The power of great expectations

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I want to extend my sincere thanks to the past recipients of the Harvey A. K. Whitney Award for selecting me as the 2017 recipient. I am extremely honored and humbled to receive this award.

One does not stand before you tonight without the benefit of more than a little luck along the way. I have been very fortunate throughout my career.

First, I have had incredible mentors like Clif Latiolais, the director of my M.S. program; Roger Anderson, my residency program director; Harold Godwin, who first encouraged me to pursue an M.S.-residency program; and David Zilz, who has been instrumental in every career move that I have made. These mentors have influenced me not only through their mentoring but also through the example they set. My sincere thanks also go to Joe Oddis, Henri Manasse, and Steve Allen for their support during my tenure as a board member and officer with ASHP and the ASHP Research and Education Foundation.

Second, any success that I have had has been the result of collaboration with many others who share what Latiolais called "an enthusiasm for excellence." I owe a debt of gratitude to my professional colleagues. These include the pharmacy staffs and faculty members where I have worked, the more than 100 pharmacy residents whom I have had a part in training, and the incredible ASHP board members whom I have served with in my professional journey.

And most importantly, to my wife Pam and two daughters, Diane and Stephanie—I owe you more than I can ever repay. My lifelong passion has been my active involvement in health-system pharmacy practice and in ASHP at the local, state, and national levels. While this dream was very important to me, I fully realize it was not your dream. Along the way you have made many sacrifices, shouldered many burdens at home, and made several moves to allow me to pursue my dream. I will always be grateful for your love and support.

Setting high expectations

Tonight I would like to talk to you about embracing the power of great expectations. I have selected this topic because I believe everyone wants to do a good job, but they need to know what is expected of them and want feedback to see how their performance is measuring up to those expectations.

Setting expectations to assist individuals, teams, and organizations achieve success has been a fundamental principle in my personal management philosophy throughout my entire career. When the first class completed their M.S. degree program at the Northeastern Ohio Medical University College of Pharmacy, they presented me with a beautiful clock with an inscription that read "Thank you for setting high expectations." If the most memorable management principle I taught them was a simple 6-word sentence about setting high expectations, I am delighted.

High expectations and high performance

Why do leaders incorporate the principle of setting high expectations into their management philosophy? Effective leaders know that people tend to live up to the expectations set for them. Simply put, high expectations lead to high performance.

Let me tell you a story about high expectations leading to high performance.[1] A chief executive officer (CEO) was frustrated with one of her senior managers and was about to fire him. She wanted to give him one last chance and hired an executive coach to work with him at a cost of $20,000. The coach asked the CEO for a list of expectations that she had for the manager. The coach took the list, thanked the CEO, and left her an invoice for half of the total bill. On meeting the manager, the first thing the coach did was give him the list of expectations. The manager had never been aware of the CEO's expectations and was able to figure out what he needed to do to please his boss and be successful; after thanking the coach, he went on his way. When the coach met with the CEO 3 months later to review the manager's progress, the CEO expressed her delight with the manager's performance, which was a complete turnaround. When she asked the coach how he brought about the change, the coach replied that he had simply given the manager the list of expectations and then handed her an invoice for the rest of the bill.

Expectations abound

Expectations are all around us. I have put them into 3 categories: (1) expectations others have of us, (2) expectations we have of others, and (3)

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From 2011 to 2014, Hunt was associate professor and vice chair of pharmacy administration at the Northeastern Ohio Medical University College of Pharmacy (NEOMED). While at NEOMED, he developed a 2-year combined master of science/residency program in health-system pharmacy administration in the College of Graduate Studies in conjunction with the Cleveland Clinic and Akron General Medical Center. Upon his retirement in 2014, the University Board of Trustees granted Hunt the status of associate professor emeritus, the first such designation by NEOMED.

Before moving full time to academics, Hunt held the position of vice president of pharmacy at Novation, the supply chain management company for the Veterans Health Administration and the University HealthSystem Consortium, working with 1,400 hospitals across the country.

Hunt began his career in 1971 as the assistant director of pharmacy at St. Marys Hospital in Rochester, MN. He subsequently led the pharmacy departments at Lutheran General Hospital in Park Ridge, IL, and the University of Kentucky Hospital in Lexington.

He received bachelor of science and master of science degrees in pharmacy from the Ohio State University College of Pharmacy and completed a residency in hospital pharmacy at Grant Hospital in Columbus, OH. He also holds a master of business administration degree from the Lake Forest Graduate School of Management.

A longtime member of ASHP, Hunt has served on several councils and committees and as a Kentucky representative to the ASHP House of Delegates. In 1994, he was elected to a 3-year term on the ASHP Board of Directors and, in 1999, was elected as ASHP president. He served 2 terms as chair of the ASHP Research and Education Foundation Board of Directors from 2001 to 2003. Hunt has also served in leadership roles with ASHP state affiliates in Minnesota, Illinois, Kentucky, and Texas.

Hunt is the recipient of several awards, including the Illinois and Kentucky Hospital Pharmacist of the Year Award, the Latiolais Award, and the Ohio State University College of Pharmacy Distinguished Alumni Award. He is a Fellow in ASHP and an honorary member of the Texas Society of Health-System Pharmacists.

expectations we have of ourselves. Let's take a closer look at each of these.

Expectations others have of us. This category covers the expectations of a huge number of people. It encompasses your boss, your organization, different departments within your organization, your staff, peers, regulatory agencies, and patients, and the list goes on and on.

Sometimes our boss has specific expectations or demands of us that are critical to the organization and nonnegotiable. We usually know when these present themselves, and we need to meet these expectations without delay in order to build trust and confidence.

Sometimes our managers have expectations for us to achieve specific outcomes—such as designing and implementing a particular pharmacy service—but leave it to us to figure out the details and how to do it. This is a clear opportunity for us to manage expectations. In my first job as director of pharmacy, the administrator to whom I reported had moderate expectations for pharmacy services. His previous experience had been in a specialty hospital where comprehensive pharmacy services were not provided. This was his point of reference and his expectation for the future. Through much discussion, planning, patience, and persistence, we in the pharmacy were able to convince our administrator to embrace and support the vision we had for pharmacy services. He then had the confidence and understanding to sell our programs up the chain of command. The point here is that sometimes the expectations that others set for us are too low or not well defined. We do not have to accept these; we can manage and redefine the expectations others have of us in many situations.

Sometimes, the expectations that others have for us are presented as challenges because others see something in us that we may not see ourselves. Clif Latiolais was a master at setting great expectations for his constituents. He had the charisma and persuasiveness to get people excited about a new challenge. I recall talking to Clif just after I had been elected to the ASHP Board of Directors. We had some friendly back and forth, as well as some sincere congratulatory comments; but right before he hung up the phone, he said, "In 4 years, let's have another call about the ASHP election results." While his indirect challenge caught me by surprise, I appreciated what he saw as my potential.

Expectations we have of others. Constituents need to know the expectations we have of them. This allows them to bring to bear all of their knowledge, skills, and abilities to work on behalf of achieving goals that benefit the organization. Clear expectations provide the framework to ensure that everyone is working in concert and knows his or her role for organizational success. Roger Anderson drove this point across to me during my residency and has always served as a role model for setting expectations since then. He always stressed that setting expectations for others involves more than job performance; it also involves setting expectations for personal behavior, attitude, and organizational values.

But there is much more to achieving high performance than simply communicating our expectations; we must create conditions for success. People need to buy into what we want them to do; we need to provide them with the necessary training in terms of skills and abilities; we need to provide

them with the necessary knowledge and confidence to do the job; and we need to provide them with feedback on how they are performing against those expectations.

Expectations we have of ourselves. Jack Nicklaus,[2] one of the all-time greats in golfing, said that achievement "is largely the product of steadily raising one's levels of aspiration and expectation."

Setting clear goals and expectations for ourselves helps to focus our attention on how we spend our time and what is important to us.

When we set expectations for ourselves, we can put them into 2 buckets. The first bucket contains all the "things" we want to achieve. Effective leaders are self-motivated and set challenging goals for themselves in the next year, 5 years, and longer. They do not stop there, however. They figure out how to get there through well thought out plans to achieve those goals.

The second bucket of expectations we have for ourselves contains how we accomplish the "things" in the first bucket and how we live our lives. This goes to the heart of defining our character. We have to ask ourselves: What are our personal values? How do we show respect for others? How do we live our lives with personal integrity? What personal standards of conduct do we claim? What's the right thing to do? The answers to these questions define our character, something we should consciously do for ourselves rather than yielding to others.

Everything we can say about setting expectations for ourselves can be summed up in this simple quote I saw on a car's license plate holder: "Be the person your dog thinks you are." That's a pretty high bar to guide the expectations we have of ourselves.

A contemporary American motivational writer, Ralph Marston Jr.[3] said, "Don't lower your expectations to meet your performance. Raise your level of performance to meet your expectations. Expect the best of yourself,

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Harvey A. K. Whitney (1894–1957) received his Ph.C. degree from the University of Michigan College of Pharmacy in 1923. He was appointed to the pharmacy staff of University Hospital in Ann Arbor in 1925 and was named Chief Pharmacist there in 1927. He served in that position for almost 20 years. He is credited with establishing the first hospital pharmacy internship program—now known as a residency program—at the University of Michigan in 1927.

Harvey A. K. Whitney was an editor, author, educator, practitioner, and hospital pharmacy leader. He was instrumental in developing a small group of hospital pharmacists into a subsection of the American Pharmaceutical Association and finally, in 1942, into the American Society of Hospital Pharmacists. He was the first ASHP President and cofounder, in 1943, of the *Bulletin of the ASHP*, which in 1958 became the *American Journal of Hospital Pharmacy* (now the *American Journal of Health-System Pharmacy*).

The Harvey A. K. Whitney Lecture Award was established in 1950 by the Michigan Society of Hospital Pharmacists (now the Southeastern Michigan Society of Health-System Pharmacists). Responsibility for administration of the award was accepted by ASHP in 1963; since that time, the award has been presented annually to honor outstanding contributions to the practice of hospital (now health-system) pharmacy. The Harvey A. K. Whitney Lecture Award is known as "health-system pharmacy's highest honor."

and then do what is necessary to make it a reality."

Expectations for pharmacy

Now let's take those 3 categories of personal expectations—expectations that others have of us, expectations we have of others, and expectations we have of ourselves—and apply those principles to 3 recommendations that I have for pharmacy.

ASHP does an outstanding job of providing guidance for pharmacy practice through various publications and conferences. *ASHP Best Practices* has been an invaluable resource in fostering improvements in pharmacy practice and patient care for over 60 years.[4] This publication, more than any other resource, sets forth expectations for practice through policy positions, statements, and guidelines for current and future practice.

ASHP and the ASHP Research and Education Foundation have made enormous contributions in providing guidance for hospital and health-system pharmacy through its sponsorship of periodic consensus conferences on a variety of critical topics. Notable landmark conferences that have changed the very fabric of pharmacy practice include the 1985 conference Directions for Clinical Practice in Pharmacy (also known as the Hilton Head Conference),[5] the 1993 conference Implementing Pharmaceutical Care,[6] and the 2010 conference on the Pharmacy Practice Model Initiative.[7]

We are fortunate that ASHP and the ASHP Research and Education Foundation have provided these resources to help set expectations for contemporary health-system pharmacy practice. However, let me make 3 additional recommendations for your consideration this evening.

Recommendation 1: Strengthen clinical advanced pharmacy practice experiences

My first recommendation is to strengthen the curriculum for our doctor of pharmacy (Pharm.D.) programs, specifically in the area of advanced pharmacy practice experience (APPE) clinical rotations. For our graduates to be responsible and accountable for patients' medication-related outcomes, the Pharm.D. curriculum must equip them with the knowledge, skills, and abilities to assume this role. Let's look at the medical model for some practical ideas.

When third-year medical students are on their clinical rotations, they are totally immersed in that rotation—whether it be oncology, general medicine, pediatrics, etc. Pharmacy students have similar rotations in which they contribute measurably and meaningfully to patient care, though often with far less intensity, responsibility, and accountability than their medical counterparts. In addition to being evaluated on the provision of patient care services, medical students are assessed on their knowledge in a specific clinical service through clinical subject examinations, commonly known as shelf exams. Medical students must pass these exams in order to successfully complete their clinical rotations. The National Board of Medical Examiners (NBME) offers standardized, objective, discipline-based exams for use in assessment near the completion of a clinical rotation.[8] Students may use national study guides to help them prepare for the exams. Shelf exams help to ensure that medical students can demonstrate knowledge in a particular area of practice in addition to their practical skills in providing patient care.

Pharmacy does not have a component of its clinical rotations that is comparable to medicine's shelf exams. Imagine if our curriculum incorporated pharmacy shelf exams into APPE rotations, where students had to pass an exam that assessed their knowledge in a particular area of practice.

My expectation is that this recommendation, implemented over the next decade, will strengthen our Pharm.D. curriculum and produce better prepared practitioners. Today the student experience in the clinical APPE rotations, in terms of content and intensity, may be highly variable among preceptors, clinical rotations, and colleges of pharmacy. This recommendation would add a degree of rigor and standardization to our clinical rotations, provide additional guidance to preceptors in designing their rotations, provide an important assessment of the student's readiness to enter practice before a diploma is granted, and establish a higher expectation of performance that graduates would carry into their residencies and clinical practice.

Recommendation 2: Require accredited pharmacy technician training

My second recommendation involves pharmacy's failure to require completion of a nationally accredited pharmacy technician training program before an individual can take the certification exam. In order for us to redeploy pharmacists to provide drug therapy management services, we must optimize the utilization of technology and advanced-level pharmacy technicians who have appropriate education, training, and credentialing.

We have been able to reach consensus on many issues surrounding the credentialing and utilization of pharmacy technicians, even among diverse pharmacy organizations. Here are just a few notable examples.

The Council on Credentialing in Pharmacy created the Pharmacy Technician Credentialing Framework in 2009, which states the following: "State boards of pharmacy will regulate pharmacy technicians and require them to complete a nationally accredited education and training program and pass a competency-based examination that is psychometrically sound, nationally accredited, and based on the task analysis."[9] It further states that "pharmacy must adopt uniform national standards for pharmacy technician education, training, certification, and regulation in order to meet

the JCPP [Joint Commission of Pharmacy Practitioners] 2015 Vision."

The National Association of Boards of Pharmacy (NABP) 2009 Report of the Task Force on Pharmacy Technician Education and Training Programs states that "NABP should encourage boards of pharmacy to require as an element of pharmacy technician certification completion of an education and training program that meets minimum standardized guidelines."[10] It also recommended that "NABP should encourage boards of pharmacy to require as an element of pharmacy technician certification completion of an accredited education and training program by 2015."

The 2010 Pharmacy Practice Model Summit developed numerous consensus statements,[11] such as the following:

- "Uniform national standards should apply to the education and training of pharmacy technicians."
- "To support optimal pharmacy practice models, technicians must be certified by the Pharmacy Technician Certification Board."
- "By 2015, the Pharmacy Technician Certification Board should require completion of an accredited training program before an individual may take the certification examination."

At the 2017 Pharmacy Technician Stakeholders Consensus Conference convened by the Pharmacy Technician Certification Board (PTCB),[12] 86% of attendees strongly agreed or agreed that "the profession of pharmacy should set a target for implementation of the national standard for pharmacy technician education and training at 3 to 5 years after adoption of the standard."

Where are we now? Currently, 24 states regulate pharmacy technicians and include national certification in their regulations.[13] Five states do not regulate pharmacy technicians at all. Results from the 2016 ASHP National Survey of Pharmacy Practice in Hospital Settings revealed that 77.7% of pharmacy technicians across all hospitals have earned PTCB certification, compared with 65.8% in 2011.[14] The same survey found that 17.9% have completed an accredited technician training program, compared with 11.1% 5 years ago. Pharmacy's accreditation standard requires 600 hours of instruction. The primary method of training newly hired pharmacy technicians is on-the-job training with observation.

In sharp contrast, other similar healthcare occupations require formal training and certification, including radiological technologists, clinical laboratory technicians, dental hygienists, and dietetic technicians.[15] As a point of comparison, let us take a closer look at 1 of these occupations.

The American Registry of Radiologic Technologists (ARRT), the primary credentialing organization of radiological technologists, requires that candidates for ARRT certification exams complete an associate degree program.[16] Students may focus their studies to earn their initial credential in any of 5 disciplines, such as nuclear medicine or magnetic resonance imaging technology. In order to obtain certification and registration in any of these disciplines, students must first meet requirements in education, ethics, and examination. After earning their first credential from ARRT, technologists can pursue a second credential in 1 of 10 different specialties, such as mammography or computed tomography. Candidates must meet a structured education requirement, complete the clinical experience requirement, and pass the appropriate specialty examination to earn their specialty credential.

I feel disappointed and even embarrassed when I compare our current training and certification requirements for pharmacy technicians to those of similar healthcare occupations, because I know we can do better.

I reread an article recently that called for a "cadre of well-trained pharmacy technicians or technologists" to support hospital pharmacists.[17] The author went on to state: "The United States cannot much longer remain about the only industrialized country in the world without an approved program for the training and utilization of pharmacy technical personnel." The journal was *Drug Intelligence and Clinical Pharmacy*. The year was 1976. The author was Don Francke, one of the founding members of ASHP. Unfortunately, we are still struggling, 40 years later, to implement Francke's vision.

While we can be proud of what we have accomplished through consensus statements, the fact remains that no national standardized education requirement for pharmacy technicians exists. We still face formidable barriers to fully achieve a state where completion of a nationally accredited training program is required to take the certification exam. These barriers include

- Access to formal training programs,
- Affordability of training,
- Variability among state boards of pharmacy with regard to the role and training for technicians,
- Differences of opinion on the scope of technician training by different sectors in pharmacy, and
- Uncertainty in making the transition with respect to current technicians.

What can we do to close this gap? First and foremost, we must shift our focus to *implementation* of the points of consensus that we already have with clear accountability. Next, we must set a deadline to implement our plan. Our 2015 deadline has come and gone. Given the barriers we face, maybe an expectation no later than 2025 makes sense. If the National Aeronautics and Space Administration could meet President Kennedy's[18] 1961 challenge to achieve "the goal, before this decade is out, of landing a man on the moon and returning him safely to the earth," shouldn't we be able to resolve this technician issue in an equal amount of time?

Third, we must encourage innovative ways to increase access to training programs that also make economic sense. The state of Iowa is in the planning stages of designing a joint project with all 15 community colleges in the state to facilitate a common pharmacy technician training program that would be conducted primarily online. They are considering a 9-month program that would be accessible throughout the state, affordable, consistent across all community colleges, and of high quality. Further, the Pharmacy Technician Accreditation Commission has accredited its first distance learning technician training program and has surveyed 2 others that are pending review. The potential of these programs, or some future iteration of them, lies in their accessibility, affordability, and capacity. These are just 2 potential ways to make training more accessible and more affordable.

Next, we need to take a close look at the training program for radiological technologists described earlier to serve as a model for pharmacy, even if not for a 2-year program. A structure that provides broad, core training for all technicians yet has the ability to focus on 1 discipline (hospital or community practice) with the initial credential and then allows technicians to seek specialty credentials down the road may be acceptable across all sectors of pharmacy.

Lastly, though stakeholders support a nationally accredited training program for pharmacy technicians, if it becomes clear that we cannot reach agreement on how to implement such a requirement across all sectors of pharmacy, then health-system pharmacy can wait no longer and may find it necessary to move forward on its own.

My expectation is that individuals who come to an interview as a pharmacy technician will present their state license, having already graduated from a nationally accredited technician training program and passed a national certification exam. Radiology, dentistry, and other health professions have this expectation; why shouldn't pharmacy have the same expectation?

Recommendation 3: Manage blockbuster science and technology

Adapting to transformational changes in science and technology is an exciting thought filled with uncertainty as well as opportunities. These innovations have the potential to significantly impact the delivery of healthcare as we know it. Will they pose a threat or create an opportunity?

A few examples of advances in science and technology that will apply to pharmacy include artificial intelligence (AI), robotic technology, precision medicine and pharmacogenomics, and telemedicine.

AI. AI is the science of computers learning how to think. We are basically going from a world where people give machines rules to a world where people give machines problems and machines learn how to solve them on their own.[19] A fascinating application of AI to healthcare is IBM's Watson.[20] It's difficult to keep up with the latest research, therapies, and clinical trials in oncology, but Watson has the capability of reading 1 million books per second. For the past few years, IBM has been working with leaders in oncology at Memorial Sloan Kettering to train Watson in the field of oncology. Watson can analyze the patient medical record, identify a prioritized list of treatment options, and provide links to supporting evidence. In addition to IBM Watson Health for Oncology, there are other IBM Watson modules for genomics, drug discovery, patient engagement, and care management.

Robotic technology. Pharmacy is well on its way to using robotic technology to streamline workflow, increase efficiency, and reduce the risk of errors, enabling pharmacists to focus on clinical care activities. In multihospital systems, the use of robotics supports an automated dispensing service across all facilities to optimize systemwide efficiency and minimize costs. The use of robotics to compound intravenous admixtures was an aspirational dream only a decade ago, but their use in preparing chemotherapy doses efficiently while providing a safer environment for pharmacy staff is not uncommon today. Many pharmacy activities lend themselves to robotic technology, so what we have seen so far may only be the tip of the iceberg.

Precision medicine and pharmacogenomics. Several factors influence the response different people have to a medication, including age, lifestyle, concurrent medications, comorbidities, and genetic makeup. Pharmacogenomics is the study of how a person's unique genetic composition influences his or her response to medications.[21] Pharmacogenomics is part of the broader field of precision medicine in which treatments are customized to an individual patient. Currently, the product labeling for more than 140 drugs contains pharmacogenomic information.[22]

Telemedicine. The remote diagnosis and treatment of patients by means of telecommunications and information technology is becoming more common with developments in virtual technology. Telemedicine can be beneficial for improving access to medical services for patients in remote locations. It also allows healthcare professionals in multiple locations to share information and collaborate on patient issues as if they were side by side, especially for critical care and emergency situations.

An example of virtual medical services being provided in critical care can be seen at Carolinas HealthCare System in Charlotte, North Carolina. Virtual care is provided to 315 beds in 14 different intensive care units connected across the system to a central monitoring hub that is staffed 24-7 by intensivists, nurses, and pharmacists. Virtual care may be the wave of the future in providing care that is more accessible and affordable to patients with greater consistency and accessibility to physician specialists.

Managing innovations

We do not have a clear picture of how such blockbuster changes will impact pharmacy, but we know these types of changes and many more are coming our way. The question is not whether these advances and other fundamental changes will impact healthcare; the question is, how will we manage them? Introducing blockbuster changes can have a tremendous effect on a pharmacy team—jobs can be redefined, fear of the unknown introduced, and doors of opportunity opened. It is up to the skillful leader to successfully navigate these waters of change by setting clear expectations for individuals and the team.

In his John W. Webb Lecture in 2010, Jim Stevenson[23] addressed how we can achieve transformational change in pharmacy. Throughout his lecture, Jim referred to the need for strong leadership to "help organizations adapt to significantly changing circumstances. Effective leaders define what the future should look like, align people with the vision, and inspire them to achieve the vision despite the obstacles." Jim went on to outline his own 8-step model for achieving a more rapid transformation of pharmacy practice.

Pharmacy has dealt with fundamental change and uncertainty before, and we have proven to be a resilient profession. We have a history of embracing and successfully managing change. Leaders in the future will be expected to not only focus on trends in healthcare but also look outwardly to the broader application of science and technology to our daily practice. Leaders must step up to manage these blockbuster changes to proactively determine pharmacy's rightful place in their application.

Conclusion

We have many exciting opportunities before us. We will always be chasing aspirational dreams as we continuously strive to get better.

One way we can move forward is to utilize the power of great expectations. This begins on a personal level for each of us in terms of the

1. *Expectations others have of us.* How will we manage expectations others have of us?
2. *Expectations we have of others.* What expectations will we have of others to make them and our organizations more successful?
3. *Expectations we have of ourselves.* What expectations will we have for ourselves, both the "things" we want to do and the character we want to build?

In addition to managing expectations all around us on a personal level, we must apply these same principles to achieve great expectations for pharmacy as well. We will always be looking for ways to strengthen our Pharm.D. programs, enhance technician training, adapt to scientific advances, and cope with scores of other changes we will encounter. Through it all, we must dare to dream, because great performance begins with great expectations.

Disclosures

The author has declared no potential conflicts of interest.

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