he Whitney lecture is important to all of us because it reminds us of the rich history and culture of our profession. It develops our sense of who we are, what we have done, what we stand for, where we are going, and what challenges and opportunities are before us. It reinforces the feeling of being a professional family. In the Whitney lectures we review our culture, our traditions, our storytelling, our literature, and, in more current language, our networking and our benchmarking. All of these make us strong and enable us to deal with current situations and those in the future. Preparing for the future is no small task because changes that once took years are now happening in months and what took weeks can now occur in a few seconds.

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“Each of us needs to shift our paradigm or it will be shifted for us.”

MARIANNE F. IVEY
(1993)

At the time she received this award, Marianne F. Ivey was the Director of the Department of Pharmacy Services at the University of Cincinnati Hospitals, Ohio, and Vice Chairman of the Division of Clinical and Hospital Pharmacy at the University’s College of Pharmacy.

Shifting Pharmacy’s Paradigm

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Tonight in this Whitney lecture, I would like to talk to you about shifting our pharmacy paradigm. You know what a paradigm is—it is a pattern or model that we have
come to expect because of our past experiences. The pattern can be behavior, design, or structure. Our sense of pattern can affect our everyday activities and our creativity, or lack of it, in terms of products and services. No one explains a paradigm better than Joel Barker. One of his messages is that when a paradigm shifts, everything—all of our achievements, stature, and financial potential—returns to zero if we miss the shift and do not adapt.

Is our paradigm of pharmacy shifting—pharmacy’s structure, its services, its daily activities, and its organization? I believe that we have the strength to adapt to technology and seamless, patient-focused care. I also believe that some of us, you and I, have already shifted our paradigm.

None of us wants to be back at zero after all the hard work we have done and all we have accomplished in our professional practice, but the shift in the pharmacy paradigm is happening now as we are here enjoying each other’s company, and it is occurring faster than anything we have experienced in the past. Think of how computers and computer-linked automatic dispensing devices have changed the ways and the numbers and types of people it takes to deliver care in our hospitals and community pharmacies. Technological capabilities such as the Department of Veterans Affairs system that can fill 1000 prescriptions an hour present the possibility that a few central locations could refill most of the nation’s prescriptions. With the existence of facsimile transmission, printed medication information for the patient, 24-hour toll-free numbers for consultation, express mail delivery, and lower prices for high volume, can automation and centralization be far away? In hospitals, with bedside terminals and physician order entry, there are no more mistakes by transcribers, no more multiple copies with the third illegible copy for pharmacy, no more fax machines on every unit, and no more trying to decipher the physician’s handwriting. Have you seen the shift coming and recognized the changes it will bring in human resources? Are you shifting early enough and correctly so that you minimize the loss of these resources?

Clinical shifts are also occurring. For example, when colony-stimulating factors began to be used in the treatment of cancer patients, how quickly did pharmacists and physicians work together to decrease the patients’ antibiotic doses? Missing a shift in therapy, doing things because that is our pattern, can cost us money and can affect care.

Paradigm shifts can increase anxiety, because while a shift is occurring its significance may be realized by only some of the people involved. Consider what happened to general surgeons after the development of the histamine H₂-receptor antagonists. One of the general surgeon’s biggest areas of practice, surgical procedures for ulcer treatment, disappeared. Ever wonder why some general surgeons have switched from playing golf with the suture representative to the H₂-blocker representative? Because of advances in pharmaceuticals and noninvasive technologies such as lasers, general surgeons’ practice paradigm has shifted enormously. Their adaptive behavior may affect other people in the medical center, like pharmacists, in ways we don’t like. The surgeons, like us, do not want to give up their power base or their income. Like us, they may make appropriate or inappropriate adaptations. The senior patient care
administrator at my hospital says it this way: “Change is inevitable; growth is optional.” That applies to everyone.

Obviously, technology can cause paradigm shifts. So can philosophical changes. I would like to consider briefly three philosophical changes that involve the structure and process of delivering health care. They are patient-focused care, pharmaceutical care, and continuous quality improvement.

Patient-focused care is almost an embarrassing term. What else could care be but patient focused? But often it is not. It is technology focused, discipline focused, and employee focused.

Last December in Orlando, a meeting called the National Forum on Quality Improvement in Health Care was held across the city from our Midyear Clinical Meeting. Donald Berwick, a physician and president and chief executive officer of the Institute of Health Care Improvement, gave an address about a 15-year-old patient born with short bowel syndrome. Berwick’s patient, Kevin, had been on long-term parenteral nutrition since birth. Nine times in the patient’s 15 years his intravenous catheter, his lifeline, had occluded, requiring hospitalization and surgical replacement. Knowing the unique perspective patients with chronic illness have on health care, Berwick asked Kevin, “When things go well for you in the hospital, what about it is good, and when we fail, how do we fail?” Kevin answered:

Care is best when you tell me what is going on right away, when I get the same answer from everyone, and when you don’t scare me. Care is worst when you keep me waiting and when you don’t listen to what I say (even when sometimes I know better), and when you do everything twice instead of once. Do you think you could ask me the question once or maybe twice, but not over and over and over again as if you had no memory at all? It worries me when different people here repeat the same question. Don’t you ever talk to each other? Don’t you ever meet?

Dr. Berwick showed Kevin’s remarks to the medical students on his service. Their response was, “He’s unrealistic. We’re too busy. Doesn’t he know he has to wait? Does he think he’s special? Medicine is too much of an art to give him consistent answers. That would require meetings among ourselves, with consultants and with nurses, and there is no time.”

A patient might have similar comments about pharmacists’ services. And we might give the same answers as the medical students. How did we health care providers—physicians, pharmacists, nurses, dietitians, respiratory therapists, ECG technicians, radiology technicians, phlebotomists, admitting clerks, housekeepers—get into such a fix in which what we do is so foreign to our original oaths as caregivers?

My long list of caregivers is deliberate. It illustrates one of the reasons we are discipline focused. There are so many of us seeing the patient for finely chiseled job functions that we compete for floor space and air time as we go in and out of the patient’s room. Following the enactment of Titles 18 and 19 in the 1960s, which restructured reimbursement, we divided up the patient into body parts and reimbursed care based on ever narrowing specialties of practice and ever increasing
technological advancements.

Alan Brewster, M.D., a colleague in the health care quality business, gave me some insight on why we are employee focused. He believes that as health care providers our work ethic began to change when we lost strong clinical leadership from the generalist, who followed a patient from before admission to after discharge. The influence of a strong clinical leader was felt throughout the organization. People worked on behalf of the patient until the “job” was done. In the 1970s, that influence was lost. Concerns of health care providers about their own entitlements supplanted concerns about the patient’s needs. How often do those of you who work daily with physicians hear the denigration of the referring general practitioner—the “LMD (local medical doctor)”?

Concerns of strong generalists in pharmacy practice because they did not know a technical piece of information?

Many hospitals are moving back to a focus on the patient by shifting to a more generalist caregiver—a paradigm shift that may not be as simple as you think and that may affect what you do every day more than you would expect. My hospital is one of those making the shift. Here are a few of our guiding principles of patient-centered care:

- Care is seamless.
- Care is prompt and provided at the patient’s first request. Kevin would have liked this idea.
- Care will be as close to the bedside as possible.
- The patient will come into contact with as few caregivers as possible.
- Support services will be based on the unit and provided by the care team, when possible.
- Care is team based, not supervisor based.
- Each team member is responsible for monitoring the patient environment and correcting problems.

The definition of a patient-focused team in my institution currently includes the following people: a head nurse, a nurse, a medical assistant (doing professional technical functions such as giving respiratory treatments, ECG monitoring, and drawing blood), a patient care associate (doing housekeeping, tray passing, and similar functions), and a unit clerk (doing receptionist functions and transcription of physician orders). All other care providers, with the exception of the physician, may have to negotiate with the care team for a direct role with the patient or filter their information through one of these team members.

Through discussions with colleagues, I know of several hospitals using similar models. A recent article on the front page of The Wall Street Journal mentions the team model concept, and Tom Peters discusses it in his new book Liberation Management.
Are we preparing for the shift to a team model? How do we fit into this model? How well do pharmacists, other health care providers, and hospital administrators understand the importance of our direct role with the patient?

Many, but not all, of the guiding principles of patient-focused care are the same as those of pharmaceutical care. Seamless patient care, the transparent transition of a patient’s care from pharmacist to pharmacist, is one principle common to both approaches.

There appears to be a threat in some patient-focused care designs to the pharmaceutical care concept of direct interaction with the patient. I see nurses in a position to determine who sees the patient and who does not. People differ in their willingness to collaborate. The guiding principles of patient-focused care could require complex patient information to be filtered through the nurse.

I believe that the concept of a pharmacist taking direct responsibility for a patient’s therapeutic outcomes can be realized in both hospital and ambulatory care settings. Our work at the University of Cincinnati, most notably in the neonatal intensive care unit (NICU), bears this out. In this unit, our pharmacists follow several principles:

- They focus on the patient as their primary customer (the nurse and physician are important but not exclusive customers).
- They anticipate the patient’s pharmaceutical needs in a structured and documented fashion.
- They are team focused and set their own schedules and patient care improvement projects with management for support.
- Their goals and objectives in the NICU are congruent with those of the department and the institution.
- They value each other’s input and, in turn, are valued by their colleagues in neonatology and nursing. Incidentally, none of the five pharmacists on this team has a Pharm.D. degree.

I also believe that pharmaceutical care in the outpatient setting is our next pharmacy practice shift. It offers tremendous opportunity for improving care to patients. My colleagues in the medical center and college of pharmacy and I have recently received a GAPS (Grant Award for Pharmacy Schools) to look specifically at the needs and successes of pharmacists providing pharmaceutical care in outpatient settings. Others, such as Linda Strand and Doug Hepler, are also focusing considerable attention on this area. The proceedings of the recent ASHP conference on implementing pharmaceutical care should be on the top of everyone’s reading list.

If the guiding principles of pharmaceutical care sound vaguely like those of J. Edward Deming and others, they should. The principles of pharmaceutical care and continuous quality improvement are complementary. Pharmaceutical care is the application of continuous quality improvement in the field of pharmacy.
Before I review ideas for shifting our paradigm, I want to tell you about a recent conversation. The book *Liberation Management*, which I mentioned earlier, was recommended to me by an associate at DDI-Pacer, the University of Cincinnati Hospital’s consultant in continuous quality improvement. Peters writes about a hospital in Florida that analyzed its way of delivering care to patients and adapted the “care-pairs” concept—a nurse and a medical assistant who together provide most of the care a patient needs. Concerned as I am about the potential collision course of one of the principles of pharmaceutical care, providing direct care to the patient, and the principles of patient-focused care, I called the director of pharmacy in this Florida hospital. Our discussion was very sobering.

After introducing myself, I asked the pharmacy director to describe his hospital’s model of patient-focused care, because we were doing some similar redesigning at my hospital. The Florida hospital has an average census of 550–600 patients. Patients are taken care of mainly in their rooms. They are not transported to different areas of the hospital for tests, even for radiological tests. Admitting is now done on the unit, and quality assurance, drug-use evaluation, and all activities to comply with Joint Commission and OBRA requirements are handled at the patient level.

The hospital’s pharmacists like the model because they have more time for clinical roles. They are not a part of the care-pair team, but they are on the patient units and are probably the most independent professionals on the unit. The pharmacists have adapted to reporting to a nonpharmacist. Managers are not a part of the structure of patient units, and the plan is for all department heads to be eliminated, including the director of nursing. The director of pharmacy and his assistant are developing a governance structure for the pharmacists on the team so that they will be self-governed.

I suggested to the director of pharmacy that his next task might be updating his résumé. He admitted that he was indeed working himself out of a job. From his tone of voice, and from having been a pharmacist on a psychiatric unit for a couple of years, I knew when to ask him how he felt and how he was personally dealing with all these changes. His answer was distressing.

The pharmacy director did not have a clinical background; he had a bachelor’s degree in pharmacy and an M.B.A. Because of this, he had not pushed as hard as he might have to get his pharmacists clinically involved before the patient-focused care team formation. He had lost a lot of enthusiasm in the past year. His professional goals and his role of manager had been taken over by someone else. He wondered what roles remained for him and his managers. His group purchasing organization had lessened the personnel requirements for purchasing pharmaceuticals. It was decided that the pharmacy and therapeutics committee did not have to be a pharmacy function—after all, it had always been a medical staff committee. Even production activities were going to be handled in a different way. He had need of a sounding board or mentor; but since his hospital was one of the first to implement the care-pair approach, he was given little warning and there was little opportunity for getting advice.

As seen in the example of this Florida pharmacist, who is now planning on entering a nontraditional Pharm.D. program, each of us needs to shift our paradigm or it will be shifted for us, and we may be returned to our starting points.
What can we do to capitalize on our strengths so we are on the cutting edge of change but not the bleeding edge?

First, and very important, is that we must recognize that we are strong as a group both socially and professionally. We have developed our networks for a long time, and we need to keep using them to ferret out early indicators of paradigm shifts. What for years we called sharing is now called benchmarking. Although benchmarking implies data, I strongly believe that if early in a paradigm shift we talk to, listen to, work with, and read the people we respect—people who are mavericks and on the fringe of the mainstream—no matter how bad the news, we will be in a better position to make midcourse corrections and enormous shifts. What better reason to continue looking at our associations and purchasing groups, their meetings, electronic bulletin boards and literature, as a means to stay in the forefront of change.

Second, we need to recognize the excellent work we have already done but find better and more direct ways to articulate our recommendations. For years, many of us have gained information from our own cost–benefit analysis, sometimes synthesizing it ourselves because primary studies were unavailable. Recommendations about using pharmaceuticals presented at pharmacy and therapeutics committee meetings, on daily work rounds, and in conversations with physicians and nurses were often followed and also often ignored. Put in a setting of managed care, these same recommendations are welcomed; presented to a physician and administrators who understand the imperatives of cost-competitiveness as well as quality care, these same recommendations are welcomed and acted on.

We all have to address these issues and to present data in the right forums. What would happen, for example, if you asked to report to the chief operating officer or chief executive officer? What would happen if you reported on a regular interval to your senior policy committee? Why shouldn’t your request be honored when your hospital pharmacy department—if it is like mine—is second in revenue generation only to the operating room?

Third, there are three good reasons to look for ways in which you can move horizontally in your hospital:

1. There is less vertical structure today for growth.
2. You will feel real satisfaction and fulfill your primary reason for being if you can move horizontally into patient care.
3. Moving horizontally may provide you with a new challenge that is refreshing and often increases your value to the organization while still allowing you to contribute to pharmacy.

My responsibility for continuous quality improvement for my hospital has certainly done that. It has been pointed out to me that my new functions are, in fact, an example of a paradigm shift for pharmacists.

Fourth, believe that we are a clinical profession and act on it. Managers who are also clinicians or who are willing to return to some form of clinical activity are much
more flexible, especially when there is declining emphasis on management. For clinicians, embrace the idea of pharmaceutical care and ask to be included at the table when new delivery designs are being developed. Your perspective is needed and appreciated.

Fifth, continue to use your pharmacy and therapeutics committee to review standards, guidelines, and decision trees for the use of pharmaceuticals. A picture or flow diagram is better than pages of words in delivering the message of how complicated our functions as pharmacy clinicians really are.

My final advice is to believe in yourself. As Warren Bennis, a former president of the University of Cincinnati, said, “When strategies, processes, or cultures change, the key to improvement remains leadership.” Collectively, our profession has been good in both clinical skills and management for 20 years. “Boot camp” is over; it has trained us well. We are good clinicians and we have the leadership skills to make the necessary paradigm shifts.

(For the complete list of references cited, please see page 1874 of the American Journal of Hospital Pharmacy, Sept. 1993.)
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