

## Turbulence and tranquillity in the new decade: Pharmacy leader—managers in patient care

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**Abstract:** Management challenges that face pharmacy in the 1990s are described.

Tichy's rope metaphor—intertwined cultural, technical, and political strands of an organization—is applied to problems faced by pharmacy managers; effective managers keep the organization strong by preventing the strands from working at cross-purposes to unravel the rope. Pharmacy's culture—its shared beliefs and values—is changing as "altruistic" institutional pharmacists form home care businesses, pharmacists identify more strongly with the profession than with their institutions, clinical pharmacists identify more strongly with the medical team, and cost control becomes more important. Institutional pharmacy must identify its desired outcomes and apply technology to achieve them. The patient's bedside is the best place for pharmacists to influence prescribing and monitor drug therapy; technology could be used to process patient information at the bedside and to dispense medications there. Current unit dose distribution systems isolate the functions of physician, pharmacist, and nurse, which must be integrated to make the system efficient and responsive. Standardized doses and dos-

age forms could be developed that are consistent with patient-care protocols; use of protocols allows the effectiveness of treatment methods to be evaluated and eliminates unnecessary therapy. Pharmacy can further its patient-care goals through political success with the medical staff; a pharmacy practice plan developed for a specific clinical area and presented to the medical staff is an example. Collaboration of pharmacists and physicians in a unified institutional strategy for drug use helps ensure appropriate decisions about therapy and prevents manufacturers from attempting to isolate an institution's pharmacists from its medical staff.

A culture that rewards innovation, nurtures human interaction, and recognizes thoughtful, creative vision can best make the changes that will be required to keep health-care organizations afloat in the turbulent 1990s.

**Index terms:** Administration; Administrators; Health care; History; Organizations; Patient care; Pharmacy; Pharmacy, institutional; Politics; Sociology  
*Am J Hosp Pharm.* 1990; 47:311-9

The theme of the Webb Lecture Series, Achieving Excellence, was developed in the mid-1980s at a time of tremendous change in health-care financing brought about largely by the Medicare prospective-pricing system.<sup>1</sup> Our response then could

be summarized as, "If only we can get through this transition period, we will have leaner organizations, more diverse organizations that respond to consumer needs, and a straightforward reimbursement system." Today, as we begin the 1990s,

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Presented on October 3, 1989, in connection with Mr. Gouveia's designation as the fifth John W. Webb Visiting Professor of Hospital Pharmacy by the College of Pharmacy and Allied Health Professions, Northeastern University, Boston, Massachusetts.

The contributions of Ernest R. Anderson, Jr., Edward L. Decker, Edward C. Ehrlich, Sharon M. Enright, and Sharon M. Gouveia to the philosophy and content of this paper are acknowledged.

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The John W. Webb Visiting Professorship in Hospital Pharmacy was established in 1985 at the College of Pharmacy and Allied Health Professions at Northeastern University, Boston, Massachusetts. Webb was Director of Pharmacy at Massachusetts General Hospital from 1959 until his retirement in 1983. After receiving Bachelor of Science and Master of Science degrees from the Massachusetts College of Pharmacy in 1949 and 1951, respectively, Webb was Director of Pharmacy at Hartford Hospital and worked at the University of Connecticut before returning to Massachusetts General Hospital in 1956 to become Assistant Director of Pharmacy. Webb also served as director of the graduate program in hospital pharmacy at Northeastern from its inception in 1964 until his retirement. He is the author of numerous contributions to the pharmacy literature.

A hospital pharmacy practitioner is appointed to the visiting professorship each year by the dean of the college in recognition of his or her commitment to hospital pharmacy management, experience as a practitioner and educator, and dedication to publishing management-related articles. The visiting professor presents a lecture on excellence in management to hospital pharmacy practitioners and students in the graduate program.

change has not abated; in fact, it seems to have escalated. Issues of cost, quality, and access to good health care (particularly for the uninsured) are important aspects of the American public agenda.

Vaill, in his tantalizing book *Managing as a Performing Art*,<sup>2</sup> suggests that we now live in a world of permanent white water. This metaphor has strong visual appeal. It vividly conveys a sense of energy and movement. Things are only partially under control, yet the effective navigator of the rapids is not behaving randomly or aimlessly. Intellect, experience, and skill are being exercised, albeit in ways we can hardly perceive, let alone describe. Twenty years ago, Emery and Trist<sup>3</sup> said that in turbulent environments "The ground is in motion." This white-water image captures the context of change; indeed it suggests that contexts themselves have destabilized to the point where we can no longer assume that basic structures of a situation will hold still long enough to make a planned course of action feasible. At least that's the way it feels. More and more, health-care managers cannot count on the presence of their familiar network of colleagues, on the availability of useful technologies and automation, on the likely actions of the new array of competitors, on the actions of

regulators and legislators, or on the reaction of employees or of their families—or, indeed, of their own bodies and minds—to the kinds of actions they are contemplating. This is the destabilizing context: Things that used to be taken for granted can no longer be viewed that way. In a destabilized context, you may not even know accurately what your problems are.

Perhaps even that metaphor is not adequate. We are not simply speaking of white water; we are speaking of an unpredictable wild water. Vaill<sup>2</sup> goes on to suggest that, at this time of permanent white water, leader-managers reach deep into their own values and into the organization's culture for solutions to the dilemma created by this dynamic environment.

### Health Care's White Water

Rather than attempting to chronicle all of the aspects of health care's and pharmacy's white water, I will share some personal views on what I consider to be the fundamental issues we face in the 1990s. But first, to place this next decade in context, I will briefly review the past three decades in our professional continuum.

The 1960s were times of transition. Hospital pharmacy's focus shifted from the bulk manufacture and distribution of drugs to nurses to the identification of drug-use problems. Medication errors were identified and studied. Drug interactions were preliminarily defined. Adverse drug reactions were the first signs that we were developing new, potent, and effective pharmaceuticals. The initial studies of potential bacterial contamination and physical incompatibilities in intravenous admixtures were published.

We identified problems in the 1960s, and in the 1970s we began to develop programs to address them. Our creativity, persistence, and hard work resulted in the unit dose drug distribution system, intravenous admixture services, and clinical pharmacy practice. These new responsibilities required that we adopt new information-handling methods, and computers made their foray into our practice sites. We were blessed with the ultimate reimbursement system: The more we spent, the more we were paid. Hospitals were funded to expand beds and services, whether necessary or not, through the Hill-Burton program. Our pharmacy staffs were modest in the 1960s, usually less than 10 full-time equivalents for the average hospital. During implementation of these new programs, our staffs doubled, tripled, and more. Our power and prestige were based on our ability to generate millions of dollars of revenue. Clinical pharmacy flourished and specialized. Pharmacokinetics services and drug information centers became part of pharmacy's landscape.

The 1980s brought us rapidly into reality. We

were literally thrust into white water—it seemed, at times, without the proverbial paddle. We had too many hospitals with too many beds; our staffs were too large; cost was the issue, not revenue. Management consultants told us, based on their analysis of a few simple bits of data, that we were unproductive and overstaffed. More work, less staff was the new management challenge. In this historical context, pharmacy managers in the 1990s need to address the following issues:

- A shortage of pharmacists and clerical and technical personnel. There is increased competition for the staff we seek to recruit and a challenge to retain them.
- A need to reduce our production costs while keeping our quality at least at the same level. How often have we heard questions such as, "Do we still need unit dose?" or "What does the clinical pharmacist really do?"
- Definition of our consumer. We speak of the patient as the consumer of our service, yet physicians and nurses are the focus of most of our practice initiatives.
- Quantitative measures of our contribution both to improving the quality of drug therapy and to decreasing the unnecessary use of drugs.
- Lean, effective organizations with a minimum number of levels.
- The adoption of technologies, not for their sake alone, but to deal with the issues of staff shortages, cost, and quality.

### Pharmacy's Strategic Rope

Tichy<sup>4</sup> uses the metaphor of the strategic rope to illustrate the cultural, technical, and political problems that confront managers today. His definition of organizational problems is as follows:

- *Cultural-ideological mix.* Organizations are held together by a normative glue—shared beliefs. Organizations must determine what values are to be held by which people.
- *Technical design.* The organization faces a production problem. Social and technical resources must be arranged to produce the desired output.
- *Political allocation.* The organization faces the problem of allocation of power and resources. The uses to which the organization is put, as well as who reaps the benefits of the organization's efforts, must be determined.

Tichy portrays the problems above as three inter-related strands of rope. He uses this metaphor to underscore several points. First, from a distance, individual strands are not distinguishable. This is true in organizational settings; the distinction is not clear from casual observation. (What is cultural? What is technical? What is political?) Yet, these three strands exist in each organization, and we must understand and deal with them in order to comprehend the nature of the organization.

Second, ropes can become unraveled, and when they do they become weakened. Organizations can

become unraveled. Their cultural, technical, and political strands can work at cross-purposes; as a result, the organization loses its strength. Effective management is the task of keeping the rope from becoming unraveled in the face of the cultural, technical, and political problems, or permanent white water.

Let me begin to assemble the three strands of pharmacy's strategic rope by identifying the cultural, technological, and political issues we face today.

### The Cultural Strand

Williams<sup>5</sup> exhorted us that "To achieve excellence in clinical practice, we must develop a professional culture within each of our departments. We must have a commitment to a common purpose, be competent to deliver superior performance, and be consistent in perpetuating that commitment and competence." Pierpaoli<sup>6</sup> spoke of the evolution of a value system in health care. To quote him, "There is little doubt that the culture of the health-care industry, as well as the perceptions of excellence in health-care management, have changed remarkably since the advent of the cost-containment era in the early 1970s."

As I tried to identify in my own mind what culture, values, and beliefs we have in common as pharmacists, I used the following definitions from Sathe<sup>7</sup>:

- *Culture* is the set of important understandings (often unstated) that members of a community share.
- *Beliefs* are basic assumptions about the world and how it works. People often rely on others they identify with and trust to help them decide what to believe and what not to believe.
- *Values* are basic assumptions, which represent preferences for more ultimate end states—that is, striving to be number one (the excellent manager!).

Beliefs and values that have been held for a long time without being violated or challenged may be taken so much for granted that we are no longer aware of them. That is why organizational members frequently fail to realize what a profound influence culture has on them.

Economic turbulence, which has resulted in major strategic changes, new acquisitions, or attempts to improve innovation, has moved companies into unfamiliar areas where what was once taken for granted no longer works. You might remember the venture of Exxon oil into the office copying and facsimile transmission business, stimulated by the chief executive officer's decision to diversify. The company's executives had not thought carefully about the company's culture, and the new acquisitions were decided failures. Reports of failure of health-care organizations to diversify include that of an Ohio hospital that tried to run a bottling company, a Montana dude ranch, and a life-care

center in a distant community, the collapse of which ultimately brought down the hospital corporation.<sup>8</sup> Failures such as these make it painfully clear that although culture may be taken for granted when it is in harmony with a company's business, changes that do not take culture into account are fraught with peril. In particular, organizations should give serious attention to their culture when they confront the following conditions<sup>9</sup>:

- *Diversification opportunities.* Will the new business fit? Will we be able to understand or manage it? Can a hospital pharmacy, for example, successfully run a high-quality, responsive clinical service and a profitable, high-volume retail pharmacy? Will the cultures fit? Will the skills required to manage and motivate one staff be consistent with those required to achieve high performance of the other staff?
- *Changes in competitive strategy.* Will the new strategy fit? Goldsmith<sup>9</sup> provides us with examples of strategies that did not work as hospitals tried advertising campaigns, new-business development aimed at corporate or retail markets, and marketing of excess capacity through captive insurance plans and joint ventures with physicians. These strategies produced neither measurable increases in market share nor incremental gains in earnings.
- *Rapid growth.* Health-care institutions that are successful must work to ensure that the ingredients that brought them success are not spoiled by too-rapid growth.
- *Serious conflicts between groups in the organization.* How many hospitals have been literally torn apart by conflicts between the medical staff, administration, and trustees?
- *Retrenchment.* Perhaps the greatest long-term benefit of the economic crisis that hospitals face today is that many are forced to consider what services they can best provide to their communities, rather than trying to serve all patients' needs. Those pharmacy departments that have been forced to downsize have had to painfully define what they consider to be essential services to their patients.

In pharmacy's case, evidence of cultural metamorphosis abounds. Most leaders in hospital pharmacy today were drawn into this segment of practice and away from the retail environment because they were altruistic—"the nonprofit motive." We may have sought less frequent contact with the public and more contact with other professionals who, like ourselves, had less of a businesslike, bottom-line orientation. Yet today we are asked to expand and diversify into retail and home care environments. Some departments have taken what I believe to be a dangerous, middle-of-the-road approach; for example, by running a home care company out of the existing hospital pharmacy.

Further evidence of pharmacy's metamorphosis is pharmacists' stronger identification with our profession than with our institutions. Hospitals are said to be unique in that health-care providers relate more to their profession than to the institution that employs them, or in some cases to the univer-

sity rather than the hospital. It is in these culturally enigmatic situations that we practice today. These problems may have been exacerbated by the increased mobility of our young professionals, which has affected their long-term commitment to their institutions.

Another facet of the metamorphosis is the decentralization of pharmacy practice. From strong central pharmacy operations with their "bunker-like" culture, we have decentralized. Clinical practitioners espouse the culture of the medical team in place of, or sometimes in addition to, that of the pharmacy department that employs them.

Strong management forces have further affected our health-care institutions. From the halcyon days when growth of programs was key, we have been propelled into a defensive, retrenchment posture. The shock of going from an altruistic growth mode to a bottom-line-at-all-costs mentality is more than some health-care managers can bear.

Pharmacy has changed from a revenue-based, programmatically attuned department to a cost-focused, production-based system.

The number of women entering pharmacy has increased, and the number of women in pharmacy colleges now exceeds the number of men. At the same time, we are experiencing the entrance of a culturally diverse work force as the traditional labor force shrinks.

Clinical researchers have been added to our departmental staffs. Their emphasis is the development of new knowledge regarding the use of drugs, and their priorities, interests, and values are different from those of practice-oriented pharmacists.

The foregoing changes are just that—changes. The optimist would welcome them as opportunities, the pessimist as threats. But cultural changes they are. As we seek to identify what our institutional and professional culture should be, we might consider the following thought: Changes in resource allocation have forced us to focus increasingly on defining the mission of the profession. We have been required to go beyond the view of our profession alone and to take more of an institutional perspective. Change has focused our attention on what our hospitals' core business is and what role we play in that business. Our challenge is to develop a crisp mission statement and to forge a culture consistent with that mission.

### Technological Strand

Health care may be the only industry that does not use technology and automation to reduce costs and improve quality. Technology in hospitals is usually additive; witness the example of radiology: computed tomography, magnetic resonance imaging, and now positron emission tomography. One has not replaced the other, and, given a constant

patient volume, the volume of testing with each technique is increasing.

Pharmacy's issues surrounding technology are deep-seated and diverse. We have traditionally been a technology-poor profession. We watched while the pharmaceutical industry automated the manufacture of drug products. We have had few success stories in the implementation of computer systems in our pharmacies. In 1965, John Webb asked me and my fellow graduate students the question, How will the computer affect the role of hospital pharmacy?—a question to which we still seek an answer 25 years later. Issues of biotechnology elude us. Many in our profession are concerned that we will lose control of the products of biotechnology, as we have in some cases in nuclear medicine.

Automated dispensing is discussed whenever the future of pharmacy is analyzed. Yet the current marketplace offers only two automated dispensing devices. One, designed in Japan for a different market and a different need, requires major changes in our practice, for an unquantified benefit, and addresses a minor aspect of our total dispensing requirements. The other focuses on the control of medication but does so at high cost. Yet, we must seize the moment and carefully consider a long-range plan within the profession for the adoption of technology. Among the aspects of such a plan are a clear definition of what pharmacy practice encompasses. In his Webb lecture, Bill Smith<sup>10</sup> gave sound insight into the management of clinical services. In the context of cost control and the production process, what are pharmacy's products and services? Are we going to continue to devote more of our resources to the purchase, preparation, dispensing, and distribution of drugs than to clinical practice? The way we now use our resources is a strong statement of our professional priorities.

Ackoff,<sup>11</sup> in a discussion of creativity, urges us to define our desired outcomes, then to work backwards to create the processes to best achieve these outcomes. Most clinical pharmacy leaders would say that the outcomes of their work are the creation of a medication order and the monitoring of drug use. The intermediate process between ordering and monitoring may be seen as a black box: The order is transmitted to pharmacy, and the drug is dispensed with virtually no human intervention in the processing, preparation, and dispensing of the drug product. The drug is then administered and the therapy monitored. We must consider in Ackoff's context the goals and outcomes of our efforts, then work backwards to develop the skills and programs to achieve these goals.

I like to paraphrase the statement that Victor R. Fuchs made at the 1986 ASHP Annual Meeting. He arbitrarily divided the country into two segments, one with physicians and no drugs and the other with pharmacists and drugs. When he asked his

students which patient population would have better health, they voted on the side of pharmacists and drugs. I would also divide the country into two segments: one with clinical pharmacy and floor-stock (or so-called black box) drug distribution, the other with no clinical pharmacy services but with unit dose drug distribution. Which would fare better? I believe patients would benefit more from the clinical pharmacy model. We may have to ask ourselves a hard question: Is the concept of total drug-use control too extensive and too expensive for us to convince payers and patients that they can afford it today?

If we agree that the pharmacist's role is to intervene before the medication order is written and to monitor drug use after drug administration, then we can ask industry to automate the dispensing and distribution process. How might we work to accomplish this goal? Pharmacists have prided themselves in their ability to individualize drug therapy, particularly the pharmacokinetic calculation of drug doses. Let's consider a different strategy in order to deal with the vast majority of patient medication requirements. Medical care today is increasingly based on the management of protocols of care. While not all protocols are formally prepared, much of the complex therapy we offer the patient today has become routine, i.e., driven by standard treatments. Protocols have been developed for the treatment of cancer, acquired immunodeficiency syndrome, and various transplantation surgeries. When the experience of patient-care providers is reflected in a prospectively developed protocol, quality can be measured in terms of adherence to or deviations from that standard. The provision of care can also be more efficient, since the outcomes of care are well defined.

As we standardize patient-care protocols, I believe that pharmacists should work to standardize the dose and dosage forms consistent with the needs of that care. The more we can standardize treatment, the more we can work with pharmaceutical manufacturers to standardize drug dosages and packaging, and the easier the potential task of automating the dispensing and distribution process will be. Drug waste can be substantially reduced, as well, with direct economic benefit to patients and payers.

Some critics will suggest that standardized medical care and drug dosing are impossible. In the days when pharmacists individually compounded each prescription, we had rather innocuous drugs to prepare and dispense; yet in the 1950s pharmaceutical manufacturers convinced us that it would be more cost efficient to develop standardized dosage forms and that the quality of the product would be more consistent. Today, we prepare few nonstandard oral dosage forms, and we should work to standardize the preparation and dispensing of injectable dosage forms as well.

If we accept the foregoing ideas as defining the need for automation of the pharmacy production process, where should we focus our practice and management energies? Because pharmacists need to influence physicians' prescribing and to monitor patients' drug therapy, the patient's bedside should be the focus of our technology and our practice.

Why the bedside? First, the patient is the consumer of health care. Second, focusing on the patient forces, to some extent, the integration of the medication system. Finally, this is the place to test technological improvements that will benefit patients.

How many patients would be shocked to find out that your hospital has the number of pharmacists on staff that it does—30, 40, 50, or more? Would they consider the pharmacists' efforts on their behalf a good value? Should we expect physicians or administrators to be any different? We need to build credibility through the development of visibility with those who make decisions about health-care resource allocation—patients, physicians, and administrators and, to a lesser degree, nurses. Yes, we could make a case for increasing our visibility with third parties, with insurance plan administrators and the like. But if we haven't done an adequate job within our practice environment, then we shouldn't reach beyond this immediate group until we satisfy its needs. Patients want to talk to pharmacists. In his Webb lecture, Bill Smith<sup>10</sup> exhorted us to ensure that every patient benefits from a pharmacist's intervention on his or her behalf. Zellmer,<sup>12</sup> in an editorial entitled "Let's Talk" (to the patient), suggested that pharmacists give each patient a business card so that direct contact is established and so that the patient will be able to reach the pharmacist when necessary.

The present medication system is composed of three separate islands. On the physician's island, orders are written and left for the nurse. The nurse's island starts with the medication order and begins again as the nurse administers medications to patients—with little contact with pharmacists or physicians unless a problem is identified. Our island starts with the medication order and ends as we dispense a medication cart to the nurse. The occasional ferry trip between these islands is not sufficient for us to provide efficient patient service. The unit dose system is no longer adequate to meet that need, since we have modified it so much that the integrity of the system is in jeopardy. The integration of these three islands is vital if we are to make the system efficient and responsive.

Finally, we need to transcend today's technology and our current thinking, so that we consider how we can, at the bedside, capture medication orders efficiently, perform diagnostic testing with decentralized devices, and monitor patient drug therapy directly. A true, sustained reduction in prescribing

and dispensing errors will occur when we close the loop in information technology, and do so at the bedside. In the early 1960s, Blumberg<sup>13</sup> proposed the Hospital Indicator for Physicians' Orders (HIPO) that would achieve some of these objectives. This punched card-based system used card readers to verify at the bedside that the correct medication was given to the right patient. However, technology was not ready at that time to develop a reliable HIPO system. Today we must focus our energies on marshaling technology so that all patient-related information is handled at the bedside and dispensing is done there as well. The challenge of an integrated "high-tech, high-touch" pharmacy practice at the bedside is possible only if pharmacy managers dedicate their energies to the development of such a practice plan. The banking industry has demonstrated that technology is a strategic resource—witness the automated teller machine—yet that industry's beliefs about technology are rooted in yesterday's paperwork cultures. We must be sure that we manage the technological as well as the cultural changes brought about by automation in the future.

### The Political Strand

I expect that all of us would be most comfortable with the technical, then the cultural, and finally the political issues in our organizations. In addressing the cultural and technical problems, I have touched on a number of political issues. Joe Smith,<sup>14</sup> in his Webb lecture, identified a number of strategies for us to consider within our departments as we strive to manage our human resource needs. I will discuss some of the political issues outside our departments.

Managers often deny the importance of political forces in decision making. One study of professional managers reports that most executives see their decisions as professional, even technological, but rarely political. Yet health care is increasingly politicized—on the legislative front, among pharmacy organizations, among health-care providers and health-care institutions, and within our hospitals themselves. While pharmacy might have the correct prescription, our ability to move successfully in the political arena is likely to ensure that the patient takes our remedy, and not that of another political friend or foe. I would like to touch on but two aspects of the political issues we face as we enter the new decade; namely, issues related to the medical staff and those affecting the pharmaceutical industry.

### Clinicians and Managers in Synchrony

At the New England Medical Center, the hospital is organized into three divisions: medicine, surgery, and pediatrics. Each of these divisions is led

by a matrix team comprised of a physician, a nurse, and an administrator. The role of this matrix team is to effectively manage the resources entrusted to them. They are responsible for the volume of patient caseload as well as the costs associated with the care of those patients. In pharmacy, we have sought to parallel this organization. As our department evolves, teams of pharmacists and technicians having functions consistent with each of these divisions provide satellite-based pharmacy services. The team concept focuses the energies of the pharmacy staff on the drug therapy management of their patients.

Pharmacy practice plans are developed in each division. The furthest developed is that in pediatrics, where the plan was documented by the pediatric clinical pharmacy team, reviewed with the chairman of pediatrics, and presented to the senior medical staff in pediatrics. Implementation was the responsibility of a joint pediatric medical, nursing, and pharmacy staff task force. This task force dealt with a variety of drug therapy issues in pediatrics and recommended that a pediatric pharmacy committee be established, and this has been done.

Efforts such as the above bore fruit in medicine; for example, the use of pharmaceuticals, both the quantity and cost, was reduced by 40% in the hematology-oncology service. This reduced use was a result of standardized dosing of products such as immune globulin; of more effective pharmacy satellite team management of the preparation of chemotherapeutic agents, so that doses were prepared only after laboratory testing was reviewed; and of shifting some cases to the ambulatory-care clinic where patients could be managed more efficiently. These examples of medical and pharmacy staff cooperation are not unique. Pharmacists have been successful over the years in motivating physicians to prescribe cost-effective optimal drug therapy.

I refer to the efforts I have mentioned as encouraging management and clinical synchrony. Pierpaoli<sup>6</sup> spoke in his Webb lecture of the need for pharmacy managers to be bilingual—to speak the language of the clinician and that of the manager. To bridge this gap we need to not only encourage pharmacy managers to speak the language of clinicians but also ask pharmacy clinicians to be conversant with managers. The matrix management organization that I have described facilitates this interaction but is not an absolute requirement. While not all pharmacy clinicians are ready to carry the management torch, we must be patient in responding to those clinicians who have even a modest interest in management initiatives. The programs we develop as managers should reduce costs and improve therapy. Pharmacy clinicians should be the champions of quality drug therapy. I submit that reducing exposure of patients to unnecessary chemotherapy, as the foregoing example documents, can certainly have that effect. Goldsmith<sup>8</sup>

summarizes this effectively by asserting that there may be "a negative correlation between quality and cost—that is, elegant and conservative treatment—and sparing the use of expensive technologies when they can be avoided, thus producing greater benefit to the patient at less cost." The management of patients by protocol allows us to measure and compare the effectiveness of our treatment methods as a measure of the quality of care. This in turn eliminates the need for unnecessary therapy.

### **Political Issues Relating to the Pharmaceutical Industry**

As pharmacy managers work to reduce the cost of drug therapy, there are times at which the medical and pharmacy staffs might be at odds with each other, with the pharmaceutical industry, or both.

While our very existence as health-care providers is based on a fruitful pharmaceutical industry, competitive pressures have driven some sales and marketing efforts to excess. There has been more heat than light in the search for answers to the therapeutic interchange conundrum, for example. In the discussion of this issue, pharmacy has often been left alone in opposition to a joint effort of organized medicine and organizations of pharmaceutical manufacturers.

The strength of our efforts should be based on our expertise—the ability to evaluate the literature in a sound, disciplined, and unbiased way. This review process, combined with the clinical experience of our medical and pharmacy staffs, should lead us to a logical conclusion that would serve our patients well. There are times when members of industry disagree with our findings and exercise this disagreement by attempting to isolate us from members of our own medical staffs. The pressure on pharmaceutical industry executives to serve their shareholders blinds their good judgment in their attempts to isolate and segregate members of the same hospital community. These efforts have been complicated as the professions and professional organizations have become increasingly reliant on industry funds for research and education. The wedge is easier to drive if there is a forced affinity between two of the players.

The best strategy for dealing with these issues is to present a united institutional strategy that brings together members of the medical and pharmacy staffs. Common values will ensure appropriate drug therapy decision making. Effective promotion of pharmaceuticals can best be accomplished in a healthy institutional environment.

As the profession and the industry seek to find the right balance between sound drug use and optimal promotion, we must seek a common ground. Let me suggest a way in which we might test our decisions regarding the purchase or the selection

of drugs for formulary admission. I use an imaginary committee of three individuals who could review the decisions that our department makes. The committee, composed of an outpatient, an inpatient, and a public member not associated with a medical-care provider or vendor, would scrutinize the documentation of decisions we make and should, most of the time, come to the same decision we make as managers. Perhaps I'm being a bit unrealistic, but we must have a method for testing decisions we make that affect the application of our values.

### A Time for Leader-Managers

In his paper entitled "A Radical Prescription for Hospitals," Goldsmith<sup>8</sup> suggests that for hospitals to weather the next wave of economic pressures, their successful strategy should include renewed and deepened collaboration with physicians, solutions to the productivity problem, refocusing ambulatory-care and chronic-care services, and managing for medical value.

For pharmacy, this prescription requires the assertion of new leadership as we aggressively seek solutions to issues of cost and productivity and a better definition of the quality of the outcomes of the drug therapy we provide.

I believe that the best solutions will come about as we consider a role for all pharmacists in the leadership and management of the drug therapy process. I use the term leader-manager to apply to pharmacy managers, pharmacy clinicians, and pharmacists in the ambulatory-care and inpatient environment, specialists or not. I refer to leader-managers as those pharmacists willing to accept the responsibilities that the terms leadership and management imply. As we continue on our turbulent path into the 1990s, we need a creative and concerted effort to solve the problems I have identified. To have clear vision, we need a peace of mind, or tranquillity, that allows us to deal with the cultural, technical, and political problems of today.

Our collaboration with physicians has been the key to the successful development of clinical pharmacy services. Now, we must focus less on the development of clinical services and more on how to manage drug therapy, mindful of cost and quality considerations. The best value for the drug therapy dollar will come not as we consider each medication order alone, not as we consider the relationship of a single drug to another or to a single laboratory test, but rather as we consider the best therapy for the patient. As leader-managers we need a vertical approach to drug therapy. We have expanded into home therapy, we have existing outpatient pharmacy services, but have we sought the best therapy for the patient—at home, in the nursing home, or in the physician's office, as well as in

the acute-care hospital? Our information systems are not any more integrated than our pharmaceutical services have been, and we have not developed a true long-range patient medication plan. Could we convince payers to work with us to manage drug therapy in all settings? Wouldn't that be the best medical value, both short-term and long-term?

Solutions to the productivity problem require the talents of leader-managers as well. Can we address the broadest view of the medication system to eliminate the redundancy, recopying, and inefficiencies that now exist? Automation of the pharmacy production process will solve only part of the problem. The vision of the best solution to the medication system is clouded when we look at the three islands in the system as they currently exist. Three islands, from which visibility is impaired by prescribing problems, dispensing errors, and medication errors. Are the missing dose and borrowed medication manifestations of quality problems or of a system whose time has passed?

The focus on the bedside will allow us to articulate with physicians and patients to serve their needs. Drug therapy problems are best resolved prospectively, and this can optimally be accomplished at the bedside, before the order is written. Our goal of providing high-quality drug therapy will be achieved as the physician, patient, and pharmacist collaborate on the patient's behalf. The decentralization of laboratory testing will eliminate many of the problems we now have in initiating medication therapy and then modifying it after laboratory values are returned and interpreted. The high-tech side of the "high-tech, high-touch" model will allow for the decentralization of medication dispensing and administration, as well. Bar coding of the medication dose and the patient's arm band will eliminate the most serious type of error—administration of a drug to the wrong patient.

### Conclusion

The changes I have discussed can best be accomplished in an organizational culture that rewards innovation, nurtures human interaction, and recognizes thoughtful, creative vision. Pharmacy leader-managers can deal with the turbulence of the 1990s if they have the wisdom to set forth with their organizations in an unsinkable raft, accompanied by physician and patient, and have the inner tranquillity to navigate the roughest waters.

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## Reflections on excellence in pharmacy management

*Editor's note: When William A. Gouveia was selected as the fifth annual John W. Webb Visiting Professor, the four previous appointees to the professorship were asked to participate in a symposium on excellence in pharmacy management. Each previous appointee presented comments in response to Gouveia's lecture; some updated the ideas they had presented in their own lectures. The previous Webb Visiting Professors are as follows:*

1985	Robert B. Williams
1986	Paul G. Pierpaoli
1987	William E. Smith
1988	Joe E. Smith

### Empowering pharmacy through a collective vision

ROBERT B. WILLIAMS

*Am J Hosp Pharm.* 1990; 47:319-21

Charles F. Kiefer, President of Innovation Associates Inc., in Framingham, Massachusetts, has coined the term "metanoic organizations." Metanoia is a Greek word referring to the fundamental change in the way we think about life. Bill Gouveia has suggested that we need to think differently about our departments and the environment in which we work; he said that changes in resource allocation have forced us to define what our mission really is, to take more of an institutional view, and to focus our attention on what our hospital's core business is and what role we play in that business. I agree wholeheartedly.

According to Kiefer, a metanoic organization is one that "has undergone a fundamental shift of orientation from the individual and collective belief that people must cope with life and, in the extreme, are helpless and powerless, to the conviction

that they are both individually and collectively empowered to create their future and shape their destiny."

In other words, pharmacists as individual professionals within a larger organization such as a hospital must be empowered to use their personal and professional energy and creativity to create a vision not only for themselves but for the entire hospital.

The changes occurring in hospitals today certainly provide our departments (and institutions) the opportunity to change orientation and function as "metanoic organizations," but this new environment requires that a new type of leadership be present. My Webb Lecture, entitled "Achieving Excellence,"<sup>1</sup> was really about leadership. (It could have been entitled "Excellence through Leadership," but I'm saving that title for a paper I'm currently writing.) I firmly believe that, given the clinical competence of pharmacists, a new type of leadership is what will make the difference between apathy and vitality in our profession.

Bill Gouveia described pharmacy's "strategic rope" as having three strands—technical, political, and cultural. He said that "effective management is the task of keeping the rope from becoming unraveled in the face of the technical, political, and cultural problems." These problems are pervasive within each of our hospitals today, whether we are in a university setting, a community hospital, or any other type of organized health-care setting. I submit that it takes a new, unique type of leader to not only keep these strands from unraveling but to

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Presented October 3, 1989, at the College of Pharmacy and Allied Health Sciences, Northeastern University, Boston, MA, in a symposium by the current and past recipients of the John W. Webb Visiting Professorship in Hospital Pharmacy.

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