

The National Center for Health System Pharmacy Leadership

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## National Center for Health System Pharmacy Leadership

Six years ago, the Institute of Medicine (IOM) published the first of a series of reports assessing the quality of healthcare, and the American healthcare system was confronted with the reality that the care it provided was often of poor quality. The state of healthcare delivery quality and how to provide high quality care was documented and assembled into action plans to bridge the chasm between them. The IOM identified medication errors as a significant threat to patient safety and a source of poor care outcomes, but it was approached as one element of systemic flaws in organizational performance. There was little direct attention given to the importance of managing the medication-use process to improve safety, reduce errors, optimize treatment outcomes, promote health, and contain costs. In addition, the critical role of professional pharmacy expertise was omitted from the discussion.

### The Changing Context of Pharmacy Leadership in Hospitals and Health Systems

#### *The Quality of Care Imperative*

The need for more effective pharmacy leadership for quality in hospitals and health systems is literally a life or death matter. The IOM estimated in 2000 that between 44,000 and 98,000 patient deaths each year are related to preventable medical errors, with over half linked to the medication-use process.<sup>1, p 26</sup> Some later estimates are higher.<sup>2</sup> All individuals are at risk of experiencing medical errors, but those with complex medication regimens like the elderly and individuals with chronic diseases are especially vulnerable. More than half of women over 65

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<sup>1</sup> Institute of Medicine. *To Err is Human*. Washington, DC: National Academies Press; 2000.

<sup>2</sup> Health Grades. HealthGrades Quality Study: Patient Safety in American Hospitals. 2004, Jul. <http://www.healthgrades.com/PressRoom/index.cfm?fuseaction=PressReleases> (accessed 2006 Mar 3).

take more than five medications in any given week.<sup>3</sup> The more than 100 million Americans who have chronic illnesses, of which approximately two-thirds are elderly, are at risk of preventable medication errors, as well.<sup>4</sup> In many cases, an individual's medications are prescribed by a variety of providers, making the elderly and those with chronic illnesses particularly vulnerable to over-use, under-use, and misuse of medications. Several studies conclude that patients in hospitals both with and without sophisticated information technology systems are not safe from medication errors.<sup>5</sup> Pharmacist involvement is a critical, cost-effective way to manage drug therapies and will have an impact on both quality of care and cost containment.<sup>6</sup>

Despite the widespread public, political, and professional attention to the crisis in quality of care, the slow rate of progress is significant. The five year anniversary of the IOM's first report *To Err is Human* was marked by disappointment and guarded optimism for the future.<sup>7</sup> While progress has been made toward enhancing patient safety in hospitals and health systems, medication system-related errors remain a major problem. Medication over-use, under-use, and misuse put patients at risk of suboptimal outcomes. As Gail Warden, president emeritus of the Henry Ford Health System stated, "We are still willing to accept a different level of quality than in other industries. Healthcare has not been as sophisticated as some other industries about

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<sup>3</sup> Smith SR, Catellier DJ, Conlisk EA et al. Effect on health outcomes of a community-based medication therapy management program for seniors with limited incomes. *Am J Health-Syst Pharm.* 2006; 63: 372-9.

<sup>4</sup> Institute of Medicine. *Crossing the Quality Chasm.* Washington, DC: National Academies Press; 2001.

<sup>5</sup> Caldwell C, Denham C. *Medication Safety and Cost Recovery.* Chicago: Health Administration Press; 2001. Nebeker JR, Hoffman JM, Weir CR et al. High rates of adverse drug events in a highly computerized hospital. *Arch Intern Med.* 2005; 165: 1111-6. Silverman JB, Stapinski CD, Huber C, Ghandi TK, Churchill WW. Computer-based system for preventing adverse drug events. *Am J Health-Syst Pharm.* 2004; 61: 1599-603.

<sup>6</sup> Patel RJ, Lyman AE, Clark DR et al. Personal digital assistants documenting primary care clinical pharmacy services in a health maintenance organization. *Am J Health-Syst Pharm.* 2006; 63:258-61. Hoffman JM, Shah ND, Vermeulen LC et al. Projecting future drug expenditures – 2006. *Am J Health-Syst Pharm.* 2006; 63: 123-38. Schneider PJ. Five worthy aims for pharmacy's clinical leadership to pursue in improving medication-use. *Am J Health-Syst Pharm.* 1999; 56: 2549-51. Serb C. Business issues in the pharmacy (Supplement sponsored by AmeriSourceBergen). *Hosp Health Netw.* 2005; May.

<sup>7</sup> Scalise D. 5 years after IOM . . . the evolving state of patient safety. *Hosp Health Netw.* 2004; October: 59-62. Young D. Five years after the IOM report, experts gauge progress of patient safety. *Am J Health-Syst Pharm.* 2005; 62: 12-20.

errors or quality. We're nowhere near where we ought to be.”<sup>8</sup> Leadership is required to further improve all aspects of the quality and safety of care, particularly by pharmacy executives in both hospitals and health systems.

### *The Cost of Care*

In addition to the significant contributions that enhanced pharmacy leadership will bring to quality and patient safety, the financial implications of effective pharmacy leadership are compelling. The financial stewardship of pharmacy resources is a consequential responsibility. In 2004, pharmacy accounted for 12.8 percent of hospital expenditures, or nearly \$40 billion. By 2010, pharmacy expenditures are projected to increase to 15.3 percent, more than \$60 billion per year.<sup>9</sup> Overall, studies estimate that inflation in drug expenditures accounts for approximately one-fifth of overall healthcare expenditures. It is projected that significant pharmaceutical inflation will continue in 2006, with outpatient settings rising between seven and nine percent, clinic settings increasing nine to eleven percent, and nonfederal hospitals experiencing expenditure inflation of between five and seven percent.<sup>10</sup> The impact of the pharmacy on a hospital's budget puts the pharmacy director in a position to demonstrate to senior leadership his or her role in optimizing the added value of competent medication-use system management.

The cost associated with adverse drug events (ADEs) has been estimated to be in the billions of dollars in the aggregate and millions per year at the level of individual hospitals and health systems. It is estimated that the annual cost of ADEs totals more than \$2 billion in inpatient hospital costs and that ADEs are the cause of up to 41 percent of all hospital admissions.<sup>11</sup> A large academic medical center estimated ADE associated costs at \$5.6 million,

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<sup>8</sup> Scalise D. 5 years after IOM . . . the evolving state of patient safety. *Hosp Health Netw.* 2004; October: 59-62.

<sup>9</sup> Serb C. Business issues in the pharmacy (Supplement sponsored by AmeriSourceBergen). *Hosp Health Netw.* 2005; May.

<sup>10</sup> Hoffman JM, Shah ND, Vermeulen LC et al. Projecting future drug expenditures – 2006. *Am J Health-Syst Pharm.* 2006; 63: 123-38.

<sup>11</sup> Nebeker JR, Hoffman JM, Weir CR et al. High rates of adverse drug events in a highly computerized hospital. *Arch Intern Med.* 2005; 165: 1111-6.

of which \$2.8 million is considered preventable.<sup>12</sup> There is a clear mandate for the pharmacy profession to provide competent medication-use management and leadership to address these issues.

The new Medicare prescription drug benefit, Medicare Part D, is likely to impact hospital and health system pharmacy in ways that are not yet clear. The benefit is expected to increase prescription drug utilization by 41 million beneficiaries.<sup>13</sup> As of January, 2006, 14 million beneficiaries have enrolled in Part D, which puts enrollment far under the 29.3 million beneficiaries that the government had anticipated would join a Part D plan in 2006, but shows the potential impact as enrollment expands.<sup>14</sup> In general, the Medicare eligible community does not know a great deal about Part D and their responsibilities and opportunities within the plans. More than 60 percent of seniors recently stated that they understand the benefit “not too well” or “not at all.” Nearly half of all beneficiaries surveyed (49 percent) said that it would not help them personally.<sup>15</sup> It seems evident that growth in Medicare Part D may be relatively slow.

Medicare Part D provides an opportunity for hospital and health system pharmacy to take on an expanded patient care role. Part D authorizes pharmacists to provide medication therapy management (MTM) services to Medicare enrollees, which “provides a unique opportunity for pharmacists to assume stewardship by taking the lead in enhancing care for the patient and coordinating care among other primary care providers.”<sup>16</sup> MTM holds the promise of significantly enhancing patient safety and quality of care and is an opportunity for the pharmacy

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<sup>12</sup> Silverman JB, Stapinski CD, Huber C et al. Computer-based system for preventing adverse drug events. *Am J Health-Syst Pharm.* 2004; 61: 1599-603.

<sup>13</sup> Hoffman JM, Shah ND, Vermeulen LC et al. Projecting future drug expenditures – 2006. *Am J Health-Syst Pharm.* 2006; 63: 123-38.

<sup>14</sup> Kaiser Family Foundation. Medicare prescription drug coverage enrollment update. <http://www.kff.org/medicare/upload/7453.pdf> (accessed 2006 Feb 8).

<sup>15</sup> Kaiser Family Foundation. As enrollment begins, new survey underscores challenges if seniors are to take advantage of Medicare drug benefit [news release]. <http://www.kff.org/kaiserpolls/med111005pkg.cfm> (accessed 2006 Feb 6).

<sup>16</sup> Brill JV, Robbins DA. Medication therapy management: Challenge and opportunity. *Pat Safety Quality Healthcare.* 2006; January/February: 16-18.

profession to demonstrate leadership capabilities, both in the care delivery and community settings.<sup>17</sup>

### *The Role of Pharmacy Leadership*

Given the relationship of the medication system to quality of care improvement and cost containment, the potential contributions of the health system and hospital pharmacy profession to the achievement of organizational objectives are underestimated. The perspective of medication-use system expertise is often missing from policy level strategic decision-making processes within institutions. While the IOM reports on quality of care, particularly *To Err is Human* and *Crossing the Quality Chasm*, draw attention to the relationship of medication-use systems to quality of care problems and suggest strategies for improvement, there is little recognition of the centrality of the expertise of the pharmacist in general and the pharmacy department director in particular to implementing those strategies.

Underlying the failure to recognize the potential contribution of pharmacy leadership is the absence of a vision of the ideal role. In addition to competently managing an expanding budget and ensuring the safe delivery of medications to patients, the pharmacy director should be equipped to provide leadership in hospital-wide quality of care, medication safety initiatives, and advancing integrated information systems to support clinical decision-making.

The role of the pharmacy director has evolved incrementally to respond to expanding responsibilities. Unfortunately, the typical position description focuses upon maintaining the basic service functions of the department. In addition, the typical departmental staffing pattern offers little opportunity to delegate day-to-day supervisory functions so as to enable the pharmacy department director to devote time and energy to the broad challenges facing the organization. The reality of the typical role was summed up by a director who described her

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<sup>17</sup> Traynor K. Some Medicare Part D medication management programs will use pharmacists. *Am J Health-Syst Pharm.* 2006; 63(1): 16-21.

range of responsibilities as including “managing a \$25 million budget and figuring why a staff member did not clock out for lunch.”<sup>18</sup>

Clearly, there is a widening chasm between what pharmacy directors do and what the organization would benefit from having them do in order to accomplish its strategic objectives. There must be a change in the competencies required to do the work of the director to reflect a movement from departmental management to organizational leadership (see Appendix 1). There is need for a new vision of leadership in the organization, based upon the persuasive evidence of the need for competencies inherent in pharmacy management. As Goldsmith and Walt state in *Leading Beyond the Walls*,

To prepare successfully for the next millennium, tomorrow’s organizations will have to change the mind-set of many leaders or change their employment status. For leaders who are near retirement, this may not be an issue. For midcareer leaders who lack the needed new skills, this may be a challenge. They will have to learn why the new skills are important. They will have to understand what they need to learn and be shown how they can best learn it. The organization’s reward and human performance reinforcement systems will need to be augmented to reflect the importance of new competencies.<sup>19</sup>

Though their comments directly address global organizations, the lesson applies to pharmacy management. Incremental, reactive change in the traditional role is not adequate to meet the present and future requirements of hospitals and health systems.

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<sup>18</sup> Field Interview with Health System Pharmacy Director. 2005 Jun 10.

<sup>19</sup> Goldsmith M, Walt C. New competencies for tomorrow’s global leader. In: Hesselbein F, Goldsmith M, Somerville I, eds. *Leading Beyond the Walls*. San Francisco: Jossey-Bass; 1999.

## *The Demographic Imperative*

There are almost 6,000 hospitals in the United States and there are close to 10,000 pharmacy directors and middle managers.<sup>20</sup> Many, if not most, of those individuals have not been prepared with the competencies that are central to the new vision of the role, which is essential to the mission of hospitals, health systems, long-term care facilities, and community health centers. There is currently a documented shortage of appropriately trained individuals and it is projected to become much more severe.<sup>21</sup>

A recent survey of pharmacy directors and middle managers found their average ages to be 48 and 43, respectively. The majority, 80 percent, plan to leave their positions within ten years and 36 percent within five years. Twenty six percent plan to retire, 14 percent anticipate moving out of the hospital and health system setting, and 14 percent plan to leave the profession.<sup>22</sup> In summary, 8,000 of the approximately 10,000 pharmacy executives plan to be gone in ten years. As the pressure to improve quality and contain costs builds and the complexity of the potential contribution expands, health organizations are faced with the loss of many of the most experienced pharmacy executives. Clearly, the vision of enhanced leadership cannot be realized without making the position more attractive, improving retention, and providing the competencies for success.

The scope of the impending shortage could be specified with some confidence if there was a widely recognized career development path to management positions. Interviews with pharmacy directors reveal that most did not arrive in their positions by deliberately developing their careers along a recognized and predictable path. Therefore, there is not a supply “pipeline” of potential pharmacy managers that can be measured relative to the prospective demand.

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<sup>20</sup> American Hospital Association. *AHA Hospital Statistics*. Chicago: Health Forum; 2005: 6-27.

<sup>21</sup> White SJ. Will there be a pharmacy leadership crisis? An ASHP Scholar-in-Residence Report. *Am J Health-Syst Pharm*. 2005; 62: 845-55.

<sup>22</sup> White SJ. Will there be a pharmacy leadership crisis? An ASHP Scholar-in-Residence Report. *Am J Health-Syst Pharm*. 2005; 62: 845-55.

While pharmacy practice management residencies (PPM) are designed for pharmacists interested in the path to pharmacy management, they play a limited role in responding to the need. Prerequisites include either a pharmacy practice residency or considerable experience in practice. There appears to be a trend toward a decreasing interest in the programs, though this may be changing. There are currently only nine one-year programs and five universities that offer six two-year combined/Master's degree residency programs (see Appendix 2). The programs advertise a total of 28 positions, which are rarely filled. In fact, the advertised positions at four of the one-year residencies have not been filled for several years. Currently, in the 2005-06 academic year, there are five residents in one-year programs. There were only 25 applicants that yielded 18 students in two-year programs; yet this is the largest enrollment in recent years. Calendar year 2005 saw similar results, as just twenty-five students reportedly completed ASHP-accredited practice management residency programs.<sup>23</sup> Graduates of practice management residencies may follow a variety of career paths that may or may not include hospital and health system pharmacy leadership.

The popularity of joint degree programs is growing. Dual or joint degree programs offer PharmD students the opportunity to concurrently earn a Master's degree in such areas as business administration, health administration, public administration, and public health. Thirty five pharmacy schools anticipate offering PharmD/MBA programs (health administration may be included in some of the MBA programs) for the 2006-07 academic year<sup>24</sup> (see Appendix 3). A survey of 15 of the programs showed that they conferred 119 joint degrees from 2002-2004.<sup>25</sup>

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<sup>23</sup> American Society of Health-System Pharmacy. Roster of residents completing ASHP-accredited programs in calendar year 2005. *Am J Health-Syst Pharm.* 2006; 63(3): 266-79.

<sup>24</sup> American Association of Colleges of Pharmacy. Pharmacy school admission requirements: Table 4. [http://www.aacp.org/Docs/MainNavigation/InstitutionalData/6867\\_Tab4PSAR.pdf](http://www.aacp.org/Docs/MainNavigation/InstitutionalData/6867_Tab4PSAR.pdf) (accessed 2006 Feb 15).

<sup>25</sup> American Association of Colleges of Pharmacy. Dual degree appendix 3: Dual degree graduates 2002-2004. <http://www.aacp.org/site/view.asp?TRACKID=&VID=2&CID=1046&DID=6776> (accessed 2006 Mar 6).

Similar to the residency programs, the career paths for dual degree graduates are varied and may not include hospital or health system pharmacy management and leadership.

One of the implications of the above described observations is that incumbents frequently lack the competencies that are essential to the present role. They are most often promoted from the position of staff pharmacist, which does not require preparation in such important competencies as financial management, strategic planning, and coalition building. A second implication is that there is no ready focal point in the career development process for the infusion of the competencies that are essential to fulfilling the vision of the future role.

### Defining the Problem

Little systematic research has been done on pharmacy leadership and its place in the healthcare delivery organization, though much has been written on the subject.<sup>26</sup> The available information is largely anecdotal and lacks an evidence base. The Center development initiative undertook preliminary research for the purpose of clarifying needs in the field. The research made it clear that there is no common job description for the high performing pharmacy leader, a lack of defined expectations, and little general understanding of the ways in which the pharmacy director can contribute to the achievement of the healthcare delivery organization's objectives.

Pharmacy directors' perceptions about their role as leaders in the organization were largely

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<sup>26</sup> Young D. Effective leadership is vital to pharmacy's future. *Am J Health-Syst Pharm.* 2004; 61: 1212-4. Schneider PJ. Five worthy aims for pharmacy's clinical leadership to pursue in improving medication-use. *Am J Health-Syst Pharm.* 1999; 56: 2549-51. Ford-LaPointe T. Developing new practitioners' leadership potential. *Am J Health-Syst Pharm.* 2005; 62: 254-6. Holdford DA. Leadership theories and their lessons for pharmacists. *Am J Health-Syst Pharm.* 2003; 60: 1780-6. Wells BG. Why leadership? It's all about patients. *Am J Pharm Educ.* 2003; 67(4): Article 1. Anderson RW. Health-system pharmacy: new practice framework and leadership model. *Am J Health-Syst Pharm.* 2002; 59: 1163-72. Ivey MF. Why should there be a chief pharmacy officer in a healthcare organization? *Am J Health-Syst Pharm.* 2005; 62: 975-8. White SJ. Will there be a pharmacy leadership crisis? An ASHP Foundation Scholar-in-Residence report. *Am J Health-Syst Pharm.* 2005; 62(8): 845-55. Thompson CA. Hail to the chief . . . pharmacy officer. *Am J Health-Syst Pharm.* 2004; 61: 1876-80. Zellmer WA. Doing what needs to be done in pharmacy practice leadership: a message for residents. *Am J Health-Syst Pharm.* 2003; 60: 1903-7. Zellmer WA. The habits of successful pharmacists. *Am J Health-Syst Pharm.* 2000; 57: 1794-6. Zellmer WA. Reason and history. *Vital Speeches of the Day.* 2004; 71(3): 89-94. Gouveia WA. Clinical leadership [editorial]. *Am J Health-Syst Pharm.* 2005; 62(8): 805. Woodward BW. The discontent of professionalism: call in the night [Harvey A. K. Whitney Lecture]. *Am J Health-Syst Pharm.* 2004; 61: 1779-84. Godwin HN. Achieving best practices in health-system pharmacy: eliminating the 'practice gap'. *Am J Health-Syst Pharm.* 2000; 57: 2212-3. Godwin HN. Closing the pharmacy practice gap. *Am J Health-Syst Pharm.* 2004; 61: 623-5.

unknown, as were the perceptions of hospital and health system administrators of the competencies expected of the pharmacy director to be a leader in the delivery organization.

A preliminary needs assessment was conducted to gain a better understanding of the field of pharmacy leadership, including the path to the director of pharmacy position, the current role, and the competencies necessary to be successful in the role and as a leader in the healthcare organization (see Appendix 4). The information collected also provided insight into the perceived educational needs of directors of pharmacy and their preferences for educational delivery methods. The needs assessment consisted of a survey that was mailed to 1,605 individuals (healthcare delivery executives with and without pharmacy experience and directors of pharmacy) and in-person, extensive interviews of local directors of pharmacy and executives.

Survey participants were asked to rate a list of 57 competencies according to their importance to being a pharmacy leader in the organization. Directors of pharmacy were asked not to rate themselves, but to answer in relation to directors in general. Similarly, administrators were asked not to rate their pharmacy director specifically, but to answer in relation to the directors in general.

The survey revealed a set of competencies that are considered important for the director of pharmacy. Among the five top rated competencies by both directors and administrators, which are not often addressed in schools and colleges of pharmacy, are the director's ability and responsibility to cultivate working relationships with physicians, nurses, and other caregivers; assuming leadership for effective drug use policy through such means as partnering with the medical staff and the pharmacy and therapeutics committee; and collaborating with caregivers in the design and implementation of a safe and effective medication-use system so that it meets their needs.

The surveys sent to directors of pharmacy included a section on educational opportunities to gauge the types of programs that directors might be interested in attending. Choices ranged from participating in journal and web-based continuing education to earning a Master's degree. The Master's degree option was the lowest rated option while short, intensive learning sessions was rated the highest.

Staff working on the initiative conducted extensive interviews (two to three hours) with pharmacy directors from two major health systems on the east coast and with hospital and health system administrators to gather firsthand perspectives about the profession. Each director was queried about his or her background and path to the director of pharmacy position, management and leadership training experience, current role and influence, and succession planning. Common themes and ideas emerged, including a consensus about the absence of a solid continuing education framework, the necessity of a general clarification and formalization of the essential competencies for the director role, and the responsibility of the pharmacy director in general for patient safety concerns (see Appendix 5). There is no clear path to pharmacy leadership and no expected formal training, which means that the director is often unprepared for the role. A recent article about the status of the pharmacy director during the first six months highlighted that there are areas, such as financial management, where the new director will have very little experience.<sup>27</sup> All of the directors interviewed confirmed the assertion that a lack of preparation characterized the first months in their position.

The surveys also confirmed anecdotal information that the staff gathered during the study period. Succession planning in the pharmacy department is difficult because many staff pharmacists are reluctant to take on an administrative position of such responsibility. Staff members realize that the director is under considerable pressure with complex responsibilities,

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<sup>27</sup> Nold EG, Sander WT. Role of the director of pharmacy: the first six months. *Am J Health-Syst Pharm.* 2004; 61: 2297-310.

yet may be paid less than a staff pharmacist because of pay compression issues. Pressures to increase the quality and quantity of services, yet contain or reduce costs, are viewed unfavorably by staff members. These factors are compounded by the relative invisibility of the pharmacy perspective in many strategic discussions in the organization. While each element alone may not discourage a promising department member from aspiring to a pharmacy leadership position, all of the factors combined are discouraging.

### The Strategy

The challenges presented by the mandate to improve quality of care and patient safety while simultaneously containing costs and by the demographic imperative led to a year-long partnership between the American Society of Health-System Pharmacists (ASHP), the ASHP Foundation and Georgetown University to explore the need for and the design of a Center for Health System Pharmacy Leadership.

The project was guided by an advisory committee comprised of experts in pharmacy practice, pharmacy management education, and hospital and health system administration (see Appendix 6). The committee was charged with reviewing the plan for the project, responding to the research findings, and defining the mission, objectives, and program of a center that will make a fundamental contribution to the health of the public through enhancing the effectiveness of pharmacy leadership.

The Georgetown University project staff was charged with defining the challenge and developing the response that is embodied in the concept of the Center for Health System Pharmacy Leadership. The project included an extensive literature search, the identification and evaluation of applicable experience across several industries, preliminary research, and the design of the proposed center and its programs.

### *The Center's Mission*

The mission of the Center for Health System Pharmacy Leadership is to enhance the effectiveness of pharmacy leaders in developing, managing, and continuously improving the medication-use process to improve the health and well being of patients and communities.

### *The Center's Objectives*

The development initiative generated five specific short- and long-term objectives that will fulfill the Center's mission. The Center will focus on recruiting talented pharmacists to positions of pharmacy leadership, providing and encouraging competency-based education for career development, raising senior executives' understanding of the potential contributions of pharmacy leadership to achieving organizational objectives, and expanding knowledge of the competencies necessary for effective leadership. In the long term, the Center will create and promote a pharmacy leadership credential, identifying those who are technically competent and committed to organizational pharmacy leadership.

### *The Center's Program Plan*

- **Objective: To attract highly motivated pharmacists to careers as pharmacy executives**

Successfully attracting a greater proportion of talented young pharmacists to careers in hospitals and health systems is essential to expand the pool of potential leaders. Unfortunately, the pharmacy leadership career path competes with other attractive career options for the interest of pharmacy students, and the present level of exposure to the pharmacy leadership career path is minimal.

The Center will collaborate with the American Association of Colleges of Pharmacy (AACCP) to develop a strategy for expanding student exposure to careers in hospitals and health systems with emphasis on the opportunity for consequential leadership at both the departmental

and institutional levels. A concerted effort will be made to focus particularly on those schools with substantial minority enrollment. The strategy will address curriculum content, faculty development, and student experience in pharmacy leadership and management.

The Center will collaborate with pharmacy educators on a number of proposed activities. Model syllabi will be developed for distribution to all pharmacy schools. The syllabi will identify essential competencies and be designed to provide the basis of or a component of a course, or as a template against which to assess current content. Supporting materials may include videos demonstrating the leadership role, profiles of role models in pharmacy leadership, and guidelines for hospital visits that emphasize departmental leadership activities and opportunities, such as interviews with CEOs and COOs. In considering program content, the Center will implement a “best practices” program for identifying, recognizing, and disseminating innovative curricula and activities by schools and faculty members. The Center will use the information gained to conduct a teaching institute for faculty members to support curriculum development. The institute could be held on a campus or in conjunction with an AACP meeting. The Center will also develop a program that connects schools and student organizations to hospital and health system pharmacy directors who will serve as guest speakers and mentors to interested students. The recommended speakers will be drawn from the membership of the ASHP Section of Pharmacy Practice Managers. The Center will develop presentation materials for the speakers.

To expand leadership development opportunities through joint PharmD and administration degree programs, the Center will consider identifying the currently operational joint degree models for the purpose of clarifying the strengths and weaknesses of the available options and disseminating that information to all pharmacy schools. The options include PharmD/ MBA, MHA, MPH, MPA, MS, and MA. This experience will lead to offering

technical assistance, including teaming with experienced schools, to schools that are considering starting joint degree programs. Finally, the Center will convene educators from joint degree programs to share their experiences with others and to solve common problems.

- **Objective: To provide and to encourage the expansion of competency-based education opportunities for the career development of pharmacy executives**

The majority of new PharmD graduates who are interested in pursuing advanced training will enter one of the 700 clinical residency programs that are accredited by ASHP. The residencies present an important opportunity to both infuse management and leadership competencies into the development of individuals who are likely to be leaders in a wide variety of settings, as well as to attract some of them to careers in hospital pharmacy administration and leadership.

The Center will work with ASHP to strengthen residency content guidelines and materials that focus on essential competencies for leadership. The effort will parallel the recent addition of leadership and quality of care competency requirements across medical residency programs. Consideration will be given to encouraging additional optional and required exposure to hospital pharmacy practice, administration, and leadership.

The most direct career path to administrative leadership is the pharmacy practice management (PPM) residency. The limited capacity of the programs and their inability to attract more applicants is a problem that is already a topic of discussion in the literature and with which the Center will deal early in the program.<sup>28</sup> The Center's goal is to increase the number of occupied positions in pharmacy practice management residencies to 100 in five years. This will require a creative and energetic program of promotion in pharmacy education, attention to the

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<sup>28</sup> Hunt ML. Aspiring leaders should consider M.S.- residency programs. *Am J Health-Syst Pharm.* 2000; 57: 2169. Savage SW. Pharmacy practice management residency programs. *Am J Health-Syst Pharm.* 2006; 63(2): 114, 121.

appeal of the program's content and format, and expansion of capacity. The Center may establish a panel of program leaders and graduates to design the strategy.

The Center will make an important contribution to the development and implementation of competency enhancement strategies through continual assessment of how the infrastructure of continuing education for the professions is changing. There is a growing consensus among consumer organizations, many leaders of the professions, licensure boards, federal and state legislative leaders, sponsors of specialty boards, and accreditation organizations that the extant continuing medical education (CME) system is not performing up to public expectation. They agree that CME must be reformed to deliver predictable changes in provider behavior and to reduce the causes of medical errors (see Appendix 7). CME sets the pattern for all of the health professions, including pharmacy and pharmacy management and leadership.

The consensus has coalesced around the concept of periodic demonstrated competency assessment. Achieving that objective will require fundamental changes in CE requirements and provision, to say nothing of the need to create the technology of demonstrated competency assessment. It is essential that the Center provide an informed connection for pharmacy leadership development activities to this change in CE.

The urgency to expand the pool of individuals who are interested in and preparing for careers in pharmacy management mandates a major effort to attract the interest of young careerists, including pharmacists who are employed in retail, manufacturing, distribution, and research as well as staff pharmacists in hospitals. The Center will be involved in developing and delivering the message that the career is highly satisfying professionally, highly regarded, and highly accessible.

## The Fellowship Program

The development of a practice-based pharmacy leadership fellowship program will be among the Center's first initiatives. The objectives are to provide a superior learning experience and to create a pool of individuals who are recognized as having the competencies to assume leadership positions, either immediately or in the near future. Many hospitals and health systems have been operating administrative fellowship programs for years so the advantage of expanding into pharmacy leadership will be well understood. The program has obvious succession advantages for the participating hospitals. The Center's goal is to establish 100 institutionalized fellowship positions that the field can look to for a continuing supply of talent.

The programs have their origin in the administrative residency that was for many years a component of Master's degrees in hospital and health services administration. Some of the fellowships continue to be related to, but independent from, university graduate programs. It is a model that can be adapted to pharmacy leadership development. A key strategy is to encourage hospitals to earmark one position in existing programs for a pharmacy leadership fellow.

The pharmacy fellowship is envisioned as a six-month to one-year program that may be related to some of the established health administration fellowships. This has the advantage of building on a program that is well known and respected by senior administrators, many of whom are graduates of the programs. A considerable portion of the program content and administrative arrangements would be generic to the interests of both types of fellows. The hospital pharmacy director would be the preceptor.

The Center would be responsible for soliciting the participation of hospitals in the fellowship program through a close working relationship with directors of pharmacy. The Center would also take the lead in encouraging pharmacists, particularly those emerging from

residencies of all kinds, to seek fellowship appointments. Fellowships would also be appropriate for recent PharmD graduates.

The Center's fellowship initiative will include establishing guidelines for the content of the experience so that the competency profile of a fellow is predictable in the marketplace. Outcomes will be specified and a fellowship syllabus provided that specifies such content as rotation through various departments and functions, exposure to the budgeting and planning processes, shadowing senior executives, etc., as well as the pharmacy specific component. The latter will vary depending on the background of the participant.

### The Mentorship Program

Mentoring is perhaps the most widely used management development tool employed by complex organizations. Its value is highly lauded in the literature, and mentoring is seen as mutually beneficial to both participants.<sup>29</sup> Mentoring takes many forms, ranging from informal relationships, to relationships that are encouraged and rewarded by the organization, to formal programs that are often a component of succession planning. The key component is the identification of a more senior or experienced executive who assumes responsibility for guiding the career development of a younger or more junior colleague. The primary caveat to a mentoring program is that mentoring relationships should never replace a solid social network of colleagues, which will not be a concern of the Center's program.<sup>30</sup>

A mentorship program is attractive because it engages individuals on the job and because the general idea is well known. There is some experience with mentoring in pharmacy administration, both within hospitals and health systems and nationally by the ASHP Section of

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<sup>29</sup> Kouzes JM, Posner BZ. *The Leadership Challenge*. Jossey-Bass: San Francisco; 1995. Mohr JJ, Abelson HT, Barach P. Creating effective leadership for improving patient safety. *Qual Manag Health Care*. 2002; 11(1): 69-78. Melum M. Developing high performance leaders. *Qual Manag Health Care*. 2002; 11(1) 55-68. Pieper SK. The mentoring cycle: a six-phase process for success. *Healthc Exec*. 2004; 19: 17-24. Bennis WG. The seven ages of the leader. *Harvard Business Review*. 2004; 82(1): 46-53.

<sup>30</sup> Ritchie JB, Thompson P. *Organization and People*, 4<sup>th</sup> Ed. West Publishing: St. Paul, MN; 1988.

Pharmacy Practice Managers. In general, the benefits of mentoring are well-recognized by the field.<sup>31</sup> The Center proposes to build upon the experience of industry and the field to develop an extensive and well-established mentoring program that will serve a substantial number of individuals and institutions.

Based upon a study of mentorship programs in other settings, the Center will develop a mentorship program plan. The program will be widely publicized through ASHP to attract participation. A program manual will be developed with specific goals and expectations for mentors and participants, selection criteria, timeframe, suggested activities, readings, etc. In those cases where hospitals and health systems have an established mentorship program, the manual will encourage attention to pharmacy specific competencies.

It is envisioned that program mentors will be recognized by ASHP for their contributions to leadership development. Mentor training programs may be conducted in conjunction with the ASHP annual meeting and other events, leading to certification as a mentor. It is assumed that most mentorship relationships will be within an institution or system, but it may be possible to develop a program that crosses organizations. A directory of certified mentors, which could be similar to the online directory currently used by the ASHP mentoring program that identifies those qualified to mentor in specific practice areas,<sup>32</sup> would facilitate such arrangements. If the Center's initiative can lead to 200 recognized mentorships, it will represent a substantial expansion of the leadership "pipeline."

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<sup>31</sup> Altman JS. The value of mentorship. *Am J Health-Syst Pharm.* 2005; 62(23): 2474, 2477. White SJ. Will there be a pharmacy leadership crisis? An ASHP Foundation Scholar-in-Residence report. *Am J Health-Syst Pharm.* 2005; 62(8): 845-55. American Society of Health-System Pharmacists. Proceedings of a leadership retreat conducted by the ASHP Foundation and the John W Webb Visiting Professor Program. *Am J Health-Syst Pharm.* 2005; 62(8): 856-63. Ford-LaPointe T. Developing new practitioners' leadership potential. *Am J Health-Syst Pharm.* 2005; 62: 254-6. Young D. Effective leadership is vital to pharmacy's future. *Am J Health-Syst Pharm.* 2004; 61: 1212-4. Zilz DA, Woodward BW, Thielke TS et al. Leadership skills for a high-performance pharmacy practice. *Am J Health-Syst Pharm.* 2004; 61: 2562-74. Zellmer WA. Doing what needs to be done in pharmacy practice leadership: a message for residents. *Am J Health-Syst Pharm.* 2003; 60: 1903-7.

<sup>32</sup> ASHP Virtual Mentoring Exchange.

<http://www.ashp.org/VirtualMentoring/index.cfm?cfid=13377770&CFToken=98402397> (accessed 2006 Mar 2).

- **Objective: To enhance the understanding of the senior leadership of health service organizations about how qualified pharmacy executives contribute to the achievement of the organization's objectives**

The Center will focus early attention on enhancing employment opportunities for pharmacy executives who aspire to have expanded responsibilities for all aspects of the medication-use system and are well prepared to assume them.

Preliminary research clarifies the fact that senior executives have a traditional and limited perspective of the competencies to consider when filling the director of pharmacy position. By appointing staff pharmacists with little or no management training to head very complex departments with expanding responsibilities for patient care quality and safety, senior executives are not advancing the competencies that further the reach of the management team. At present, there is no recognized competency-based definition of advanced pharmacy administrative leadership.

The challenge to the Center is two-fold. First, the Center will create the new definition of pharmacy leadership. Second, it will inform hospital and health center senior leadership about how this “new breed” of pharmacy professionals is prepared to contribute to the executive leadership team. This comprehensive team is essential to respond to the forces of change that are increasing the complexity of managing multifaceted and integrated healthcare organizations. The Center will demonstrate how the newly defined competencies, based on the medication-use system and embodied in the leadership development programs, align with strategic organizational objectives.

The Center will take the lead in developing a position description/competency profile that will enable senior managers to seek individuals who are equipped to participate in strategic planning and direction setting for the organization. The profile will be generated by researching

current and emerging competency needs. It will inform the design of the Center's management and leadership development activities and ensure that they are aligned with the definition of the high-performing pharmacy leader.

The Center will search for examples of organizations that have effectively capitalized on the potential contributions of advanced pharmacy leadership. Case studies describing "best practices" will be developed. The definition/profile and the cases studies will be disseminated to senior executives in the form of articles in healthcare management journals, presentations at professional meetings of senior executives, background papers for executive search firms, and through the membership of ASHP.

- **Objective: To expand knowledge of A) appropriate pharmacy executive management and leadership competencies, B) the role of pharmacy executive leadership in achieving the objectives of hospitals and health systems, and C) effective participation of pharmacy executives in community health promotion**

A fundamental premise is that the activities designed and implemented by the Center, Foundation, and Society will be evidence-based. Relevant databases are essential to research, policy development, program development, and evaluation. An early step will be to inventory available databases, identify data needs, and develop approaches to meeting those needs through collaboration with other organizations whenever possible. It is particularly important to develop a comprehensive census database of pharmacy departments that will facilitate workforce planning.

As the Center develops, research activities will be initiated to monitor the evolving pharmacy executive role as the basis for continually aligning educational and assessment programs with the competency requirements of successful practice. It will also be important to systematically assess the effectiveness of the Center's efforts to enhance student and early

careerist interest in pharmacy management and leadership, the fellowship and mentorship programs, and other activities.

The research program will include an emphasis on developing case studies of best practices in A) competency development across a variety of service delivery organizations; B) attracting minority group members to the field; C) improving retention; D) pharmacy department staffing strategies to enhance leadership development; and E) collaborations within systems. Such case studies will identify the variables that may be related to success, which can then be researched to produce the framework for evidence-based strategies and programs.

A Future Agenda: A Credential for Executive Management and Leadership

- **Objective: To establish a credential that will allow hospital and health system pharmacy executive managers and leaders to demonstrate that they are technically competent to manage medication-use systems and professionally committed to provide leadership in the community to ensure access to safe and cost-effective medication-use.**

A competency-based pharmacy executive management board certification program, recognized for validity and quality, would be a significant advancement of the field. A long-term objective of the Center is to explore the ramifications of establishing a credential that will encourage pharmacists to aspire to board certification and encourage employers to recognize the potential of high performing pharmacy leadership. The Center will examine the experience of other professions, design a program model, and propose an implementation plan.

## Organizational Setting

*American Society of Health-System Pharmacists Research and Education Foundation*

<http://www.ashpfoundation.org/>

The Research and Education Foundation of the American Society of Health-System Pharmacists (ASHP) is a 501c3 organization that is closely associated with the American Society of Health-System Pharmacists. Led by a fifteen-member Board of Directors that includes ASHP executives, pharmacists, and leaders in health systems and health policy, the ASHP Foundation supports research and education to improve the health and well being of patients through appropriate, safe, and effective medication-use.

The Foundation's strategic priorities are to support "1) the expansion of pharmacists' direct patient care and leadership roles; 2) the design and study of safe and effective medication-use systems; and 3) the advancement of optimal patient medication outcomes."<sup>33</sup> The Foundation provides leadership and conducts education and research activities that foster the coordination of interdisciplinary medication management leading to optimal patient outcomes. Emphasis is given to programs that will have a major impact on public health by advancing pharmacy practice in hospitals and health systems.

In fiscal year 2005, the Foundation awarded \$535,150 in support of leadership development, research, and education for talented individuals and healthcare teams. Among the initiatives and individuals supported was a Scholar-in-Residence focused on studying issues of pharmacy leadership. The individual selected had spent more than 30 years as a pharmacy manager and leader in hospitals and health systems, and she brought that experience to the residency as she studied the field's demographics, challenges, and shifting priorities. The report of the Scholar-in-Residence included recommendations both to help the profession encourage

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<sup>33</sup> American Society of Health-System Pharmacists Research and Education Foundation. ASHP Foundation Annual Report. <http://www.ashpfoundation.org/Uploads/reports/ASHPF05annualreport.pdf> (accessed 2006 Feb 10).

individuals to become leaders in their positions and to help the Society and other groups foster leadership development. One of the most recent large grants awarded by the Foundation was a \$100,000 grant to Georgetown University's Department of Health Systems Administration to design the national Center for Health System Pharmacy Leadership.

*American Society of Health-System Pharmacists*

[www.ashp.org](http://www.ashp.org)

The American Society of Health-System Pharmacists (ASHP) has been the professional association for pharmacists in hospitals, health maintenance organizations, long-term care facilities, home care, and other healthcare delivery systems since its inception in 1942. It currently has over 30,000 members. Its mission is to “advance and support the professional practice of pharmacists in hospitals and health systems and serve as their collective voice on issues related to medication-use and public health.”<sup>34</sup> The Society's 130 staff members are working to advance the profession by enhancing hospital and health system pharmacy's contribution to organizational effectiveness by focusing on the pharmacist as a leader in medication and patient safety, medication-use management, therapeutics, drug expenditure reductions, and other areas.

The Society conducts and disseminates research on the state of health system pharmacy, including studies on the pharmacy department and its leadership, and promotes best practices in the field. These are showcased in ASHP's publications, including the twice monthly *American Journal of Health-System Pharmacy*, pharmacy practice standards manuals, training manuals, and offerings such as professional meetings, workshops, educational materials, leadership and management materials, and membership in a section of interest.

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<sup>34</sup> American Society of Health-System Pharmacists. About ASHP. <http://www.ashp.org/aboutashp/index.cfm?cfid=13471769&CFToken=63191340>. (accessed 2006 March 01).

## *Section of Pharmacy Practice Managers*

<http://www.ashp.org/practicemanager/>

The ASHP Section of Pharmacy Practice Managers is a specialty focus group within the Society aimed at providing resources, support, and a sounding board to the nation's pharmacy managers and leaders. Its mission is to "be the professional community of ASHP members that fosters management skills and effective leadership," helping members manage pharmacy resources, optimize the safety of medication-use systems, develop staff and future leaders, and promote the pharmacist's role in patient care.<sup>35</sup> Currently, the Section has a total of 7,500 members, and 3,300 individuals have designated the Section as their primary area of practice. Approximately 60-70% of the Section's members are directors of pharmacy.

The Section is led by leaders in the field, some of whom occupy the executive level pharmacy leadership positions that are the focus of the Center. Its committees set the agenda for the organization's activities and have been active in both management competency analysis and development and leadership development.

The Section meets its mission, goals, and objectives in a variety of ways. Pharmacists are encouraged to learn from one another in the Section sponsored discussion groups and online networking opportunities. These opportunities often expand into groups of directors in communities who meet on a regular basis in their communities. Young managers have the opportunity to network with experienced members and gain valuable insight into pharmacy leadership in the process.

Networking and discussion groups complement the educational opportunities offered by the Section. The cornerstones of the Section are the Pharmacy Leadership Institute<sup>36</sup> and the

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<sup>35</sup> American Society of Health-System Pharmacists. ASHP Section of Pharmacy Practice Managers Strategic Plan. <http://www.ashp.org/practicemanager/mission.cfm?cfid=10975447&CFToken=46894326> (accessed 2006 Feb 10).

<sup>36</sup> American Society of Health-System Pharmacists. The Pharmacy Leadership Institute. <http://www.ashp.org/meetings/pharm-leadership.cfm?cfid=10975447&CFToken=46894326> (accessed 2006 Feb 10).

Leader's Conference. The Institute is an annual, week-long leadership seminar held at and in conjunction with the Executive Leadership Center of Boston University. It is sponsored in part by the Cardinal Health Foundation. Its goal is to offer a learning experience for pharmacy managers that includes both didactic instruction and peer interaction to expand their management and leadership competencies. Twenty-five pharmacy managers participate in the Institute each year.

The annual Leader's Conference is a two-day event designed for pharmacy residents and students, current practitioners, new managers, and seasoned managers, which draws 350 to 400 individuals annually. Course content addresses contemporary topics in pharmacy leadership, such as understanding and improving the reimbursement process, changing workforce demographics and demands, and communication skills.

The Section of Pharmacy Practice Managers also brings value to the field through Advisory groups focused on areas of critical interest to the field such as management competency research and leadership development. These groups meet regularly and shape educational opportunities, create policy positions, and research the competencies that are essential to effective pharmacy management and leadership.

#### Center Management

The Center will be an integral program component of the Research and Education Foundation of the American Society of Health-System Pharmacists. The location assures the Center ready access to the Society's professional staff resources, library, publications program, meeting planning, and databases, as well as facilitating programmatic articulation with Society programs. It is anticipated that the Center will work particularly closely with the Section of Pharmacy Practice Managers.

The Center will be headed by a director who will report to the executive vice president of the Foundation. The director will have the support of an advisory committee composed of senior executives of the Foundation, the Society, and the Section of Pharmacy Practice Managers. The committee will review the plans and programs of the Center quarterly.

The Center will develop a consultative relationship with the Department of Health Systems Administration at Georgetown University for the purpose of accessing University resources, participating in program planning, and developing collaborative activities.

## Center Budget Years 1-3

**Center for Health System Pharmacy Leadership  
American Society of Health-System Pharmacy Research and Education Foundation & ASHP**

**Proposed Three Year Budget from June 1, 2006-May 31, 2008**

				Year 01	Year 02	Year 03
				06/1/06-05/31/06	06/1/07-05/31/07	06/1/08-05/31/08
<b>Description</b>						
<b>Personnel</b>		%	<b>Base Salary</b>			
TBD	Director	100%	125,000	125,000	129,375	133,903
<b>Fringe Benefits @ 31%</b>		31%		38,750	40,106	41,510
<b>Total Personnel Costs</b>				\$ 163,750	\$ 169,481	\$ 175,413
<b>Publications</b>						
Web Page				0	0	0
Print Information				400	400	400
<b>Consulting</b>				35,000	36,400	37,856
Data Management				0	2,500	3,000
<b>Computer Equipment</b>						
Computers				3,000	0	0
Printers				200	0	0
Computer Software				200	250	250
<b>Travel</b>						
Director Travel				5,000	7,000	10,000
Recruitment Travel/Relocation Expenses				5,000	0	0
Recruitment (ads, etc.)				1,000	0	0
<b>Other Expenses</b>						
Project Supplies				1,000	1,000	1,100
Long Distance				500	500	600
Photocopying				500	600	600
Overnight Courier / Postage				1,000	1,000	1,100
<b>Rent</b>				0	0	0
<b>Total Direct Costs</b>				\$ 216,550	\$ 219,131	\$ 230,319
<b>Indirect Costs/Overhead</b>		0%		\$ -	\$ -	\$ -
<b>Total Project Costs</b>				\$ 216,550	\$ 219,131	\$ 230,319
<b>Revenue</b>						
ASHP Foundation				\$ -	\$ -	\$ -
ASHP				\$ -	\$ -	\$ -
<b>Balance</b>				\$ (216,550)	\$ (219,131)	\$ (230,319)

## Appendix 1: A Review of Competency Literature

The concepts of competency and competency development have garnered a great deal of attention in recent years. Loosely defined as the skills, knowledge, and attitudes (or aptitudes or abilities)<sup>37</sup> or the management knowledge and skills,<sup>38</sup> competencies are generally considered to be associated with one's ability to be successful in the performance of his or her job.<sup>39</sup> More specific advanced definitions vary widely.<sup>40</sup> In their text *The Art and Science of Competency Models: Pinpointing Critical Success Factors in Organizations*, Lucia and Lepsinger highlight four aspects of a competency: it "a) affects a major part of one's job (a role or responsibility); b) correlates with performance on the job; c) can be measured against well-accepted standards; and d) can be improved by training and development."<sup>41</sup> Epstein and Hundert craft a definition of professional competence in the health professions: "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served."<sup>42</sup> Lucian Leape cites this definition in the context of performance deficiencies and their impact on quality of care in delivery organizations.<sup>43</sup>

Three distinct areas of the competency literature were explored to gain an understanding of competence for health services management and the pharmacy department: competency for management in general, competency for management in health administration, and competency specific to leading the pharmacy department. The latter is the direct subject of the Initiative's Needs Assessment Survey, which was influenced by the literature survey findings.

The general management competency literature provides a foundation for identifying those skills necessary for success as a manager, regardless of industry or position. There is general agreement among researchers on competencies. In *Managers not MBAs*, Mintzberg offers a succinct list of managerial competencies in four domains: personal, interpersonal, informational, and actional. He stresses that competencies should be measurable and should not be personality traits such as honesty and commitment. His competency domains are broad, and many of the items they include are considered by other researchers to be domains in and of themselves, like leading individuals and managing self, externally.<sup>44</sup>

The Federal Executive Institute & Management Development Center within the Office of Personnel Management (OPM) outlines "Executive Core Qualifications" for leadership and

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<sup>37</sup> Shewchuk RM, O'Connor SJ, Fine DJ. Building an understanding of the competencies needed for health administration practice. *J Health Manag.* 2005; 50(1): 32-47.

<sup>38</sup> Calhoun JG, Vincent ET, Baker GR et al. Competency identification and modeling in healthcare leadership. *J Health Adm Educ.* 2004; 21(4): 419-39.

<sup>39</sup> Garman AN, Johnson MP. Leadership competencies: an introduction. *J Health Manag.* 2006; 51(1): 13-17.

<sup>40</sup> Counte MA, Newman JF. Competency-based health services management education: contemporary issues and emerging challenges. *J Health Adm Educ.* 2002; 20(2): 113-22. Longest BB. Managerial competence at senior levels of integrated delivery systems. *J Health Manag.* 1998; 43(2): 115-35. Fine DJ. Establishing competencies for healthcare managers. *Healthc Exec.* 2002; Mar/Apr: 66-67. Robbins CJ, Bradley EH, Spicer M. Developing leadership in healthcare administration: a competency assessment tool. *J Health Manag.* 2001; 46(3): 188-99.

Hudak RP, Brooke PP, Finstuen K. Identifying management competencies for healthcare executives: review of a series of Delphi studies. *J Health Adm Educ.* 2000; 18(2): 213-43.

<sup>41</sup> Lucia LD, Lepsinger R. *The Art and Science of Competency Models: Pinpointing Critical Success Factors in Organizations*. San Francisco: Jossey-Bass Pfeiffer; 1999.

<sup>42</sup> Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA.* 2002; 287(2): 226-35.

<sup>43</sup> Leape LL, Froson JA. Problem doctors: Is there a system-level solution? *Ann Intern Med.* 2006; 144: 107-15.

<sup>44</sup> Mintzberg H. *Managers not MBAs*. San Francisco: Berrett-Koehler; 2003: 257-62.

management. Their focus is on the federal government environment, but their configuration of competencies is applicable to industry in general. Its strength is that it highlights general areas such as leading change, leading people, results-driven, business acumen, and building coalitions/communications.<sup>45</sup> This model provided some of the domains included in the Initiative's Needs Assessment Survey.

Competency literature specific to healthcare leadership and management provides another layer of complexity. The process of defining competencies essential to the healthcare manager, ensuring that those competencies are measurable, and using that information to inform both the practice of healthcare management and the education of managers is a popular current topic. As in the case of general management, many competencies are ubiquitous: leadership, interpersonal skills, human resource management, coalition building, effective communication (both verbal and written), strategic thinking, analytical thinking, physician management, understanding of the healthcare environment, healthcare financial management, and information technology, among many others.

The Healthcare Leadership Alliance (HLA), a partnership of the American College of Healthcare Executives, the American College of Physician Executives, the American Organization of Nurse Executives, the Healthcare Financial Management Association, the Healthcare Information and Management Systems Society, and the Medical Group Management Association, recently categorized the competencies of healthcare management as the foundation of the recently published HLA competency directory, a searchable reference tool that catalogues three hundred competencies essential for the successful healthcare manager.<sup>46</sup> The HLA competencies are organized into five domains: leadership, communications and relationship management, professionalism, business knowledge and skills, and knowledge of the healthcare environment. The directory demonstrates agreement among the six organizations that there is a core set of competencies necessary to successful executive performance, regardless of clinical background or the organizational setting. The directory also includes competencies that are specific to particular areas of the healthcare setting, acknowledging that each specialty has a particular area of concern with a body of knowledge inherent to it.

In recent years the field of pharmacy has begun to focus on leadership and management competencies within pharmacy departments and their influence on the hospital and health system. Reflections on the characteristics of leadership and effective management in the pharmacy department pervade the literature.<sup>47</sup> However, there are few systematic assessments of

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<sup>45</sup> Office of Personnel Management. Executive core qualifications. <http://www.leadership.opm.gov/ecq.cfm> (accessed 2005 Apr 5).

<sup>46</sup> Healthcare Leadership Alliance. HLA Competency Directory. <http://www.healthcareleadershipalliance.org/> (accessed 2005 Nov 22).

<sup>47</sup> Young D. Effective leadership is vital to pharmacy's future. *Am J Health-Syst Pharm.* 2004; 61: 1212-4. Schneider PJ. Five worthy aims for pharmacy's clinical leadership to pursue in improving medication-use. *Am J Health-Syst Pharm.* 1999; 56: 2549-51. Ford-LaPointe T. Developing new practitioners' leadership potential. *Am J Health-Syst Pharm.* 2005; 62: 254-6. Holdford DA. Leadership theories and their lessons for pharmacists. *Am J Health-Syst Pharm.* 2003; 60: 1780-6. Finkel E. Promoting ethics, equality. *Mod Healthc.* 2005; 35(11): H6-10. Wells BG. Why leadership? It's all about patients. *Am J Pharm Educ.* 2003; 67(4): Article 1. Anderson RW. Health-system pharmacy: new practice framework and leadership model. *Am J Health-Syst Pharm.* 2002; 59: 1163-72. Ivey MF. Why should there be a chief pharmacy officer in a healthcare organization? *Am J Health-Syst Pharm.* 2005; 62: 975-8. White SJ. Will there be a pharmacy leadership crisis? An ASHP Foundation Scholar-in-Residence report. *Am J Health-Syst Pharm.* 2005; 62(8): 845-55. Thompson CA. Hail to the chief . . . pharmacy officer. *Am J Health-Syst Pharm.* 2004; 61: 1876-80. Zellmer WA. Doing what needs to be done in pharmacy practice leadership: a message for residents. *Am J Health-Syst Pharm.* 2003; 60: 1903-7. Zellmer WA. The habits of successful pharmacists. *Am J Health-Syst Pharm.* 2000;

the competencies required for effective pharmacy management. The general pharmacy literature demonstrates anecdotal agreement with the health administration literature including vision, mentoring, communicating with the medical staff, financial management, change leadership, being results driven, managing diversity, process improvement, community building, negotiation, conflict management, time-management, strategic and multidimensional thinking, written and verbal communication skills, knowledge of the healthcare environment, and relationship building.<sup>48</sup> The articles referenced above that address competencies rarely mention the pharmacy department generally and the medication-use system specifically.

Competency measurement literature has grown with the general interest in competencies.<sup>49</sup> Competency measurement is a complicated process. One method of assessment involves working from a job description and conducting a formal evaluation of whether the tasks or competencies specified have been met.<sup>50</sup> Assessment tools for healthcare managers often use listings of sample activities or situations, such as communication, conflict resolution, and others. Robbins, Bradley, and Spicer developed a full competency assessment tool for healthcare managers, including a list of desired competencies and work and educational actions that would develop each competency. While the tool could be used for those at different levels, it is geared toward the early careerist. Individuals are rated as a novice (N), basic (B), or expert (E) in a particular area. Not observed (Z) is also an option. The competency listing is divided into technical skills, which is further segmented into operations, financial, information systems, human resources, and strategic planning/external relations. Industry knowledge includes clinical process and healthcare institutions. The remaining domains are analytic and conceptual reasoning and interpersonal and emotional intelligence.<sup>51</sup>

It is important to note that the IOM identified created five core competencies for all clinicians essential to future of the American healthcare system. The five are now required outcomes of most medical residencies and are being considered for adoption by other professions. The five competencies are “1. provide patient centered care; 2. work in interdisciplinary teams; 3. employ evidence-based practice; 4. apply quality improvement; 5. utilize informatics.”<sup>52</sup>

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57: 1794-6. Zellmer WA. Reason and history. *Vital Speeches of the Day*. 2004; 71(3): 89-94. Gouveia WA. Clinical leadership [editorial]. *Am J Health-Syst Pharm*. 2005; 62(8): 805. Woodward BW. The discontent of professionalism: call in the night [Harvey A. K. Whitney Lecture]. *Am J Health-Syst Pharm*. 2004; 61: 1779-84. Godwin HN. Achieving best practices in health-system pharmacy: eliminating the ‘practice gap’. *Am J Health-Syst Pharm*. 2000; 57: 2212-3. Godwin HN. Closing the pharmacy practice gap. *Am J Health-Syst Pharm*. 2004; 61: 623-5.

<sup>48</sup> Zilz DA, Woodward BW, Thielke TS et al. Leadership skills for a high-performance pharmacy practice. *Am J Health-Syst Pharm*. 2004; 61: 2562-74. Wollenburg, KG. Leadership with conscience, compassion, and commitment. *Am J Health-Syst Pharm*. 2004; 61: 1785-91. Faris RJ, MacKinnon GE, MacKinnon NJ et al. Perceived importance of pharmacy management skills. *Am J Health-Syst Pharm*. 2005; 62: 1067-72. Kolawole OA, Pedersen CA, Schneider PJ et al. Perspectives on the attributes and characteristics of pharmacy executives. *Am J Health-Syst Pharm*. 2002; 59: 278-81.

<sup>49</sup> Calhoun JG, Davidson PL, Sinioris ME et al. Toward an understanding of competency identification and assessment in healthcare management. *Qual Manag Healthcare*. 2002; 11(1): 14-38.

<sup>50</sup> Murdaugh LB. *Competence assessment tools for health-system pharmacies*. 3<sup>rd</sup> ed. Bethesda, MD: American Society of Health-System Pharmacists; 2005.

<sup>51</sup> Robbins CJ, Bradley EH, Spicer M. Developing leadership in healthcare administration: a competency assessment tool. *J Health Manag*. 2001; 46(3): 188-99. Robbins CJ, Bradley EH, Spicer M. Competency assessment tool. [www.ache.org/PUBS/jhmrobs.cfm](http://www.ache.org/PUBS/jhmrobs.cfm) (accessed 2005 Feb 1).

<sup>52</sup> Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Washington, DC: National Academies Press; 2003.

## Appendix 2: Practice Management Residencies

### One-Year Programs

- Aurora Health Care – Metro Region, Milwaukee WI
- Columbus Regional Healthcare System, Columbus GA
- Detroit Medical Center/Detroit Receiving Hospital, Detroit MI
- Long Beach Memorial Medical Center, Long Beach CA
- MUSC Medical Center/College of Pharmacy, Charleston SC
- Shands at the University of Florida, Gainesville FL
- University of California, San Francisco, San Francisco CA
- University of Pittsburgh Medical Center, Pittsburgh PA
- Fairview Hospital, Minneapolis MN (will begin 2006 per Scott Knoer)

### Two-Year Combined Residency/Master's Programs

- Children's Hospital (part of Ohio State program), Columbus OH
- Methodist Healthcare – Memphis Hospitals (University of Tennessee), Memphis TN
- The Johns Hopkins Hospital, Baltimore MD
- The Ohio State University Medical Center, Columbus OH
- University of Kansas Medical Center, Kansas City KS
- University of Wisconsin Hospital and Clinics, Madison WI

### Appendix 3: Dual Degree Programs Anticipated for 2006-07

Institution	Offered Within College or School of Pharmacy					Offered In Cooperation With Other Programs				
	NLBS <sup>a</sup> / MS	NLBS <sup>a</sup> / PhD	PharmD/ MS	PharmD/ PhD	Other	NLBS <sup>a</sup> / MBA	NLBS <sup>a</sup> / JD	PharmD/ MBA	PharmD/ JD	Other
Auburn				•				•		
Samford								•		
Arizona				•				•		
Arkansas								•		PharmD/MPH
California-San Diego		•						•		
California-San Francisco Pacific				•				•		PharmD/MPH
Southern California			•	•				•	•	PharmD/Gerontology; PharmD/MPH; PharmD/Geriatric Pharmacy Certificate
Nova Southeastern								•		
Palm Beach Atlantic								•		
Florida				•				•	•	PharmD/MPH
Mercer				•				•		
Idaho State			•	•				•		
Illinois-Chicago				•				•		
Butler								•		
Drake								•	•	
Kansas								•		
Kentucky								•		PharmD/MPA; PharmD/MS Economics; PharmD/PhD
Maryland				•				•	•	PharmD/MPH
Ferris State								•		
Michigan				•						BS Pharmaceutical Sci/MS Pharmaceutical Engineering
St. Louis			•							
Missouri-Kansas City								•		BS or BA/PharmD
Montana				•				•		
Creighton			•		PharmD/MHSA			•		
Nebraska			•	•						
Southern Nevada								•		
St. John's	•									MS Pharmaceutical Sciences/MS Library
Buffalo	•							•	•	
Albany							•	•		
Campbell			•					•		
North Dakota State				•				•		
Ohio Northern									•	
Ohio State			•	•				•		PharmD/MPH
Toledo				•		•				
Oklahoma			•							
Oregon State				•				•		
Duquesne			•	•				•		
Pittsburgh				•						
Wilkes								•		
Rhode Island								•		
South Carolina				• <sup>b</sup>				• <sup>b</sup>		
South Dakota State			•	•						
Tennessee				•						
Houston			•	•						
Shenandoah								•		
Appalachia						•				
Virginia Commonwealth			•	•				•		PharmD/MPH
Washington			•	•						PharmD/PA

<sup>a</sup> Nonlicensure eligible pharmaceutical sciences degree  
<sup>b</sup> Charleston (MUSC) campus

Source: American Association of Colleges of Pharmacy. Pharmacy school admission requirements: Table 4.  
[http://www.aacp.org/Docs/MainNavigation/InstitutionalData/6867\\_Tab4PSAR.pdf](http://www.aacp.org/Docs/MainNavigation/InstitutionalData/6867_Tab4PSAR.pdf) (accessed 2006 Feb 15).

## Appendix 4: Preliminary Needs Assessment Survey Results

The Center for Health System Pharmacy Leadership Initiative implemented a preliminary needs assessment survey to enhance understanding of the competencies (skills, knowledge, and attitudes) that are necessary for the director of pharmacy to succeed as an influential leader in the hospital or health system. The survey was directed to hospital and health system executives and to pharmacy directors. Their perspectives were sought on competencies that were derived from an extensive literature search of studies of general management, pharmacy management, leadership, and other domains. The literature offers a variety of perspectives on skills, knowledge, and attitudes vital to leadership roles and positions. The high degree of agreement among them supports the validity of the insights provided by the preliminary study (see Appendix 1).

The preliminary study was based on the premise that there is a set of competencies that are generic to all health system management and leadership positions and that there is also a competency set that is specific to pharmacy leadership related to patient safety, pharmacoconomics, and the management of the medication-use system.

In addition to competency rating, the surveys of directors of pharmacy included a section on the educational options that would be of interest to them. This was asked to gain insight into the interest of the directors in various education delivery methods and options.

### Survey Methodology

The survey was mailed to a total of 1605 individuals. Seven hundred and seventy six directors of pharmacy were selected at random from a national database of hospitals and health systems provided by SMG Marketing Group. They were divided into three categories: fewer than 200 beds, between 200 and 400 beds, and the third with pharmacy directors from organizations with more than 400 beds. The American College of Healthcare Executives (ACHE) provided a sample of 800 senior executives, including CEOs, COOs, CNOs, and CIOs. Of those executives, 152 were chosen because they have pharmacy experience and indicate that they occupy a senior level management position. An additional 648 general executive level administrators were randomly chosen from ACHE's database according to the bed size of their institution, including 216 individuals from hospitals with fewer than 200 beds, 216 in hospitals with 200-400 beds, and the remaining 216 from hospitals larger than 400 beds and multi-hospital systems. An additional 29 executives with pharmacy experience were generated by a survey of schools of pharmacy and pharmacy residency programs.

Sixteen percent of the surveys (n=254) were completed and returned: 15 percent from the directors of pharmacy (n=115) and 17 percent from the administrators (n=139). Of the 139 administrators who returned the survey, 32 percent (n=45) have prior training in pharmacy and 68 percent (n=94) do not. Twenty-seven surveys were undeliverable and three individuals declined to complete the survey, which accounts for less than two percent of the survey sample.

The individuals who responded to the survey are highly educated. A substantial majority (80 percent) of the 45 administrators with pharmacy experience have one or more Master's degrees (n=36), and nine percent (n=5) have an MD, JD, or PhD. Nine percent of the 45

administrators (n=5) have a PharmD degree. The other 94 administrators are also highly educated: the majority, (88 percent), have a Master's degree (n=83) and seven percent (n=7) have an advanced degree such as an MD, PhD, or JD. The high proportion of administrators with advanced degrees made a comparison between the ratings of those with and without an advanced degree insignificant.

Of the 115 directors of pharmacy, 38 percent (n=44) reported having earned a PharmD, 47 percent (n=54) had one or more Master's degrees, and 27 percent (n=31) completed one or more pharmacy residency programs. No difference was detected between the results of those with and without a PharmD and those with and without a Master's degree.

### *Competency Rating Section*

Eighty-five competencies were identified, and fifty seven of those were identified and assigned to five distinct domains and six sub-domains for the survey (see Table 1). The first domain was professional expertise with a total of 11 competencies classified into three sub-domains: health system care coordination (four competencies), medication-use system (four competencies), and pharmacy operations (three competencies). The business acumen domain included 18 competencies in three sub-domains: human resource management (nine competencies), financial management (five competencies), and technology (information) management (four competencies). The three final domains were leading change (eight competencies), leading people for results (nine competencies), and coalition building and communication skills (11 competencies). For purposes of data analysis, each of the sub-domains was treated as a separate category of competencies.

The survey directions stated that the competencies may be important to a pharmacy director's success as a leader in any health system or hospital. Participants were encouraged to read through the complete list and rate each competency relative to all of the others. A five-point Likert scale was used, with one being much less important than most other competencies and five being much more important than most other competencies.

## Discussion

### *Competency Rating Section*

In addition to analyses by level of education, the survey data were analyzed with a comparison between directors of pharmacy and all of the administrators surveyed, and by comparing the directors of pharmacy, administrators who have a background in pharmacy, and administrators who have not had prior pharmacy training.

A hypothesis tested was that those who move into general management from pharmacy have a distinct view of the department and its leaders, which results from their intimate knowledge of the pharmacy's particular challenges and opportunities. The data do not support this hypothesis. A regression analysis comparing the ratings of the three groups – directors, executives with pharmacy experience, and other administrators – indicates that there is no significant difference overall between the two types of administrators in respect to their importance ratings of the management and leadership competencies. The administrators with

pharmacy experience rate some competencies and domains similarly to other administrators but rate other items similarly to the directors of pharmacy (Chart 1).

Ratings for the medication-use system domain are significantly different between the directors of pharmacy and the generalist administrators. It is interesting to note that the administrators consider the medication-use system domain competencies to be more important to the director's influence than do the directors.

Although all participant groups viewed the medication-use system domain competencies as the most important, pharmacy directors see the path to leadership differently from the administrators in key competency areas relevant to leadership and influence within the organization. "Leading People for Results" and "Coalition Building and Communication Skills" emphasize such competencies as "implements sound ethical practices within the pharmacy department," "actively participates in team efforts at the health system level," and "exerts appropriate influence for consensus building." In both cases the directors viewed competence in those leadership areas as significantly more important than did the administrators, indicating differences in perspective on the leadership trajectory.

Studying the highest and lowest rated competencies for each group shows that among the 57 competencies there are skills, knowledge, and attitudes that everyone considers important for the director to occupy a leadership position. The ability and responsibility of the director of pharmacy to cultivate working relationships with physicians, nurses, and other caregivers; to assume leadership for effective drug use policy through such means as partnering with the medical staff and the pharmacy and therapeutics committee; and to collaborate with caregivers in the design and implementation of a safe and effective medication-use system so that it meets their needs are all among the five highest rated competencies by directors and administrators (See Table 2). Likewise, there is some agreement by directors of pharmacy and administrators on those competencies that are less important to a high-performing director of pharmacy: the director of pharmacy should be less concerned about being able to effectively manage within cultural diversity of the workforce and patient populations or to utilize tools and resources for effective interviewing (See Table 3). There is less agreement on those competencies that are less important than there is on those that are of importance to leadership in the role.

### *Educational Options Section*

The needs assessment survey asked directors of pharmacy to rate eight educational options according to their interest in each: 1) a full-time, 12 to 18 month residential Master's degree with financial support from your employer, 2) a part-time, 2 to 3 year Master's degree evening program in your community, 3) a 12-20 month executive model Master's degree program requiring two or three weekend days a month in your community or as a commuter to another city, 4) web-based interactive self study for CE credit, 5) journal-based self study for CE credit, 6) courses on CD-ROM, 7) short, intensive learning sessions geared toward specific topics, and 8) optional programs that are part of a professional meeting. The rating scale was from one to five, with one being of much less interest than most other options and five being of much greater interest than most other options.

From an analysis of the average ratings of each educational option it can be inferred that, in general, directors of pharmacy are less interested in long-term options such as Master's

degrees and are more interested in shorter-term learning opportunities. There was a considerable difference between the average rating of the highest rated educational option, short, intensive learning sessions geared toward specific topics, and the lowest, an employer supported full-time 12 to 18 month Master's degree program, with average scores of 4.0 and 1.7 respectively. The residential Master's degree option, which directors favored the least, was followed by journal-based self study for CE credit, a part-time two to three year Master's program with evening classes, a one to two year executive model Master's degree, and courses on CD-ROM. These were clustered closely and were all considered of somewhat less interest than the other options.

Web-based, interactive self-study and optional programs that are part of a professional meeting appear to be closer to what this group of pharmacy directors prefers for continuing education, and these items were rated between about the same and somewhat more interesting than most other options. The most highly rated item was short, intensive learning sessions geared toward specific topics. Intensive learning sessions were rated as being of somewhat or much greater interest than the other options.

It can be concluded that this sample of directors is more interested in those options that do not require them to commit to a long-term program such as a Master's degree. With the exception of journal based CE, directors favor brief options such as programs tied to an annual meeting and intensive learning sessions. This finding strengthens the Initiative's conclusion that a credential based on a variety of intensive educational sessions or learning module, among other activities, is more likely to meet the needs of directors of pharmacy who are interested in furthering their management and leadership competency.

It should be noted that the majority (84 percent) of the respondents have at least one advanced degree. The results from a different sample of directors of pharmacy who have less advanced education may result in a different outcome, although the findings do not change appreciably when those who have a Master's in management or leadership are excluded or when those with a PharmD are considered separately.

### Conclusions

There is no clear agreement about the competencies necessary for the director of pharmacy to be a leader in the organization. Directors of pharmacy and health system and hospital executives think similarly on some issues, but have significant differences on others, as do general executives and those with a background in pharmacy. Directors of pharmacy have a high degree of agreement on the educational options that they prefer.

Table 1: The List of Competencies, Preliminary Study of Pharmacy Leadership

✓ Indicates inclusion in the needs assessment survey

**Domain: Professional Expertise**

**Sub-Domain: Health System Care Coordination**

- ✓ Develops systems to facilitate appropriate medication-use by providers and patients across the continuum of care
- Considers organizational structure and interdepartmental relationships that influence pharmacy's effectiveness
- ✓ Considers the roles, philosophies, and requirements of providers in care delivery settings to facilitate effective medication-use
- Develops systems that comply with regulatory requirements
- ✓ Embraces the organization's mission, vision, and values when designing medication-use processes to meet patient care needs
- Develops systems that are in accordance with the requirements of accrediting bodies
- ✓ Maintains effective medication-use systems for diverse patient care settings (eg; inpatient care units, operating rooms, ambulatory clinics, and emergency room settings)
- Supports and facilitates the safe and effective use of medications in clinical research
- Demonstrates knowledge of patient and medication safety literature through program analysis and change

**Sub-Domain: Medication-Use System**

- ✓ Assumes leadership for effective drug use policy by partnering with the medical staff and the pharmacy and therapeutics committee
- ✓ Demonstrates leadership by collaborating with caregivers in designing and implementing a safe and effective medication-use system so that it meets their needs
- ✓ Applies quality improvement techniques to optimize the safety and effectiveness of the medication-use system
- ✓ Assumes responsibility and accountability for pharmacy supply chain management, including product selection, contracting, procurement, and security by developing safe and effective systems
- Works with caregivers during the implementation phase of medication-use system to ensure that it meets their needs

**Sub-Domain: Pharmacy Operations**

- ✓ Ensures that pharmacists provide drug information and patient consultations as necessary
- Considers the role of drug therapeutics in clinical and financial decision-making
- Develops systems to ensure staff orientation and training to pharmacy processes with verification of competency

- Ensures that qualified pharmacists are monitoring patient drug therapy
- ✓ Ensures that pharmacists collaborate with caregivers to ensure that drug therapy is evidence-based and cost-effective
- Develops interface and procedures with internal and external bodies to provide needed medications in natural disaster, terrorist events, or other emergencies
- ✓ Maintains a comprehensive pharmacy service to include timely medication order review, safe and effective drug preparation, and accurate and timely drug distribution
- Maintains both routine and unique drug control systems (e.g., unit dose, controlled substances, IV admixtures, investigational drugs)
- Effectively plans pharmacy facilities to ensure effective and safe pharmacy work flow
- Applies productivity measurement and performance improvement applications using internal and external benchmarks as appropriate

**Sub-Domain: Human Resource Management**

- ✓ Utilizes performance appraisal processes to optimize staff performance
- ✓ Develops pharmacy staff talent
- ✓ Manages pharmacy staff talent
- ✓ Communicates vision, goals, and standards to staff
- ✓ Considers budget realities when planning for future staff needs
- ✓ Utilizes tools and resources for effective interviewing
- Maintains market competitive compensations levels
- ✓ Applies sound legal, financial, ethical, and cultural practices in management
- ✓ Advocates for competitive compensation models
- Takes appropriate corrective action as needed based on staff performance
- ✓ Effectively recruits and selects qualified staff
- Implements effective staff retention programs
- Uses clinical ladder and exponential incentives to retain competent staff
- Establishes synergetic leadership team within department

**Sub-Domain: Financial Management**

- Uses financial reports as part of departmental planning and forecasting
- ✓ Manages finances to remain within departmental budgets
- ✓ Applies analyses such as cost/benefit and ROI principles to decision-making
- ✓ Is accountable for control of departmental revenue, expense, and capital budgets
- Demonstrates ethical behavior in decisions related to product selection

- ✓ Considers organizational factors, such as case mix and severity adjustments, new technologies, new drug releases and new hospital services/procedures, when planning for pharmaceutical expenditures
- ✓ Adapts systems to optimize revenue capture based on changes in pharmaceutical and supply reimbursement models
- Demonstrates a creative approach to rational drug therapy that is both cost-effective and demonstrates positive patient outcomes
- Establishes marketing guidelines for pharmaceutical representatives and vendors

**Sub-Domain: Technology (Information Management)**

- ✓ Assures that information systems are interfaced or integrated across the health system to facilitate appropriate medication-use
- ✓ Assures appropriate interaction among the pharmacy department, information technology staff, and other healthcare disciplines to ensure effective use of medications and medication related technologies
- ✓ Develops protocols for maintaining integrity of patient information, including security and confidentiality
- ✓ Seeks new technology and automation applications to optimize medication-use processes
- Uses technology assessment principles to evaluate new technology

**Domain: Leading Change**

- ✓ Strategically develops comprehensive pharmacy services for use by caregivers
- ✓ Demonstrates the ability to garner organizational support for system-wide initiatives
- Demonstrates the ability to articulate a strategic vision and leads change accordingly
- Responds to regulatory, economic, and market changes as each impacts safe and effective medication-use
- Exercises leadership in advocating for changes in state and federal health policy
- ✓ Leads change efforts according to the organization's vision, mission, and corresponding strategic plans
- ✓ Integrates pharmacy services into the organization
- ✓ Considers the whole organization when engaged in problem solving and decision-making processes
- ✓ Applies strategic thinking to problem solving and decision-making
- Understands state and federal health policy
- Applies healthcare marketing approaches to programs and services

- Considers the impact of governance functions, including structure and fiduciary responsibility, on management decisions
- ✓ Creates opportunities to provide leadership relating to all aspects of appropriate medication-use
- ✓ Creates strategic plans in line with the vision of the organization's preferred future
- Makes appropriate changes or adjustments to programs or systems based on customer service and employee satisfaction data

**Domain: Leading People for Results**

- ✓ Possesses sound judgment and self-confidence in leadership roles
- ✓ Effectively manages within the cultural diversity of the workforce and patient populations
- ✓ Effectively leads team efforts
- ✓ Demonstrates awareness of personal strengths and weaknesses
- ✓ Actively participates in team efforts at the health system level
- ✓ Considers the impact of one's actions and behaviors on others as part of establishing and maintaining a professional reputation and credibility
- ✓ Appropriately delegates responsibility
- ✓ Actively mentors staff for patient care and leadership roles
- ✓ Implements sound ethical practices within the pharmacy department
- Demonstrates passion, pride, and motivation to achieve
- Demonstrates loyalty by balancing individual interests with commitment to the organizational mission
- Demonstrates strong organizational and time management skills

**Domain: Coalition Building and Communication Skills**

- Works well under pressure
- ✓ Communicates effectively in writing
- ✓ Manages relationships between the pharmacy and other caregivers
- ✓ Builds coalitions to support system-wide initiatives
- ✓ Exerts appropriate influence for consensus building
- ✓ Demonstrates effective project management skills
- ✓ Cultivates working relationships with physicians, nurses, and other caregivers
- ✓ Demonstrates the ability to resolve issues under crisis circumstances
- ✓ Gives clear, concise, and logical verbal presentations
- ✓ Negotiates effectively
- Demonstrates active listening skills
- Maintains a network of contacts for information sharing, personal development, and mentoring

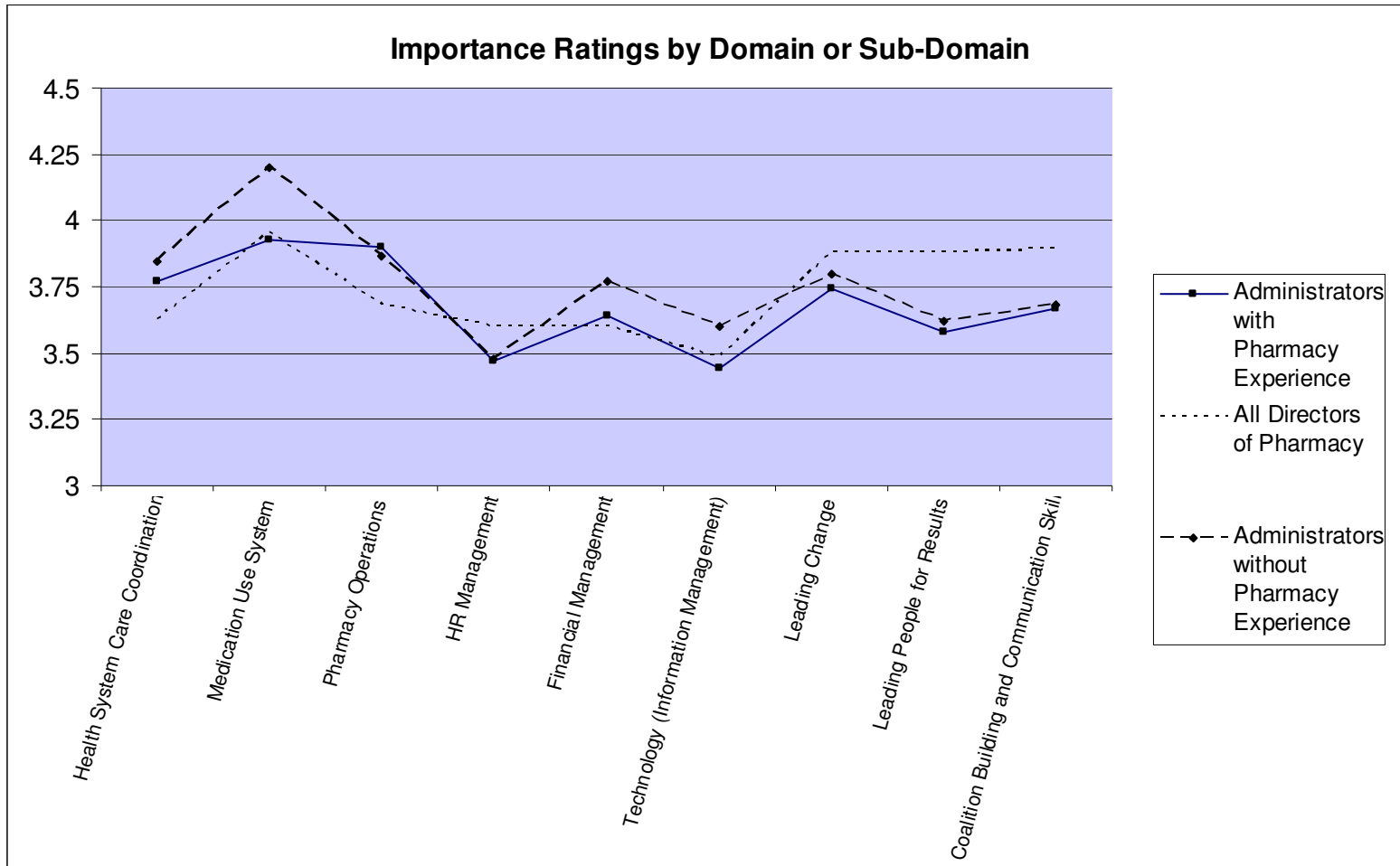
Table 2: Five Highest Rated Competencies of Each Survey Group

Highest Rated Competencies by Survey Group				
Competency	DoP	Administrators		
		General	Pharmacy Background	All
Applies quality improvement techniques to optimize the safety and effectiveness of the medication-use system	---	4.21	---	4.12
Assumes leadership for effective drug use policy through such means as partnering with the medical staff and the pharmacy and therapeutics committee	4.23	4.34	4.11	4.27
Cultivates working relationships with physicians, nurses, and other caregivers	4.35	4.09	4.42	4.32
Demonstrates leadership by collaborating with caregivers in designing and implementing a safe and effective medication-use system so that it meets their needs	4.22	4.31	4.13	4.25
Implements sound ethical practices within the pharmacy department	4.19	---	---	---
Integrates pharmacy services into the organization	---	---	4.04	---
Manages relationships between the pharmacy department and other caregivers	---	4.10	4.18	4.12
Possesses sound judgment and self-confidence in leadership roles	4.23	---	4.04	---

Table 3: Five Lowest Rated Competencies by Each Survey Group

Lowest Rated Competencies by Survey Group				
Competency	DoP	Administrators		
		General	Pharmacy Background	All
Adapts systems to optimize revenue capture based on changes in pharmaceutical and supply reimbursement models	---	---	3.22	---
Advocates for competitive compensation models	---	2.87	2.93	2.89
Demonstrates awareness of personal strengths and weaknesses	---	3.37	---	3.25
Develops protocols for maintaining integrity of patient information, including security and confidentiality	3.28	---	---	---
Effectively manages within the cultural diversity of the workforce and patient populations	3.36	3.18	2.98	3.12
Ensures that pharmacists provide drug information and patient consultations as necessary	3.36	---	---	---
Maintains a network of contacts for information sharing, personal development and mentoring	---	3.23	---	---
Utilizes performance appraisal processes to optimize staff performance	3.16	---	3.11	3.30
Utilizes tools and resources for effective interviewing	3.23	3.13	3.13	3.13

Chart 1: Importance Ratings by Domain or Sub-Domain



## Appendix 5: The Perspectives of Pharmacy Department Directors--Excerpts from the Interviews

(The development initiative staff undertook in-depth interviews with pharmacy department directors in two east coast health systems. With the permission of the participants, the interviews were recorded. The following quotations were selected to reflect the flavor of the interviews.)

### *On the state of the industry and those who practice in it*

“Clearly there is a shortage in people coming out of specialized programs in pharmacy administration and leadership, with or without the M.S. degree. There is a huge gap in the exposures at schools of pharmacy. We do a lot through clerkships, but there are still ways to go. There are not enough residency programs in leadership. There is a problem too, with lots of our best clinicians and faculty going to industry.”

“We need more mentoring and teaching of future pharmacy leaders starting with the schools of pharmacy. Future leaders should spend more time with higher level leaders to understand systems and the reasoning for operations to promote patient safety and the impact of pharmacy in a health system.”

“What they [pharmacists] don’t have is formal training in problem solving with process management (i.e. breaking the problem into pieces, managing the process, and planning).”

“Pharmacy is too focused; training programs need more [connection] with health system management. Everyone has silos and the difficulty is figuring out how to bring [them] together.”

“There are no good programs to develop someone to succeed me.”

“With reimbursement problems, for example, the director level wants to know what they need to know to fix it. This ability to influence and sell whatever it is they that you are trying to do is not my strength.”

### *Transition to director of pharmacy*

“It was a very difficult transition in many ways because I had all these financial things to do that pharmacy schools don’t train you to do. I think we had one class on pharmacy administration. And even now with the new PharmD program being so clinically focused, there is even less. After the first year [as director of pharmacy] I went back to graduate school and got a Master’s degree in management. . . I went from a clinical background to a management position with no training. . . all this stuff was basically alien.”

“It took me five to six years to learn the job, and I’m still learning. There are some basic skills that have to be learned. Communication skills obviously. Interpersonal skills, too.”

[If there were no corporate resources for management training] “You would only be as good as the person who mentored you, and that may or may not be a good thing.”

“There is one clinical pharmacist who is making that fork-in-the-road decision about leadership. He’s been trained and immersed in the academic setting as a clinician and he is feeling that he might want to become more involved with the leadership side and I’ve taken him under my wing a little.”

*On the competencies for the director of pharmacy and the Center’s potential role in delivering them*

- “1) Action oriented skills and the ability to deliver
- 2) The ability to have others feel confident that the tasks you have taken on will be completed in a timely manner because you are working on [them]
- 3) Understand the big picture and the politics of the organization
- 4) Have interpersonal skills because these can increase your influence.”

“Building and strengthening relationships, motivating and influencing people, financial acumen, strong communication skills, taking initiative and teaching innovative thinking and creativity are all essential skills.”

“Communication skills are important to relate to people on the business and personal side. Interpersonal skills are also very important for having influence within the hospital. Financial skills become more important as you climb the ladder in the organization. Finally, a systems understanding is important due to the complexity of department interactions.”

“[I] would rate financial skills with budgeting, interpersonal skills, communication skills, some computer expertise at the top. Data analysis is helpful. HR and communication management skills are a big part of what I do. Time management and problem solving skills are also very important.”

“Knowing who in the department can provide certain expertise when you need it and developing employees that have this expertise. . . Communication skills are really important as well, you need to work with stakeholders. Financial skills, budgeting skills, and others are all important.”

“One needs to be able to develop and strengthen relationships, retain talent, [and] motivate people. Relationships must be built on trust between directors and VPs of other disciplines. . . You need to develop business plans; leading teams through the completion is important. Project management and committee leadership management to accomplish goals are also important skills.”

“The evaluation and assessment of technology.”

“Gathering data and presenting it in way that is convincing makes the difference between assistant director and director of pharmacy.”

“Multidisciplinary problem solving as well as relationship and consensus building are two areas that help managers become influential.”

*On the importance of financial competency and pharmacoeconomics for the director*

“...with the reliance on dollars and cents, the most important competencies would be financial competencies, some basic accounting principles. I think people don’t really know what pharmacoeconomics really is. Every month I’m questioned about my budget, my variances. I am asked ‘why are you buying this much drug?’ I’m buying it because the physicians are ordering it. If you can tell me why they are ordering it then I can tell you ways to cut costs. Most COOs, most CEOs are running it [the pharmacy department] like a business. They see it as such because it resides in your cost center; it is your responsibility to control it. In reality, it is the entire institution’s responsibility to control that cost. And the basis for educating the institution is pharmacoeconomics.”

“I felt that budgeting needed to be a class somewhere. You’re just given millions and millions to budget. Sure, I think you could learn through trial and error, by missing your budget every year and trying to extrapolate out what happened and saying that I’ll watch that next time, but that would take years. I don’t think you’d be very good. I’m not going to say you won’t be a very good director, but you’re not getting the most for your money.”

*How should the Center for Health System Pharmacy Leadership be designed so that it would produce an effective leader?*

“Courses in the basics of management for those with little to no experience and courses on interpersonal relationships, customer service, strategic thinking, evidence-based medicine, measures and outcomes would be helpful.”

“[The Center] should offer basic H.R. management courses that include discipline, interviewing skills, performance appraisals / reviews, customer service, and pharmacy finance 101.”

“Cohesiveness with other professions to [promote] respect of other professions needs to be incorporated in training. Development of a culture of mentoring would be important. Sometimes, however, you need to have experience to be a mentor. The responsibility needs to be taken on through mentoring.”

*On the responsibility of the director for patient safety*

“When the IOM reports came out, we set up a patient safety committee. I set it up. We started brainstorming about what we could do to address IOM and to enhance patient safety. I am the point person. I feel like it is my responsibility.”

*Explain the role you have in hospital wide policy development in areas like quality of care, patient safety, and resource allocation?*

“This is a huge role. Lots of policies of quality and safety are led by pharmacy. We provide leadership in these areas and have people responsible for watching future policies in JCAHO, etc.”

*How concern with patient safety and medication errors has changed the job of the pharmacy director*

“...it’s made it a lot harder. I know that a lot of people are jumping ship and saying I can’t do this anymore. A lot of directors I know are leaving because they’re so overwhelmed.”

“Opportunities to interact with high level leaders to observe how major decisions are made are important, as is having a mentor to talk with. Understanding the impact the pharmacist has on quality of care and the value of pharmaceutical services.”

*Imagine that either you have selected one of your staff members as a promising candidate for the transition to management or that he or she has approached you with the desire to transition into a managerial role. You would like assistance in helping that person be an effective leader in the health system. How can the Center for Health System Pharmacy Leadership be designed so that it will produce an effective leader? How do you think it should be structured? What should be the focus of the curriculum? What would you want the person to walk away with?*

“We’ve done training internally for pharmacists with no management training. This group return on investment would be another good course – determining how to decide and move forward on something while asking if it really make sense in the long run.”

“Class work would be helpful. If these sessions were held at the ASHP meeting, it may be difficult for everyone to make. Ideally it would be at the local or state level.”

“Nursing wants to have its own thing. The activities should show people how to appreciate other specialties and work together more.”

What resources are available to you to train or develop someone else to succeed you?

“It needs to get done through meetings (ASHP, UHC). Lots of little things come together – there is no succinct answer to this. . . . Give your best people as much responsibility and leadership experience as possible. Getting these people involved in the organization horizontally (throughout departments) and vertically as well as getting them involved at the state local and national level. I would only do this with someone who has had done the baseline (M.S. program). This includes the management operations, contract operations, technology oversight, budgeting process and managing people, among others in new program development. When you find an area that they are not strong in, you need to find training program for this area.”

*Do you or have you had a mentor? Are you a mentor for someone else?*

“Yes, I’ve had several mentors in different capacities. If mentoring is defined as influence development, I’ve done this through career counseling. If the definition is taken seriously, it is a “wise and trusted counselor.” Mentoring requires time through close personal relationships. I try to serve as a mentor to residents and managers so that they can take on bigger roles.”

*Please share with us any leadership or management training or programs that you have completed or that you might turn to for assistance or guide others to.*

“Vince Lombardi once said, ‘Leaders are not born, they are made.’ Foremost is the Master’s program because leadership is influence. Our program teaches people how to influence the profession wherever they are. We teach management skills with leadership vision. If you only have leadership vision and don’t have muscle or skills to back it up, won’t be able to accomplish a lot. Through education and training you can teach leadership. It helps to have good people skills, although you can work on how to minimize problems with people skills you don’t have. Need people skills and depth (work and skills) the right balance is somewhere in the middle.”

“Beside the basic management functions, leaders need to be:

- strategic thinkers
- team players
- willing to change, be flexible, and try new things
- willing to delegate and release control.”

“Activities include residency training programs, group learning activities, and an intensive training course for those unable to undergo extensive training with frequent follow-up over time. An online training course would also be available.”

“Gaps for preparing leadership and management positions include the following: the schools of pharmacy train new pharmacists without fulfilling the need for leaders, schools of pharmacy do not bring in adequate leaders to teach leadership skills, and the promotion of leaders without the institution providing them with adequate training in their new position.”

*On the need for a national center for pharmacy leadership*

“you have all of these pharmacists who have an advanced degree and yet their [executive leadership’s] expectations haven’t moved along with that, so to say. With ASHP I get the feeling that they’re also struggling with that. Because I don’t think that the world of what we used to look like 10 years ago, its not like what it is right now. So I think that something like what you’re doing, I don’t think its been done, and I don’t think that it would be in competition with any of these groups at all because this is something that would be of interest, and might be something that could be modeled.”

Appendix 6: Executive and Advisory Committee Members of Center for Health System  
Pharmacy Leadership Initiative

Executive Committee Members:

**Steve Allen, MS, FASHP**

Executive Vice President and CEO, ASHP Research and Education Foundation

**Dave Chason, MBA**

Corporate Assistant Vice President of Pharmacy Services, MedStar Health

**Steve Cohen, FACHE**

Senior Vice President, Integrated Operations, MedStar Health

**Gary Filerman, PhD**

Chair, Department of Health Systems Administration, Georgetown University

**Doug Scheckelhoff, MS, RPh**

Director, Pharmacy Practice Sections, ASHP

**William Zellmer, MPH**

Deputy Executive Vice President, ASHP

Advisory Committee Members:

**Amy Freeman, MS**

Executive Vice President, Mercy Medical Center, Baltimore MD

**Jim Hethcox, MS**

Vice President - Corporate Clinical Affairs, Cardinal Health, Dublin OH

**Dave Kvancz, MS**

Chief Pharmacy Officer, The Cleveland Clinic Foundation, Cleveland OH

**Ray Maddox, PharmD**

Director of Pharmacy, St. Joseph's Candler Health System, Savannah GA

**Doug Miller, PharmD**

Assistant Vice President for Pharmacy, Grady Health System, Atlanta GA

**Susan Nordstrom-Lopez, CHE**

President, Advocate Illinois Masonic Medical Center, Chicago IL

**Bruce Scott**

Chief Operating Officer, McKesson Medication Management, Brooklyn Park MN

**Tom Thielke, MS**

Vice President, Professional and Support Services, University of Wisconsin Hospitals and Clinics, Madison WI

**Ginny Torrise, PharmD**

Deputy Chief Consultant, Pharmacy Benefits Management, Department of Veteran's Affairs, Washington DC

## Appendix 7: The Coming Transformation of Professional Competency Assessment

As the literature around competencies for management and leadership has evolved, so too has the field of professional competency and continuing education for the health professions. The field of continuing medical education is in a time of transformation, and CE for the rest of the health professions will soon follow suit. Public, professional and political confidence in the CME system is eroding.<sup>53</sup> The chasm between what is known and what health professionals do is a major reason for the crisis in healthcare quality and safety.<sup>54</sup> A radical change in the structure of CME will have profound implications for CE for all of the health professions.

Because of its breadth and reach, the CME system has no peer in regulatory recognition, academic integration, financing, professional organization participation, delivery infrastructure, or influence. The existing model served a different era reasonably well and built public confidence that it kept physicians up-to-date and competent. However, extensive primary and meta analysis concludes that most of the investment in CME does not result in behavioral change.<sup>55</sup> Moreover, it is known that it takes 17 years for an innovation to be fully adopted into

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<sup>53</sup> Barnes BE. Evaluation of learning in health care organizations. *J Contin Educ Health Prof.* 1999; 19: 227-33. Davis D, Evans M, Jadad A et al. The case for knowledge translation: shortening the journey from evidence to effect. *BMJ.* 2003; 327: 33-5. Davis DA, Thomson MA, Freemantle et al. Impact of formal continuing medical education: do conferencing, workshops, rounds and other traditional continuing education activities change physician behavior or health care outcomes? *JAMA.* 1999; 282(9): 867-74. Davis DA, Thomson MA, Oxman AD et al. Changing physician performance: a systematic review of the effect of continuing medical education strategies. *JAMA.* 1995; 274: 700-5. Ebell MH, Shaughnessy A. Information mastery: integrating continuing medication education with the information needs of clinicians. *J Contin Educ Health Prof.* 2003; 23: S53-62. Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA.* 2002; 287(2): 226-35. Ettel DL, Wilson CM. Medication errors: focus on legibility. *Pat Safety Qual Healthcare.* 2006; Jan/Feb: 52-4. Haynes RB, Davis DA, McKibbon A et al. A critical appraisal of the efficacy of continuing medical education. *JAMA.* 1984; 251: 61-4. Ivey MF. Why should there be a chief pharmacy officer in a health care organization? *Am J Health-Syst Pharm.* 2005; 62: 975-8. Institute of Medicine. *To Err is Human.* Washington, DC: National Academies Press; 2000. Institute of Medicine. *Health Professions Education: A Bridge to Quality.* Washington, DC: National Academies Press; 2003. Magee M. Who will own tomorrow's CME [slide presentation].

[http://www.healthpolitics.com/media/cme/slides\\_cme.pdf](http://www.healthpolitics.com/media/cme/slides_cme.pdf) (accessed 2006 Jan 6). Slotnick HB. How doctors learn: the role of clinical problems across the medical school to practice continuum. *Acad Med.* 1996; 71(1): 28-34.

<sup>54</sup> Cabana MD, Rand CS, Powe NR et al. Why don't physicians follow clinical practice guidelines? A framework for improvement. *JAMA.* 1999; 282(15): 1458-65. Davis DA, Thomson MA, Oxman AD et al. Changing physician performance: a systematic review of the effect of continuing medical education strategies. *JAMA.* 1995; 274: 700-5. Ebell MH, Shaughnessy A. Information mastery: integrating continuing medication education with the information needs of clinicians. *J Contin Educ Health Prof.* 2003; 23: S53-62. Institute of Medicine. *Crossing the Quality Chasm.* Washington, DC: National Academies Press; 2001. Institute of Medicine. *Health Professions Education: A Bridge to Quality.* Washington, DC: National Academies Press; 2003. Tu K, Davis D. Can we alter physician behavior by educational methods? Lessons learned from studies of the management and follow-up of hypertension. *J Contin Educ Health Prof.* 2002; 22: 11-22.

<sup>55</sup> Barnes BE. Evaluation of learning in health care organizations. *J Contin Educ Health Prof.* 1999; 19: 227-33. Cabana MD, Rand CS, Powe NR et al. Why don't physicians follow clinical practice guidelines? A framework for improvement. *JAMA.* 1999; 282(15): 1458-65. Davis DA, Thomson MA, Freemantle et al. Impact of formal continuing medical education: do conferencing, workshops, rounds and other traditional continuing education activities change physician behavior or health care outcomes? *JAMA.* 1999; 282(9): 867-74. Davis DA, Thomson MA, Oxman AD et al. Changing physician performance: a systematic review of the effect of continuing medical education strategies. *JAMA.* 1995; 274: 700-5. Ebell MH, Shaughnessy A. Information mastery: integrating continuing medication education with the information needs of clinicians. *J Contin Educ Health Prof.* 2003; 23:

practice, and that entry level certifications and licenses do not ensure continuing competence.<sup>56</sup> In this new era, neither these delays nor practitioner obsolescence will be tolerated. A better system for assuring behavioral change and continuing competence must be instituted to narrow the chasm between knowledge and practice.

There is strong interest in, and a growing commitment to, institutionalizing required continuing demonstrated competency assessment for physicians. The “power structure” – boards, professional societies and licensing authorities – is coalescing behind it. The players agree that the science of assessment cannot yet support a new system, but the convergence of public and professional policy and public demand for verifiable competence has already increased the flow of support to R & D in evaluation and simulation.<sup>57</sup> It is only a matter of time before the tools are in hand that will make transformation practical.

### Implications of CME Reform for the Strategy of Hospital and Health System Leadership Transformation

The pharmacy leadership program has been conceptualized to eventually embody the emerging premises of CME including demonstrated competency in achieving outcome-based objectives, evidence-based methodology, stakeholder accountability, and transparency. Public and professional policy will dictate parallel changes in credentialing and continuing education throughout the health professions

The profession has an extraordinary opportunity to position its practice transformation model within or ahead of the transformation of CE. The profession has the advantage of relatively little entrenched tradition, limited infrastructure, and few stakeholders to resist change. The most important stakeholder, ASHP, has established the agenda to challenge the chasm. Thus, the “stars are aligned.” The practitioners agree on the need and the leadership has the will.

The research, review of the literature, interviews, and gap analysis conducted lead to the conclusion that the design and implementation of a comprehensive strategy is urgently required. The need is not to add more courses, degrees, residency programs, journal articles, or CD-ROMs, although they are all important. Instead, the field needs a strategy that is based on substance and a path to professionalism that is visible and valued by both careerist and employer. This must be the driver of the transformation.

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<sup>56</sup> Barnes BE. Evaluation of learning in health care organizations. *J Contin Educ Health Prof*. 1999; 19: 227-33. Ebell MH, Shaughnessy A. Information mastery: integrating continuing medication education with the information needs of clinicians. *J Contin Educ Health Prof*. 2003; 23: S53-62.

<sup>57</sup> Ebell MH, Shaughnessy A. Information mastery: integrating continuing medication education with the information needs of clinicians. *J Contin Educ Health Prof*. 2003; 23: S53-62.

## Continuing Education: The British Experience

The Pharmacy Education R&D Reference Group from the Royal Pharmaceutical Society of Great Britain recently published a report titled “Making Pharmacy Education Fit for the Future.”<sup>58</sup> This report relates to what has been highlighted here: continuing education must be based on a plan of professional development and demonstrated competence and move away from counting credits earned in a lecture hall. It also offers a potential model for the future.

The British focus is on lifetime learning, both the acquisition of new skills and the continuing demonstrated competence of existing skills for all hospital pharmacists. To prevent, identify, and cope with poor performers, they have concluded that they must institute a system of formal skill appraisal. In 2002, a voluntary continuing professional development plan was implemented whereby pharmacists maintain a portfolio of their development activities to demonstrate that they have “completed the CPD cycle (needs assessment, planning, implementation and evaluation) according to the activities and responsibilities of their particular jobs.”<sup>59, p 51</sup> These portfolios enable pharmacists to track and consider their performance levels, skills, knowledge, and goals for the future: these portfolios also serve as a method of deliberate career development planning. They are surveyed by the Society for evaluation. This initiative is currently voluntary, but may become mandatory with future legislation. The assumption is that these plans are beneficial, but the Group has recommended research to confirm the link between these plans and competence.

The Pharmacy Education R&D Reference Group has also recommended that that the Royal Society should develop a competency map for hospital pharmacy that will encompass all groups and functions of the pharmacy workforce to ensure that care delivery is patient centered and appropriate. This map will serve as a method of assessing and addressing gaps in professional development and may eventually become the basis for the continuing professional development plans outlined above.

## Continuing Education in US Health System Pharmacy

Professional development for pharmacy has become a topic for debate. A 2004 article written by an assistant executive director of Accreditation Council for Pharmacy Education highlights the necessity of a change from traditional CE to the more integrative continuing professional development (CPD) concept. Like the other health professions, the pharmacy community is beginning to recognize that that the current organization of CME may have limited value and that there are other models that will provide greater benefit to the learner.<sup>59</sup> This has come about in part because of the literature from Britain and also because of the role that the IOM has played relating CE for the health professions to patient safety, as is highlighted by the publication of their 2003 report, *Health Professions Education: A Bridge to Quality*. The work is just beginning, but pharmacy has drawn the same conclusions as other health professions with regard to CE and is likely to move in the same direction.

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