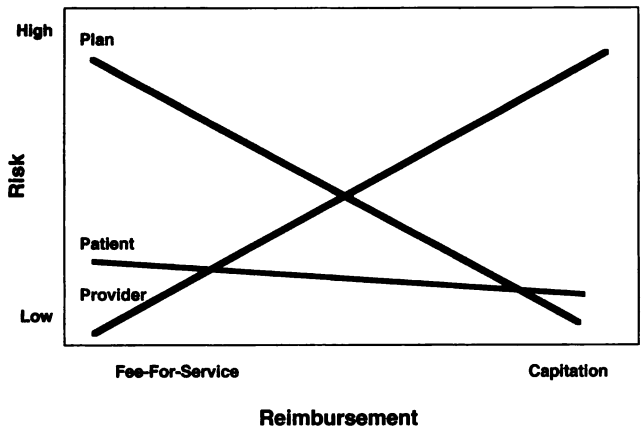

Fig. 1. When risk is transferred to providers, the health plan and patients bear little or no risk (full capitation); moderate solutions should be devised with risk shared by all who influence utilization.

movement from traditional fee-for-service to "at risk" compensation (capitation, withholds), whereby insurers hope to secure their profit margin while passing risk to providers (Fig. 1). The potential profit may not be as large as in the past, but the risk is gone. Currently, those who broker healthcare take a significant percentage of the healthcare dollar. These profit margins will be difficult to sustain in a highly competitive market. Instead, the health plans try to secure a guaranteed profit of 8–9% while transferring risk to providers. In Minneapolis and St. Paul, a stage-four, or most highly evolved, market, the subscription rates for managed care products have dropped from $135 per member per month to $70. In this environment, shifting risk to the provider allows the insurer to eliminate administrative costs (e.g., an actuary to calculate risk); instead, the marketing staff simply needs to identify the current competitive rate necessary to capture market share *[1]*. Market share is, after all, the primary goal of the health plan. I recently heard a provider contract negotiator in Arkansas lament that if all the covered lives projected in the business plans of Little Rock insurers were summed, the state would need 50 million inhabitants! To meet financial objectives, the health plan must shift provider compensation from high-risk fee for service to low-risk capitation. Because providers take on the former role of the insurer and bear substantial risk, they must be able to control risk by managing the physician's use of important tools, such as the laboratory, through disease management strategies.

To limit demand for unnecessary services, patients must share the risk. In a capitated environment, the health plan bears no risk, the provider bears nearly all risk, and, curiously, the patient incurs less risk, because the market has moved from a typical 20% copayment in a fee-for-service environment to a $5 or $10 copayment in a capitated environment. Thus, even though our annual price tag of $800 billion plus for healthcare is ever increasing, the out-of-pocket expense per individual has actually decreased. We incur less personal expense for healthcare, but wages fall and product costs rise because of rising employer healthcare costs.

Commodity vs Service

The healthcare broker looks at all the pieces of the pie and says, "If we get the lowest bid on each piece, we can assemble these commodities to obtain low-cost medicine." Providers intuitively know that laboratory services are not a mere commodity. (In a commodity market, value is proportional to the inverse of price. If you obtain a commodity at a lower price, the value increases.) Although many health plan executives understand the importance of vertical integration and control of episode-of-care costs, negotiations for laboratory services often take place with lower-echelon contract officers who lack a broad perspective and have parochial concerns about ratcheting down their departmental costs.

We in the laboratory provide a service that includes consultative support and information management. In a service industry, value is proportional to quality divided by cost. If we maintain quality and lower costs, we have increased value. If we increase quality at the same cost, we have increased value. We can also introduce time as an element of cost. Our Medical Director, Robert Kisabeth, suggests that the saying "time is money" diminishes the value of time. Time is first of all *time*. Time has its own value. As related to the laboratory, turnaround time is crucial to decision making, resulting in earlier discharge or diagnosis and speeding the patient through the system. The laboratory must be a "gatekeeper," in the popular phrase for triaging patients in managed care—but we spell it "gait." The laboratory can contribute by increasing the pace of patients through the system.

Economies of Scale vs Economies of Integration

In the past, we derived savings from simple economies of scale. A higher volume of testing, consolidated at a central site, increased efficiency and lowered unit costs. Those economies of scale have been exhausted. Further efforts to remove services from the medical center can only diminish service and adversely affect episode-of-care costs. If laboratory testing decreases, as it must in some areas, there will be even less opportunity for economies of scale. But there remain tremendous opportunities for "economies of integration": vertical integration within the medical center and horizontal integration within the community. All too often, hospitals or medical centers compete with one another, constructing medical office buildings to draw physicians into their fold, buying up practices to garner patient referrals, and otherwise competing for the delivery of identical services, leading to tremendous redundancy. Testing performed in the physician's office or outpatient setting is repeated for lack of a unified medical record system. I would estimate that 15–25% of testing is redundant due to lack of integration.

Competition

Who are the medical center's true competitors? Paul Mango, Vice President and chief operating officer of the Reference Laboratory Alliance in Pittsburgh, suggests that we need to understand three forms of competition. We will always have horizontal competition from other medical centers. This is appropriate in a free marketplace and improves quality. We also face a second, vertical competition from insurers, health main-

tenance organizations, independent practice associations, and preferred provider organizations, who broker the services of the medical center and amalgamate them into, supposedly, low-cost care while taking a margin off the top. To compete with the commodity brokers, medical centers need to develop their own managed care plans and integrated delivery systems, not merely physician–hospital organizations. Unfortunately, this is yet another reason why the laboratory is an afterthought for managed care. The managed care CEO understands the power of vertical integration in the delivery of laboratory services and would prefer to purchase from someone who is able to deliver that service. However, a strong medical center with a managed care offering competes directly for member subscriptions. So if your laboratory negotiates a contract with a large insurer, you have to recognize that your parent organization may be in direct competition with that same insurer. A third vector of competition is substitute competitors (e.g., surgicenters, cataract institutes, home health services, and commercial laboratories), who take activities away from the medical center and, in a bizarre arbitrage, also take margin through selectively favorable reimbursement *[2]*. Notice that all of these activities have one thing in common—favorable Current Procedual Terminology coding for reimbursement. Critical services that lack adequate reimbursement are left behind. At the same time, separating out these entrepreneurial activities frustrates the medical center's ability to deliver integrated care.

Strategic Planning

Robert Hattery, chairman of the Board of Governors at Mayo, counsels those who would embrace change: "If the horse you are riding dies, get off." During these times of great change and challenge for the laboratorian, we must reengineer our services and recoup the practice of laboratory medicine for our communities.

The primary strategy I suggest is to follow a 25-year example from Mayo and develop a community laboratory outreach program. Integral to that strategy is the philosophy that we are not selling a commodity based on price, but rather we sell service. Build service, sell service, and deliver service, all the while enhancing service in a continuous cycle. How does this contribute to the solution? Total internal test volume in a community laboratory will continue to decline to numbers commensurate with appropriate disease management. We need, therefore, to offset that decreased volume with the volume available to us from physicians' offices. This contributes to the margin of our organization in three ways: (*a*) the existing fixed costs of plant and equipment are spread over a larger base, adding test volume that lowers unit costs for all testing, (*b*) Enhancement of test repertoire, providing improved turnaround, better service, shortened length of stay, and more rapid diagnoses; and (*c*) after variable costs are retrieved, revenue contributes directly to margin.

In fee-for-service reimbursement, the more tests we do, the quicker we achieve a break-even point and extract a contribution to margin. Under managed care, reimbursement will be received prospectively on a per-member-per-month basis, and every cost we incur on that patient thereafter will diminish the contribution to margin. We must lower our unit costs now while the transition is occurring if we are to be positioned strategically for the future. When visiting community laboratories, I often see a very busy operation in the morning, but excess capacity during second and third shifts. A prudent manager needs to fill that excess capacity and keep people busy. Wouldn't it be wonderful if a piece of equipment could wear out before it was obviated by new technology?

The second strategy in preparing for managed care is horizontal integration. Currently, health plans believe that laboratory services must be bid for on a statewide or even national basis to obtain low price; however, healthcare is delivered locally, not nationally. Laboratory services are relevant only in a community or regional context. Nonetheless, central administration of the contracting and billing functions for broad geographical areas is an important marketing advantage when attempting to contract with payors. Therefore we need to find other partners in the community. The keys to success in multiprovider networking are individual outreach development, vertical integration of laboratory medicine into the practice, and finally horizontal integration and contract negotiation. Further savings can be achieved through sharing and, ultimately, consolidating services where appropriate. This "consolidation in place" of community laboratories is now possible through available information systems and protection of "safe harbors" regulation *[3]*.

Community laboratory medicine is laboratorians working with other community healthcare providers to deliver care to patients. Community laboratories solve problems, help make diagnoses, and reduce inappropriate tests and the attendant downstream cost. I have seen a large laboratory in this country market a 64-test profile directly to patients, claiming this represented no additional cost to healthcare because the patient paid for it. Is it possible that if you perform 64 tests on even a healthy person, something is going to be abnormal? The medical center must pursue these abnormal results and may be left with no reimbursement because of a capitated agreement. Inappropriate testing, as well as important testing that has been overlooked, causes tremendous downstream costs. If the pharmacy has a formulary, why doesn't the laboratory have prescribed tests, together with practice guidelines that ensure appropriate use? This would establish a standard of practice that precludes ordering tests that add cost but have no demonstrated value (e.g., CA 15–3 and cathepsin D) *[4]*.

Continuous Improvement

Consider how we might design a laboratory that goes beyond traditional means in contributing to outcomes management of patients from cradle to grave. Almost every patient who accesses the system encounters the laboratory. Why can't the laboratory create appropriate protocols to aid in the diagnosis of disease and also to monitor compliance with treatment? Laboratory computer systems could alert providers that follow-up procedures have been missed. Phlebotomists could be trained to take blood pressures and electrocardiograms, perform rapid strep analyses for outpatients, and make inquiries as to patient satis-

faction and what might improve satisfaction during the episode of care.

In the past, we concerned ourselves with revenue. In the future we must concern ourselves with quality and episode-of-care cost, not simply unit price. In the past we dealt with treatments; we must now understand entire processes. We need to get outside of our departments and talk to others, e.g., in radiology, because what we do in the laboratory greatly affects what they do. Laboratory services can be considered only in the context of the overall healthcare delivery system, placing emphasis on patient care above all. Charles Mayo enunciated it in 1916 and it is relevant today: "The keynote of progress in the 20th century is system and organization, in other words, teamwork." *[5]*

Managing Change

To successfully manage complex change, we need common vision, skills, incentives, resources, and a plan. If we lack a shared vision, we will have confusion. If we lack the appropriate skills, particularly management skills, there will be anxiety in our workforce. We have ample incentives in the marketplace today for change, so change will not be gradual. We need resources, and very often we in the laboratory think that we are uniquely besieged and asked to do more with less. My laboratory once had a sign that read, "We have done so much with so little for so long, we now attempt the impossible with nothing." However, this is true throughout industry. Upper management is reluctant to loosen the purse strings until a project has proved itself. If we demonstrate the laboratory's value to the community, the resources will follow. We need to be our own advocates internally and sell ourselves to administration and to the CEO, who has seen pieces of healthcare leave the medical center and the subsequent attendant failures. And finally, we need an action plan. How many of us have been engaged in a "plan of the week" or "plan of the month", which has fallen by the wayside? To sustain a business, you need a business plan. We need a dynamic action plan that can continually move our horizons forward.

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