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Campus to Community Linkages: Roles, Commitments, and Responsibilities of a Pharmacy Program

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Historically, universities have had significant involvement in the social, economic, technological, and political development of their surrounding communities. For many of these institutions, their involvement represents commitments to enhancing the advancement and progress of the community. These commitments, through programmatic initiatives, have enormous significance in the upkeep of long-standing, as well as new, outreach activities that link campuses to communities.

Individual colleges share in the overall commitment of their universities in establishing linkages with communities. Participation of community residents in cultural, social, and health-related events, as well as community awareness of these issues, are strongly correlated to activities of some medical and pharmacy programs (Skelton and Osterweis 1993; Association of Colleges of Pharmacy 1997; Sieker and Sieker 1996; Wallerstein 1992). Thus, these colleges' targeted community programs — designed to improve quality of life, to provide training opportunities, and to promote health awareness — are becoming increasingly more important in the establishment of permanent linkages to communities. Through them, universities and their colleges function in partnership with their communities.

Two questions relative to the partnership and to linkages with communities are the focus of this essay: (1) *To what extent are individual universities responsible for encouraging and providing cooperative, participative endeavors, on a continual basis, with local communities;* and (2) *How do pharmacy programs, in particular, promote on- and off-campus linkages that complement the endeavors of their universities?* This essay addresses these two questions, presents and discusses roles and responsibilities inherent in campus-to-community linkages, and highlights activities and projections of the Florida A&M University, College of Pharmacy and Pharmaceutical Sciences' (COPPS) commitment to community outreach. Several performance tenets that have encouraged and fostered interactive links between the COPPS and its immediate community form the basis of the discussion.

The Nature of Campus-Community Linkages

It is obvious that universities, especially the larger ones, are often dominant economic forces in communities. Most of them operate under the premise of a special responsibility toward the communities in which they operate. Hence, there are crucial, supportive, and collaborative links that are formed between the two parties. These collaborative endeavors advance diverse and complementary

emphases that highlight the combined strengths of the two entities, resulting in a stronger and more productive, interactive environment.

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Key to the interaction of campuses and communities is a clear understanding of their individual goals and limitations. On one hand, academia seeks to advance the human state while acquiring and delivering knowledge. The community, on the other hand, seeks to advance the human state by acquiring knowledge; but it also strives to garner, establish, and operationalize resources that improve the functional capabilities of its citizens. Through the latter, communities provide the necessary technology, service, funds, products, and more that advance their

existence. Although campus-community interactions can be mutually beneficial, many roadblocks compromise the relationship and, in turn, may promote conflicts that weaken or hinder interactiveness between them.

Hence, in regard to the first question above, several factors must be examined as one considers the universities' responsibility in fostering interaction. The factors include: (1) colleges and universities increasingly face the need, rather than the request, to serve local communities; (2) institutions of higher learning are

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divided into different groups; (3) multiple program emphases often lie outside of local community needs and understanding but are supported by curriculum and public service; (4) conflicting and uncomfortable socioeconomic divisions within communities may even be fostered by universities; and (5) universities and professional schools often lack the capacity to tap into community resources. These factors can be shown to influence the performance, productivity, and extent of universities' involvement in community affairs.

In some areas of the country, the underdeveloped capacity to tap into community resources is a significant factor influencing development of university links to minority populations. In order to bridge this particular gap, universities must forge partnerships

that operate on a plan of shared responsibility with their communities and that address needs emanating from neglected sections of communities. It is already evident that minority universities have had some success in improving their communities by opening new avenues of sharing and accepting leadership roles in advancing inter-community relationships outside traditional areas such as sports. Some of these institutions have provided unlimited opportunities to faculty to pursue off-campus linkage relationships which increased the institution's responsibility for changing the status of underdeveloped areas of campus-community linkages (Third Conference on Educating One-third of a Nation, 1991).

Campus and community resources and programs have the potential to enrich student learning and promote cooperative interaction. Ideally, linkages are accentuated by sharing of resources, which is most beneficial when it is truly bi-directional; when it takes into consideration and addresses the needs, problems, and concerns of communities; and when it advances university programs that extend the opportunities for student training and faculty research. This understanding is important to the advancement of educational outreach to communities and has become a focus of the current national administration (Gore 1993; Clinton 1998).

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proposed by the university. Thus, in response to the second question, individual colleges sometimes may have to take the lead in creating new linkages with communities. For example, the mission and administrative guidance at Florida A&M University (FAMU) expounds upon and promotes the idea that its colleges, through their faculties, should be involved in programs that enrich the lives of community residents. As a result, the culture of the university better reflects community concerns and the support and contributions of the campus.

Individual programs such as those in the COPPS have made connections to the community in several ways. This is evidenced in the long history of community involvement through informal and formal teaching, public service, research, and student work that the college has championed. In recent years, these activities have become more formal and have resulted in several unique linkages between the college and the local community. The college now manifests itself as a model for creating a college climate of open-mindedness relative to community health care, health awareness, and educational opportunities.

The COPPS' community involvement — a commitment to meeting community needs and to solidifying a partnership — makes it a model for the rest of the university. Close examination of the COPPS and other pharmacy programs in the nation may reveal that their activities on campus are complementary to endeavors of other parts of their institutions. Individually, units on campus can respond to specific community needs and can have an integral role in forging campus-community linkages.

COPPS Community Outreach Roles and Responsibilities

The COPPS has utilized realistic, progressive, and cutting-edge concepts and methodology in carrying out its community outreach. It is guided by three primary beliefs: First, the principal goal of pharmaceutical care is to achieve definite and definable outcomes from medication use while demonstrating effectiveness in improving the quality of life for those served; second, the pharmacist remains the most accessible and responsive member of the health-care team; and third, pharmacists have expanded new roles that are of tremendous benefit to society (White Sheet, 1996).

Pharmacy programs across the nation that train individuals to enter the global marketplace provide curricular content that utilizes modern and advanced techniques of pharmaceutical care. These programs set directions for the improvement of the general health of community residents, and guarantee that universities lacking medical schools will participate in the health-care enterprise.

Participation in the health-care enterprise involves actions on several fronts including local, state, and national governments; professional organizations and associations; and the community at large.

Community needs (health, education, physical fitness, economic, social) are included in the COPPS' battery of service and communication projects provided to residents of its neighborhood. Moreover, while unique local needs are addressed by COPPS, the program also adheres to national principles of pharmacy outreach. For example, one of the most obvious and important community needs is friendly, efficient pharmacy care at convenient sites within the community. The college responds to this need by providing new students and faculty projects like establishing a network of diabetes screening and education services at neighborhood clinics; student lectures (through fraternities and other organizations) on health issues for the elderly and middle-school students; mentoring science teachers and K-12 students; and establishing other service projects at neighborhood health clinics. The college also graduates as many as eighty-nine students per year, most of whom are members of ethnic minority groups. The college reports a one hundred percent success rate on licensure exams.

COPPS' community-outreach plan and program emphases include: acceptance and retention portfolios for students and pharmacies; effective recruiting of local students into college programs; attention to critical health care deficiencies; applied research; and establishment of an on-campus receptive site for positive interaction with the community. Each of these items is addressed below.

Acceptance and Retention Portfolios

The COPPS and other health-science programs must be concerned with the extent to which contemporary challenges, such as acceptance and retention portfolios, relate to the improvement of community health, provide for community inclusiveness, and enhance quality of life.

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Undoubtedly, portfolio standards set by universities must be inclusive of community concerns for best results. Yet, many pharmacy colleges do not set and execute acceptance/retention principles, particularly for minority communities (NIH-HIEHS 1993). In fact, in many instances the final burden of responding to minority-community needs in this area is carried by only a few institutions.

The question remains, how should this challenge be addressed in the academy?

The college addresses the challenge of setting acceptance standards at university and state board of regents levels. Operationally, the university provides the means to augment required

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instructional and collaborative learning and thereby ensures successful completion of training and education requirements for students. In doing so, high standards of acceptance and retention remain a primary focus of the total institutional operation and commitment. The COPPS takes extra steps to maximize both acceptance and retention requirements by advertising, mentoring, tutoring, conducting research, and communicating ideals beneficial for its registered students and community individuals.

One of the important community links in the college's outreach program is its connection to community colleges. This linkage affects acceptance and retention portfolios in several ways. For example, in close proximity to the COPPS is Tallahassee Community College (TCC) which serves several neighboring counties. Qualified students from the Tallahassee area who are students of TCC, or of any other state community college, have (according to an articulation agreement) an inroad into the pharmacy undergraduate program on a competitive basis. As a result, many students of community colleges adhere to well publicized, prerequisite educational requirements, which ensures that standards are met as students proceed through an AA curriculum. This action has served to stimulate student interest and to provide early awareness and contact with the pharmacy curriculum.

Another community-sensitive interaction is the college's association with local retail pharmacies, independent and chain, that train and employ students. While the volume of student training is limited, the association between the community pharmacies and the COPPS has produced high quality outcomes. The COPPS provides the important link with the community via faculty and student contact and by providing opportunities for sharing information and expertise. Thus, the college's programs benefit as new stores open and other opportunities for students and faculty become available.

As stated earlier, the college has had a long-standing link to the community via its training and education program for its students and for community residents. Local professionals function as preceptors for students and thereby are a part of the college's delivery of service. Overall, twenty such community-based preceptors participate in some aspect of the college's program. From

the standpoint of the community, this partnership boosts promotion of the concept that it is prudent to have local businesses for local people managed by local experts and supported by local institutions in the community's economic structure. Furthermore, the community benefits through appointment of local pharmacists and business owners to part- or full-time faculty positions and enhanced community acceptance of patronage of local pharmacies. In turn, the acceptance/retention portfolio of the college is strengthened when local pharmacists also are educators of future pharmacists and role models.

Individuals other than pharmacists in neighboring communities take advantage of the college's open-door policy and participate in its seminars, symposia, cultural events, and invited lectures. In many instances this participation results from faculty-community interaction. Consequently, faculty may initiate program direction. The administration of the college, in turn, recognizes the importance of the linkages created by individual faculty, apart from any college-wide plan, and provides incentives to ensure those relationships are maximized and functional.

In summary, the work of the college is extended off campus by its acceptance and retention programs related to the needs of local residents and students.

Recruiting of Local Students

As evidenced by the number of matriculated students in the COPPS over the last ten years, the college continues to make significant progress in the recruitment of students from the community and nearby counties.

In 1984, the college initiated a Research Apprentice Program (RAP) by which students from local high schools are brought into faculty research laboratories for formal training. Prior to that time, such recruitment had been conducted informally by individual faculty members, through contacts with junior high and high school counselors. This activity represents one of the more long-standing and productive linkages that have influenced recruitment of local community residents. Although acceptance of students into RAP always has been competitive, local students — as many as twenty per year — have entered the program every year since its inception. Students who have participated in the program have continued into careers in pharmacy and have returned to communities — local, state and nationwide — to render care. Thus, RAP has become a recruitment effort which has yielded students with strong science backgrounds who are able to compete successfully for the available slots in this limited-access program. Moreover, RAP has provided the opportunity for students to develop, define, and refine their emphasis towards the science disciplines in general and specifically towards health-care careers.

RAP also has provided young community members with a connection to national programs, associations, and organizations. Of

early RAP entrants, a significant percent (eighty-three percent) have progressed to pharmacy careers, medical school, graduate school, dental school, and other health-care professions. Essentially, the students develop communication, research, and science skills that are rare at such an early age. Their parents and teachers, who also reside in the community, become ambassadors of the college and thereby widen the acceptance of its programs and help in its recruitment efforts. Overall, the COPPS is committed to training students from surrounding communities and envisions that those

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individuals will remain active participants in the college's development. Furthermore, faculty and students continue to initiate and maintain connections with local communities and thereby develop new linkages and interactive programs.

In one such venture, faculty serve as mentors and/or judges at annual science fairs at local schools; up to seventy-five percent of basic science faculty and fifty percent of clinical faculty regularly participate. The endeavor provides faculty with a wide variety of interpersonal

contact and student guidance: faculty see the skills and science potential of students — often for up to six years prior to their applying to college or their eligibility for RAP — and guide these young students in channeling their potential and interests. As a result, students apply to programs that best fit their skills. Although all of them do not choose pharmacy, many do, while others go on to graduate and professional schools in the biomedical sciences. Thus, the linkage formed by the early interaction with young students provides the opportunity for the college and the university to extend its community-based cooperative activities. This involvement with young people has increased their understanding of the sciences while promoting pharmacy as a career for underrepresented minorities.

Another initiative of the college, recently formalized into a grant proposal, addresses the potential of African American members of the minority community to pursue careers in science. In most communities, these individuals comprise an untapped pool of future scientists. The rationale of the proposal is that in K-12 schools, such as the FAMU Developmental Research School (DRS), students with innate abilities for science careers falter in science courses because of apprehensiveness, unawareness of their skill, or inadequate early training. Moreover, the abilities of those individuals often remain masked under circumstances that place science in an arena of the difficult or only for students of superior intellect.

The proposal calls for an all-out effort of campus and off-campus personnel to improve the progression of minorities into

science careers. It links activities in the colleges of Arts and Sciences and Pharmacy, faculty, and parents of the DRS and junior and senior science students into a package of interactive education for young students beginning as early as first grade and progressing through graduate or professional school. The COPPS still envisions this type of linkage to the community as one that will position it to participate more widely in the early education of pharmacists and scientists for years to come.

Critical Health-Care Deficiencies and Applied Research

Commensurate with the present state of and commitment to future improvements of campus-community interrelationships, the COPPS envisions a long-term goal that would allow the re-engineering of pharmacy practice and health-care delivery in the state. Such an endeavor would have to reflect far better management and procedural roles for dealing with critical health-care deficiencies that are facing communities. Across the United States, pharmacy programs must address this issue realistically, in a manner consistent with institutional missions and commitment.

Statistics show that minority communities have relatively higher rates of health-awareness deficiencies, major critical diseases, mortality, and inadequate treatment facilities (See Braithwaite 1991; NIH-NIEHS 1993; DHHS 1991 for a discussion of outcomes and awareness training in minority communities.)

The Centers for Disease Control and Prevention lists cardiovascular diseases, diabetes, respiratory diseases, stroke, and cancer to be high on the list of conditions that disproportionately impact the health status of minorities. Current statistics also indicate that as recently as March 1998, despite a national decline in overall rates of cancer, minority individuals — especially black males — still contract the disease in disproportionate numbers. Similar statistics can be quoted for other diseases. In order to reverse this startling trend, community-outreach programs must champion emerging concepts and practices relative to disease prevention, disease treatment, and healthy living (Billes, Campbell, and Manassee 1993). Pharmacy and public health practitioners of the COPPS and other researchers have developed services directed at improving health, community education, and community health awareness.

For example, the college promotes drug awareness and provides a site for drug information and drug education through lay seminars that help communities to be compliant and responsive to pharmaceutical care. An initiative of COPPS' Institute of Public Health has made possible a community-outreach program designed to provide direct access to on-line HIV/AIDS information to predominately African American residents of the community. In addition, the Institute has established a community/university partnership initiative to assess the impact of hazardous waste sites on minority communities in the states of Florida and Georgia. This

initiative has resulted in the establishment of the Southeastern Center for Community Environmental Health at the COPPS.

Similarly, although the Center for Cardiovascular Diseases is still in the infancy stage, positive cooperative endeavors have begun with local health agencies and clinics in the areas of research and training. In a broader sense, the college's programmatic focus on the disproportionate distribution of specific diseases has generated many new opportunities for positive community interaction at sites across the state.

Additionally, the mainstreaming of applied research relative to critical diseases is part of the college's focus, as the institution becomes more comprehensive in its training and outreach manifesto. Specifically, applied research is being positioned as an important part of the newly established Center for Cardiovascular Diseases of the COPPS. In fact, through its faculty, students, and community partners, the center and the college are positioned for the new, technologically advanced, service-oriented pharmacy practice of the next century that will address many local concerns.

Effective campus-community linkages relative to health care must address deficiencies, as well as propose and implement solutions that reach the core of the problems. As part of its overall vision and operation, COPPS has initiated new programs that address health assessment/awareness and public health needs. Specifically, the establishment of an Institute of Public Health (1995), a Center for Cardiovascular Diseases (1996), and a Diabetes Outreach Program (1997), under the umbrella of the COPPS, represent part of a community outreach emphasis and commitment to answer critical health care issues of the community. Such programmatic endeavors are consistent with the aims and goals expressed and identified in Healthy People 2000 (DHHS 1991) and the 1994 Surgeon General's Report on Health Promotion and Disease Prevention (DHHS 1994).

Currently, COPPS activities that address areas of community health deficiencies primarily focus on events that increase public awareness of diseases and their associated risk factors. In other areas, more extensive interactions are in place. For example, community linkages have been formed that involve collaborative efforts between the college faculty, students, and specific community health-care clinics, institutions, and centers. In such situations the college's staff plays a part in the education and treatment of patients from the community.

The faculty's expertise in writing grant proposals and their problem-solving abilities, coupled with the identification of funding sources, have fostered a stronger link between the college and community individuals (e.g., physicians, legislators, clergy, leaders) and groups. By working together, all talents are used to secure funding and other opportunities, which ensures essential health-care interventions and subsequent community empowerment. In this way, the programmatic outreach of the college is driven and improved by addressing community health-care deficiencies through applied research and other outreach activities.

Conclusion

University-community interaction extends the obvious, traditional role of pharmacy programs across the nation. In order to be successful, campus-community linkages must be specific, well directed, and culturally sensitive and inclusive. Therefore, development of new programs must address the degree to which the community will be involved in the decision-making process for program emphasis. In addition, faculty must study, interpret, and understand community needs and the avenues through which attempts at limiting health care deficiencies must be channeled.

The COPPS accentuates its involvement with communities by addressing important issues and needs through programs like Pharmacy Careers Training, Managed Care, Continuing Education, Drug Information, The Institute of Public Health, The Center for Cardiovascular Diseases, and Graduate Education and Research. All these initiatives contain components directed towards strengthening the partnership with communities so that both partners would remain self reliant and productive while maintaining their interactiveness.

As part of a commitment to society and its maintenance of links to the community, the COPPS will continue to address public-health concerns such as chronic diseases, geriatric disorders, substance abuse, teen pregnancy, and toxic substances in the environment. Additionally, the recognized vulnerability of sections of the population to disease remains an ever-increasing, driving force of new initiatives designed to expand the college's presence as a synthesizing, integrative partner of well-defined campus-community linkages.

The authors support the position that collaborative endeavors in drug-therapy management must include not only physicians and pharmacists, but also community members who are closer to patient compliance, accessibility to primary care, and patient-pharmacist relationships (NACDS 1997). Furthermore, communication between all groups — the college, the community, business, industry, and government — has directly benefitted the establishment of a new outreach emphasis relative to open-minded pharmaceutical care.

Finally, in the context of fact finding and interventions relative to pharmaceutical care and service delivery, community needs remain a primary determinant of the health-promotion strategy of the COPPS. Therefore, activities conducted and initiated by faculty and students, and the mission of the college, combine to make the COPPS a catalyst for community change and improvement.

Concomitant with the activities described above is a commitment to improving and creating new campus-community linkages as part of a long-term vision. In fact, the authors perceive a re-engineering of the education system such that all components (K-12, intra-campus sites, the university as a whole, and the academy) are in a better state to accept changes in community needs, management, and process that would best advance campus-community linkages. ■

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