Approaching the Millennium:
The Report the AACP Janus Commission
October 1997

Executive Summary

The Janus Commission was established by 1995-96 AACP President Mary-Anne Koda-Kimble to scan the health care environment and to identify, analyze, and predict those changes within the environment likely to profoundly influence pharmacy practice, pharmaceutical education, and research; and to alert the academy to both threats and opportunities that such environmental changes present. Throughout its deliberations, the Commission was drawn repeatedly to the pervasive influence of a changing, more intensively integrated and managed health care system on both pharmaceutical education and pharmacy practice. This fundamental change in health care has been the primary influence in the Commmission's thinking and recommendations.

The Commission believes that a revised model for pharmaceutical education is needed to meet the challenges presented by the changing health care system. In particular, schools and colleges of pharmacy must become true "activists" in health care policy, services delivery, and research in order to effectively achieve their missions in professional education. Employing the analogy of the pharmaceutical industry, the Commission suggests the following fundamental areas of emphasis for schools and colleges:

> the need for enhanced research and development activities related to the provision of, compensation for , and outcomes of pharmaceutical care;
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> sustained curricular reform efforts that assure successful "manufacturing" of competent and caring pharmaceutical care providers;
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> aggressive "marketing" programs, working in collaboration with the profession of pharmacy, that promote the delivery of pharmaceutical care and foster enhanced practice/education partnerships; and
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> enhanced interaction with the "product" of professional education programs, the pharmacist, to assure that graduates can and will continue to provide effective clinical, humanistic, and economic outcomes in the course of their professional careers.

Finally drawing upon the previous works of the Pew Health Professions Commission and the AACP Commission to Implement Change in Pharmaceutical Education, the Janus Commission believes that fundamental actions must be taken immediately within the academy to assure the future success of our professional programs and graduates within the evolving health care system. Among these are:

> completion of the evolution of the "values system" of pharmaceutical education toward producing graduates who are patient-centered providers of pharmaceutical care;
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> active involvement by administrators and faculty of colleges and schools of pharmacy in health care system decision-making, policy determinations, and research activities; and
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> creation by colleges and schools of action-oriented business plans that result in effective partnerships with practice organizations and health care delivery systems.

The Commission encourages a thorough and critical reading of its report and looks forward to a very healthy, lively, and productive dialogue within the academy over the next several months.

Commission Background

The Janus Commission was established by 1995-96 AACP President Mary-Anne Koda-Kimble to scan the environment in dual directions -- both historically and futuristically -- in order to identify, analyze, and predict those changes within the environment likely to profoundly influence pharmacy practice, pharmaceutical education, and research; and to alert the academy to both threats and opportunities that such environmental changes present. The Commission took its name from the Roman god Janus, which had one head with two faces capable of looking in opposite directions at the same time.

The Commission has chosen to define "the environment" as encompassing the health care delivery system, health professions education, the academic health center and research enterprise, and the related social, economic, and political forces which impact these three areas. It has done so recognizing that this does not constitute the entire environment which could be considered in such a discussion. It is a challenging and complex enough environment to contemplate nonetheless.

The Commission has convened via face-to-face meetings and conference calls throughout 1996 and 1997 and has extensively discussed several issues it feels are consistent with the charge given to it. This report summarizes those discussions and offers a series of recommendations for consideration by the academy.

Influence of Health Care System Change on Health Professions Education

The dramatic changes occurring in the U.S. health care system in recent years have been stimulated in large measure by the concern of major purchasers (e.g., corporations, federal and state governments) of health care services about the continuing and substantial growth of health care expenditures over the past two decades. As a result, according to Paul Ellwood and Alain Enthoven, "...the United States has been rapidly transforming health care by implementing a market-driven system that works -- a unique approach that has reduced rate increases for private purchasers and consumers of medical services. The market works in health care because multiple purchasers, not just the government, can introduce bold new methods of buying health care and because providers and insurers can respond with new approaches to organizing and paying for care."

As the power and influence of purchasers of health care services have grown, health care providers, both individual and corporate, have been forced to become more competitive in terms of cost, quality, and patient satisfaction. In short, health care has increasingly taken on the nature of a "buyers' market" -- a dramatic shift from the days when providers generally dictated the terms, conditions, and prices of their services and products.

The Commission discussed the significant impact that the market-driven shift toward more intensively managed systems of health care delivery will increasingly bring to bear on health professions education programs. These emerging health care entities will seek to affect both the educational process itself and, more importantly, dictate the characteristics of the product of that process -- the health care professional. This shift represents one of the most fundamental changes pharmaceutical education must face, and more importantly, embrace to its benefit if it is to continue to be successful.

The Third Report of the Pew Health Professions Commission, entitled *Critical Challenges: Revitalizing the Health Professions for the Twenty-First Century,* provides a valuable framework

for discussion of the impact of the changing health care system on health professions education. In that report, the emerging health care system is characterized as being:

> **more managed** with better integration of services and financing;
>
> **more accountable** to those who purchase and use health services;
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> **more aware** of and responsive to the needs of enrolled populations;
>
> **able to use** fewer resources more effectively;
>
> **more innovative and diverse** in how it provides for health;
>
> **more inclusive** in how it defines health;
>
> **more concerned** with education, prevention, and care management and less focused on treatment;
>
> **more oriented** to improving the health of the entire population; and
>
> **more reliant** on outcomes data and evidence.

The Janus Commission suggests that while these characteristics are ones to which the emerging system and its providers might logically aspire, considerable work remains in achieving these objectives throughout the health care system.

The report further outlines several related challenges facing the health professions education system as it produces health professionals for the future:

> **Challenge 1: redesigning** the ways in which health professional work is organized in hospitals, clinics, private offices, community practices, and public health activities;
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> **Challenge 2: re-regulating** the ways in which health professionals are permitted to practice, allowing more flexibility and experimentation, but ensuring that the public's health is genuinely protected;
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> **Challenge 3: right-sizing** the health professional work force and the institutions that produce health professionals. For the most part this will mean reducing the size of the professions and programs; and
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> **Challenge 4: restructuring** education to make use of the resources that are allocated to it.

These challenges, quite substantial in their own right, are occurring at a time when the public, health policy makers, and academicians alike are also questioning the future viability of the traditional academic medical/health sciences center (hereafter referred to as an "AHC") in which many of the primary health professions programs exist, including almost one-half of the nation's 79 schools/colleges of pharmacy. AHC's face unique challenges from the changing health care delivery system as a result of the mismatch between the historical and traditional missions of the AHC (e.g., teaching, research, and care for the uninsured) and the values of and efficiencies expected by those paying for health care. This mismatch places AHC's at a distinct disadvantage as they seek to compete for their portion of "the business" in the health care marketplace.

The challenges to be met are those of reengineering the structure, effectiveness, financing, and outputs of both health professions programs and AHC's to more effectively meet the needs of

the emerging health marketplace. This must be done while preserving and even enhancing the traditional and increasingly unique academic and research missions which have been the distinguishing features of these enterprises over the past several decades. The adverse consequences of an AHC's inability to re-engineer itself to respond more effectively to the current and future environment will inevitably filter down to the individual professional programs. Thus, the academic leaders of those programs must work together as a team to examine their programs in the context of the AHC's evolving mission in health care and modify them appropriately to meet those challenges.

Schools and colleges of pharmacy that are not located within or affiliated with an AHC (currently a slight majority of schools) face these same challenges. They too must revise and refine their academic and entrepreneurial enterprises in order to forge the alliances with health care purchasers, providers, and payers that will be essential to survival. However, these schools face two additional imperatives as a result of their structural circumstances: (1) the need to develop and/or expand relationships with other health professions education programs in order to provide educational experiences for their professional students that foster collaborative and interprofessional learning throughout the curriculum; and (2) the need to build and/or enhance interdisciplinary health care research activities related to integrated health care systems and the role of drug therapy and pharmacists' services in those systems.

Transforming the Product and Process of Pharmaceutical Education NOW, not Eventually

If the preceding discussion is reasonably accurate, as the Commission believes it is, pharmaceutical education is faced with the specific challenge of moving beyond analysis and rhetoric to action plans that position the academy, individual schools, and their graduates to be successful in a continually changing health care system. It is a time for **doing**, perhaps failing to some degree, and then doing again. The Commission believes that the academy has analyzed, studied, and "scanned" sufficiently to take action.

As it has looked both backward and forward in identifying issues, the Commission has been struck by the academy's long record of success in identifying trends and suggesting appropriate future directions. Mrtek ably chronicles the academy's efforts during the first three quarters of this century to advance the professional status of pharmacy and support its ambitions through changes in the curricula and educational degree programs of schools of pharmacy. In 1975, the Millis Commission Report (commissioned by AACP), building on the emerging concept of "clinical pharmacy", suggested that pharmacy practice be reconfigured as a "knowledge system" focused on issues of patient care and medication use rather than its historical emphasis on product chemistry and commercial sales. More recently, the Commission to Implement Change in Pharmaceutical Education provided broad and valuable guidance to the academy on issues of change, professional mission, curricular outcomes, content, and educational processes. We have, collectively, been relatively effective in describing the future and its implications for us.

For example, the Commission to Implement Change in Pharmaceutical Education successfully integrated the then-emergent concept of pharmaceutical care into its discussions and writings on the mission, revised curricular outcomes, and needed curricular and educational process changes in pharmaceutical education. Colleagues within the academy first articulated the concept of pharmaceutical care, which was further elaborated on by the Commission in its Background Paper I as follows:

> "(T)he Commission believes that the mission of pharmacy practice is to render pharmaceutical care. Pharmaceutical care focuses pharmacists' attitudes, behaviors, commitments, concerns, ethics, functions, knowledge, responsibilities, and skills on the

> provision of drug therapy with the goal of achieving definite outcomes toward the improvement of a patient's quality of life. These outcomes of drug use are: (1) cure of disease; (2) elimination or reduction of symptoms; (3) arresting or slowing a disease process; (4) prevention of disease; (5) diagnosis of disease; and (6) desired alterations in physiological processes, all with minimum risk to patients. Just as it is generally assumed that physicians are primarily involved in medical care and nurses in nursing care, pharmacists are the primary providers of pharmaceutical care.
>
> Pharmaceutical care does not exist in isolation from other health care services. It must be provided in collaboration with patients, physicians, nurses, and other care providers. Pharmacists are responsible directly to patients for the cost, quality, and results of pharmaceutical care."

The Commission to Implement Change in Pharmaceutical Education then proceeded to develop its background papers and recommendations on curricular content and length, educational processes, and the need for curricular change with this foundation in mind. In short, the philosophical leadership necessary to change the profession was provided by the academy and its thought leaders.

As a result, we approach the millennium with the concept of pharmaceutical care now widely embraced as pharmacy's mission in health care by most national pharmacy professional associations and a large segment of the profession itself. However, the philosophy has not yet been translated into universal practice performance. Consistent delivery of pharmaceutical care within the health care system by individual pharmacists and pharmacy services providers (e.g., corporate and managed care organizations, hospitals, etc.) has not yet been achieved, as evidenced by the following:

> recent national reports of the substantial costs to the health care system associated with medication misuse in ambulatory care; and
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> press reports of studies which demonstrate pharmacists' failure to detect and/or prevent recognized drug interactions in many cases.

In addition, the rapid and continuing evolution of the health care system toward more integrated and population-based systems of care presents a "moving target" for the implementation of pharmaceutical care. The definition of pharmaceutical care previously referred to focuses primarily on issues related to the provision of care to individual patients by individual providers. Much of the curricular and pedagogical reform currently underway in schools and colleges of pharmacy has been developed with the focus on individual patient care as its basis. Curricular and experiential components of the professional program in pharmacy generally lack any substantial exploration of or exposure to population-based pharmaceutical care delivery and related health systems research initiatives. The Commission believes that consideration must be given to broadening the definition of pharmaceutical care (and therefore the mission of pharmacy) to include population-based and systems-based delivery and analysis of pharmaceutical care.

What then should be the role of pharmaceutical education in ensuring the widespread implementation of both patient-specific and population-based pharmaceutical care in a rapidly changing health care system? While the academy has adopted the concept of pharmaceutical care for its curricular foundation, and has led the profession to adopt a new vision of practice, should it do more? Does the academy also have a broader responsibility to assure the implementation of pharmaceutical care within the health care system? Certainly there is criticism from the practice community that academia must do more to assist the profession to achieve the needed level of practice for the 21st century. Especially at the educational and

research levels where our future practitioners are educated and their values and skills molded, the times demand expanded leadership from the academy -- leadership coupled with full recognition of the urgency of the task.

Can, indeed must, the academy lead the effort to implement pharmaceutical care within the health care system? The Commission believes that the answer to this question is clearly YES. And it must be done by (1) continually refining the product and processes of pharmaceutical education at least as rapidly as the environment in which our graduates will practice is changing and (2) influencing that health care environment through communication and involvement with it and conducting research relevant to it. Yet, the Commission is concerned that insufficient attention and emphasis are being given by the pharmaceutical education community as a whole to the integration of pharmaceutical care into the health care system.

From the Commission's perspective, several issues must be addressed in order to overcome the barriers which are impeding the academy's ability to lead these efforts. These issues include:

the academic tradition of making decisions through faculty consensus in an era of need for rapid and responsive decision making;

the imperative to secure and expand pharmacy schools' financial base beyond student tuition and state support;

the need for enhanced alignment and participation with practitioners, corporations, and insurers that are involved in the development of integrated health care systems that include pharmaceutical and related health services;

the need for focused leadership in the design, implementation, and evaluation of pharmaceutical care systems within health services;

the need for participation in the development of marketing and reimbursement plans for pharmaceutical care;

the need to market to and educate health care decision makers concerning the competencies, capabilities, and contributions of pharmacists who are currently providing pharmaceutical care; and

increase awareness and use of initiatives of the Center for the Advancement of Pharmaceutical Education (CAPE) and other academy efforts directed toward curricular reform to help graduates achieve the specific skills and abilities (clinical, economic, and humanistic) of value to the emerging health care system.

While it is clear that pharmaceutical education does not bear sole responsibility for addressing these issues, it is equally clear to the Commission that solutions are unlikely to be found in the absence of strong leadership by the academy. Such leadership must produce results: the production of graduates with skills needed by the health care system now and in the future, the upgrading of current practitioners' competencies, and active involvement of the academy's scientists and researchers in the issues relevant to health care and improved medication use. The journey must begin in earnest.

Values - A Driving Force in the Educational Process

For several decades pharmaceutical education has had a strong and relatively clear set of values underpinning its professional education programs. Derived from both education and practice, these values have in substantial measure driven the educational process in such

diverse areas as admissions criteria and decisions, curricular structure, faculty research focus, and the structure and content of licensure examinations. They have significantly influenced the nature of the work that pharmacists perform and in many ways have molded the image and responsibilities of pharmacists in their minds and the minds of the public. These values have generally served us well.

From the Commission's perspective, those values have been primarily the following:

> Emphasis on learning and retaining factual knowledge about drug products, including their chemistry, pharmacological actions, generic and trade names, and related information;
>
> Curriculums driven by the "evidence-based hard sciences" of chemistry; biochemistry, microbiology, pharmacokinetics, etc.
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> Inculcation of an ethic in graduates that they are "the legal guardian" of the medication supply, often placing them at odds with other practitioners and patients who view medications as tools in the provision of care, not objects to be guarded; and
>
> Emphasis on independence and competition in the educational process, professional practice, and business operations.

As a result of its deliberations, the Commission believes that the traditional values system, although sound, has failed to **evolve** in a timely manner to reflect the changing needs of society and the increased complexity of health care and drug therapy. Pharmaceutical education has thus far been reluctant to modify its system of educational values, even in the face of a health care revolution and the recognition of the need for fundamental change described by the Commission to Implement Change in Pharmaceutical Education.[7.]

Consequently the academy continues to be faced with fundamental questions about its educational methods, curricular content, the type of student being attracted to the profession, and the "product" that it is producing. The Commission is convinced that a values-driven educational process must remain a core commitment of the academy. Looking forward, it is equally convinced that the nature of the values system for pharmaceutical education must evolve in the direction suggested in Figure 1.

Figure 1

Translating Values into Performance

While the importance of a soundly evolved values system for pharmaceutical education cannot be understated, the Commission believes that alone is insufficient to assure that graduates can enter practice able to provide pharmaceutical care to patients. The academy must move forward to implement substantial changes in the educational process to assure that its "product" -- the pharmaceutical care provider -- is indeed valued in the marketplace. Understanding what the health care system values is, of course, vital to the process.

The research-based pharmaceutical industry provides a ready and recognizable analogy for this process, which the Commission has considered during its discussions (See Figure 2). The Commission is exquisitely sensitive to the fact that the enterprise of pharmaceutical education produces much more than a "product", and that some may find the comparison inappropriate. However, because of the understanding and experience of many in the academy with the pharmaceutical industry, the Commission believes that the analogy can be illustrative of the issues being discussed. An important point to be made is that balance in the various components is vital to the overall success of any production process, regardless of the product.

Figure 2

The pharmaceutical industry devotes substantial amounts of human and financial resources to every phase of production of the pharmaceutical product. Key among these are the research and development initiatives at both the scientific and market research levels (a); the manufacturing process, including quality control and assurance measures (b); and the marketing and sale of the product (c). Insufficient attention to any of these three components of the model generally results in a product (d) which fails to meet the expectations of the company, the marketplace, or both.

In contrast, the pharmaceutical education "cycle" is heavily weighted toward the "manufacturing" component to the relative exclusion of the other phases of the model (see Figure 3). By focusing predominantly on curriculum, course content, and process parameters of education, the Commission is concerned that the academy is currently engaged in relatively little of the type of research and development activity, either alone or in collaboration with key components of the health care system (e.g., managed care programs, employers, etc.) that explores and defines new roles and standards of performance. Likewise, little is being done to "market" the product of pharmaceutical education.

Figure 3

Demand for the primary "product" of pharmaceutical education, the pharmacist, has remained high in recent years due to such factors as health care system expansion in the ambulatory and institutional sectors, the expanding role of medication use in patient care, and emerging roles for traditional pharmacists in non-traditional settings of care. However, the future demand for this type of "product" is now being seriously questioned.[1.]

A more balanced approach to the production of pharmaceutical education's product is essential to the future of both the academy and the profession. **The Commission believes that pharmaceutical education can sustain its core values of science- and evidence-based practice by fully engaging itself in all phases of the "production cycle" of its product as depicted in Figure 4.**

Figure 4.

Figure 3

(a) Research and Development

The pharmaceutical care paradigm continues to evolve. Current practice-based research suggests that two types of graduates will be required at the practice level -- one based at the patient/primary care interface and one at the "macro" or systems level in which outcomes research will play a key role in shaping overall drug policy for a given health care plan. Historically, U.S. colleges of pharmacy have accomplished relatively little in terms of the research and development portion of pharmaceutical care as represented in Figure 4. Indeed the Commission contends that the majority of schools of pharmacy do not have sufficiently active research and development projects relative to the evaluation, demonstration, refinement, and marketing of the pharmaceutical care practice model. Few studies have been published documenting the need for such services in a comprehensive or scientifically valid way. Some of the published research has been based outside colleges of pharmacy (i.e., in schools of medicine or public health). Schools that do not conduct such research are, of necessity, dependent on the research done by others in developing and implementing curricula and educational outcomes to be achieved by graduates.

The Commission suggests that it is both irrational and irresponsible to produce graduates who will function in a health care marketplace which the academy generally does not fully understand, does not study in a scientifically rigorous way within its own research endeavors, and does not seek to influence through collaborative interaction and development initiatives.

(b) Manufacturing

The manufacturing process builds upon information obtained through research and development efforts. Ideally, colleges should design and implement curricula based upon the "R&D" related to the product to be produced. The curriculum serves as the "tool and dye" to produce and manufacture the graduate for practice. Unfortunately, in the Commission's view, most schools and their faculties are encumbered in their curriculum reform efforts by a lack of understanding of and interaction with the marketplace. As a consequence, the potential exists for a mismatch between the expectations of the health care system regarding pharmacists' capabilities and the skills and abilities that are developed through professional degree programs.

An important additional component to be considered in this phase is the issue of quality control and assessment of graduates' performance through collaborative interaction with and feedback from the health care system. It is vital that schools obtain regular feedback from the health care system and from their alumni concerning the desired educational outcomes of the curriculum as well as the effectiveness of graduates in delivering services consistent with those outcomes and abilities. For better or worse, systems for measuring quality within the health care system are still in their infancy. The opportunity exists now to work with the health care system to develop and establish quality measures which will improve both the educational process and the effectiveness of pharmaceutical care delivery.

(C) Marketing and Sales

Where pharmaceutical education may struggle most is in the area of marketing and sales of its "product." The primary issue confronting pharmacy practitioners is related to the marketing of and compensation for pharmaceutical care services. The Commission suggests that most colleges have not taken a leadership role in this portion of the system. Yet, if the academy believes in the intrinsic value of its product and believes that the underpinning scientific and evidenced-based values of pharmaceutical education are important to society, it seems only logical that it would be actively engaged in the marketing and sales of that product.

Some college deans and faculty leaders suggest that this portion of the system is not part of their responsibility. They argue that colleges should not be engaged in the direct delivery of nor receive compensation for pharmaceutical care services. However, the Commission suggests that this can and should be logically included within the college's service mission, similar to colleges of medicine and their tradition of establishing clinical service programs for their faculty and students to provide both quality education and quality patient care.

It is widely reported that AHC administrators and deans of U.S. medical schools are meeting regularly with leaders of integrated health care systems, the Department of Veterans Affairs, and others in an attempt to both influence ongoing system design and, more importantly, to involve them more fully in the medical education process. Many AHC's are simultaneously engaging in mergers or other forms of strategic alliances while **actively** engaged and interacting with the enterprise of health care delivery in all phases of their system of education. The Commission believes that pharmacy deans and faculty must be actively involved in the processes as well. Without meeting -- and perhaps more importantly collaborating -- with their

medical, nursing, and other dean colleagues and actively participating in the evolutionary process of health system change, academic pharmacy's leadership will have great difficulty positioning schools and graduates for success in the health care system of the 21st century.

(d) The Product

Through greater involvement in the preceding three phases of the education process, schools of pharmacy will be better able to assure the competencies, values, and marketplace relevance of their product -- the pharmaceutical care provider. The Commission suggests that schools have an obligation to students and the marketplace to do just that, and that increasing levels of accountability will be placed on the health professions education system by a more intensively managed and integrated health care system. The successful graduate must possess competencies and values previously suggested (Figure 1). At the same time, the educational process must provide educational outcomes that are valued by the student and the health care system.

In short, the successful graduate must be:

> a problem-solver, capable of adapting to changes in health care;
>
> able to achieve health outcomes through effective medication use that are valued by the health care system;
>
> able to collaborate with and be a resource to physicians, nurses, and other health care team members; and
>
> a committed, life-long learner.

Consequently, schools must commit themselves to serving as career-long educational resource center for the practitioner. The Commission believes that the academy must develop programs to work collaboratively with graduates throughout their careers to monitor skills and "re-tool" competencies on an ongoing basis. In essence, as with any "producer/manufacturer," schools should provide a "warranty" for their services to the immediate purchaser -- the professional student.

In its written report, the 1994/95 AACP Professional Affairs Committee addressed these issues by recommending that the academy encourage "...substantial change in the content, delivery techniques, and financing of educational programs available to the practitioner.....by schools and colleges of pharmacy. Pharmacy practitioners possessing a bachelor of science degree who believe they have acquired the skills and knowledge of Pharm.D. graduates through practice experience and continuing education should have available to them mechanisms to demonstrate those skills through performance assessment. Schools should work individually or in consortia to develop performance-based tools to assess practitioners who desire this type of evaluation. Such tools could be used to grant academic credit toward the Pharm.D. degree or for placement of a nontraditional student within an existing program."

"Schools and colleges of pharmacy should replace existing approaches to "continuing pharmacy education" with a system of career-long 'continuing competency contracts' with local/regional practitioners, alumni, and others wishing to affiliate with such a program. Such programs should have educational processes and outcomes which assess and provide knowledge and skills that are essential to contemporary competence in pharmaceutical care practice. These programs should have a curricular structure and lead toward and/or result in formal academic credit or degree(s) consistent with the needs and objectives of the contracting professional. The costs of such programs should be borne by practitioners through appropriate annual fees throughout the

life of the contract." The Commission believes that these recommendations deserved increased attention by the academy.

Conclusion and Recommendations

Those holding leadership positions within colleges of pharmacy will determine the ultimate success of the enterprise of pharmaceutical education. The responsibility cannot logically rest elsewhere. Nevertheless, the success of pharmaceutical education now and in the future is intimately and inextricably tied to the ability of its "product", the pharmacist, to be a pharmaceutical care provider and team member within an integrated and intensively managed system of health care delivery. Clearly, this is the profession's future. A truly effective and sustained partnership between pharmaceutical education and pharmacy practice has never been more critical to our collective success.

The Commission believes that deans and faculty must act now in engaging themselves fully in the rapidly changing enterprise of health care delivery. Academic pharmacy's leaders must be an integral part of decision-making groups regarding the design and functioning of the emerging health care system. This will require the development of marketing plans for pharmaceutical care and the development of new payment systems, with possible participation in capitated and "risk-sharing" agreements. Such initiatives should be undertaken in partnership with other health professional colleges, such as medicine, nursing, and public health and could facilitate colleges' expansion of their financial base to better enable them to offer high quality educational programs, including quality postgraduate certificate programs in pharmaceutical care. Indeed, pharmaceutical education's leaders must respond fully and quickly or lose a potentially unique opportunity to help shape the emerging health care system's adoption of pharmaceutical care.

Consequently, the Janus Commission makes the following principal and fundamental recommendation:

Each college and school of pharmacy should create and maintain an action-oriented "business plan" for the development, implementation, and evaluation of a comprehensive system of "education/practice partnerships" for the college/school that fosters the goals and assures the outcomes for professional programs in pharmacy described by this Commission and the Commission to Implement Change in Pharmaceutical Education.

The Commission makes the following additional recommendations to AACP and colleges and schools of pharmacy in support of the principal recommendation:

RECOMMENDATIONS FOR AACP:

(1) Identify and publicize the "best practices" of those schools and colleges (both pharmacy and other health professions) that are effectively engaged in health care system interaction, collaboration, and research.

(2) Maintain and enhance the Association's commitment to assessing current and future professional and technical workforce requirements to provide effective pharmaceutical care. Use the data obtained to foster more informed discussions concerning the functioning and numbers of colleges and schools of pharmacy.

(3) Conduct or contract for a comprehensive "market scan" on the changing role of pharmacists in managed care settings (e.g., HMO's, PBM's, etc.) and the implications for pharmacy schools' programs and strategic initiatives.

(4) Develop programs and strategies (e.g., visitation programs, joint conferences, distribution of information on "best practices") to interface chief academic officers in pharmacy with colleagues in medicine, executives of health care plans, insurers, and others.

(5) Develop/recruit funding sources (e.g., foundations, pharmaceutical industry, etc.) to support research on pharmaceutical care implementation, compensation strategies, and related projects in ambulatory care settings.

(6) Develop a model "marketing and sales" plan for use by colleges and schools to effectively promote the "product" of the academy's professional degree programs, which would provide a national core message with flexibility for adaptation by individual schools.

(7) Develop and publicize models for non-AHC affiliated schools to use in developing and incorporating interprofessional relationships into their activities and programs.

RECOMMENDATIONS FOR COLLEGES AND SCHOOLS:

(8) Administrators and faculty must act NOW to implement what the academy has espoused in its recent deliberations, reports, and public rhetoric -- professional education programs in pharmacy which produce graduates capable of providing pharmaceutical care in a dynamic and changing health care system.

(9) The academy must demonstrate through effective curriculum reform and enhanced experiential education its commitment to an enhanced set of target values (as outlined in Figure 1) derived from its historical core values, as the underpinning of the profession and its educational processes.

(10) The academy must attract to its ranks faculty and students for whom patient service and an interest in collaborative, team-based health care are core values. Faculty should build upon and reinforce these attributes throughout the educational process and should consistently model the target values of the profession, regardless of their particular scientific or clinical discipline.

(11) Administrators and faculty must engage in active dialogue and partnering with the full range of participants in the health care system -- consumers of care, payers for care, employers, and other providers of care.

(12) Key health care decision-makers should be solicited to serve on school/college advisory and policy-making boards.

(13) Faculty resources should be committed/reallocated to the development and staffing of sites where students receive experiential education in pharmaceutical care. If necessary, reduce enrollments to assure that students' experiential education occurs in settings with the highest standards of pharmaceutical care practice.

(14) Develop university-operated, integrated faculty practice programs in which pharmacy practice faculty teach and provide services to patients in collaboration with physicians, nurse practitioners, and other health professionals.

(15) Require the incorporation of community outreach or service learning activities that stress the core values of pharmacy throughout the entire professional curriculum. Propose changes to the ACPE accreditation standards that reflect this activity.

(16) Establish consortia of schools engaged in pharmacoeconomic and outcomes research to collaborate with large managed care research entities to examine clinical and economic outcomes, payment methodologies, and other economic issues of interest to health systems and the profession.

(17) Establish an active educational outcomes and research program to both implement and evaluate pharmaceutical care education and services.

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