

SPECIAL ARTICLES

Curriculum Recommendations of the AACP-PSSC Task Force on Caring for the Underserved

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A task force was convened by the American Association of Colleges of Pharmacy (AACP) and the Pharmaceutical Services Support Center (PSSC) and charged with the development of a curriculum framework to guide pharmacy programs in educating students on caring for the underserved. Utilizing a literature-based model, the task force constructed a framework that delineated evidence-based practice, clinical prevention and health promotion, health systems and policy, and community aspects of practice. Specific learning outcomes tailored to underserved populations were crafted and linked to resources readily available to the academy.

The AACP-PSSC curriculum framework was shared with the academy in 2007. Schools and Colleges are urged to share experiences with implementation so that the impact of the tool can be evaluated. The task force recommends that the AACP Institutional Research Advisory Committee be involved in gathering assessment data. Implementation of the curriculum framework can help the academy fulfill the professional mandate to proactively provide the highest quality care to all, including underserved populations.

Keywords: underserved populations, curriculum, community-based learning

INTRODUCTION

Medical advances have improved the overall quality and duration of life in the United States. As our understanding of disease and drug therapy at the molecular level has deepened, doctor of pharmacy programs have assiduously and continuously incorporated new knowledge and technologies into the curriculum. Students work hard to master an ever-expanding body of knowledge, and to develop the scientific understanding and clinical skills needed to provide basic and advanced health care services to the public. Yet despite our graduates' competence and sworn duty to make a positive impact on society through the relief of human suffering, the provision of high quality pharmaceutical care is often limited in underserved populations. To do the greatest good for the greatest number, pharmacy graduates must not only have the knowledge, attitudes, and skills to provide quality pharmaceutical

care, they must care enough to proactively seek opportunities to render that care to the disenfranchised and forgotten people within our society.

Underserved Populations

The United States Government agencies define underserved populations using several criteria. The US Department of Health and Human Services Agency for Healthcare Research and Quality (AHRQ) describes underserved populations as "those who face barriers to timely access to health services which provide the best possible health outcomes. Populations... include racial and ethnic minorities, low income groups, women, children, elderly, residents of rural areas, and individuals with special health care needs."¹ Medically underserved areas and populations are determined by the Health Resources and Services Administration (HRSA) based on an index of medical underservice.² The 4 variables used to calculate a medically underserved area designation are (1) percentage of the population below the poverty level; (2) percentage of the population age 65 years and over; (3) infant mortality rate; and (4) ratio of primary

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care physicians per 1,000 population. Exceptions to the calculated index of medical under service consider “unusual local conditions which are a barrier to access to, or the availability of, personal health services.”

In addition to geographically defined underserved areas, many individuals have limited or no access to physician- or pharmacist-delivered care despite living in an area with an abundance of practitioners and services. Cultural and socioeconomic factors, literacy, and/or disabilities may all affect a person’s ability to obtain, and their acceptance of, available health services. Lack of health insurance, limits in terms of coverage, and difficulty accessing information related to state-subsidized health insurance are all important barriers to care. Temporal factors, such as when a Medicare Part D recipient loses coverage while in the “donut hole,” may also affect an individual’s ability to access needed pharmacy services.

Underserved populations are not unique to the United States. In many parts of the world, access to medicine and medical care is limited. In our globally focused society, the health needs of marginalized individuals, communities, and populations living outside our borders must be considered when developing curricula in pharmacy education. Initiatives such as the World Health Organization’s (WHO) Eleventh General Programme of Work, 2006-2015³ (which included equitable access as 1 of its 7 agenda items) emphasize the need to address international challenges to global health quality, and to strive to improve public health conditions wherever the need exists.

Health Disparities

Health disparities have been defined as racial or ethnic differences in the quality of health care that persist after adjustment for factors such as social determinants, access, and available or provided health care services and interventions.⁴ Health disparities reflect unequal quality of care and result in suboptimal clinical outcomes for the populations affected. The sources and/or causes of health disparities are complex and multifaceted, and may include such things as differences in overall baseline health status, cultural, social, economic, environmental, and other barriers to optimum health, non-utilization of available health services, and bias/stereotyping by health care providers.

In its landmark report from 2002, *Unequal Treatment – Confronting Racial and Ethnic Disparities in Healthcare*, the Institute of Medicine (IOM) summarized the evidence for health disparities involving the underserved available to date in the United States.⁴ The report determined that a comprehensive multilevel strategy would be needed in order to eliminate them. Among the strategies cited for eliminating health disparities was the

development of integrated, interdisciplinary health professions curricula that addressed cultural, social, and other factors impacting patient care and health care outcomes. As evidenced by ongoing tracking and reporting provided by AHRQ in its annual *National Healthcare Disparities Report* (NHDR), disparities related to race, ethnicity, and socioeconomic status are still pervasive in our health care system today.¹

Academic Mandates

The health professions community, including the profession of pharmacy, has made its position on the importance of providing care to underserved populations clear through the actions, published papers, and mission statements of leading organizations, affiliated agencies and institutions of higher learning.

American Association of Colleges of Pharmacy (AACP). The Oath of a Pharmacist has now become an essential component of the white coat ceremonies (or similar events) held early in doctor of pharmacy (PharmD) programs. Originally constructed in 1983 by APhA and AACP, the Oath includes statements which commit professional students to providing care indiscriminately.⁵ The phrase, “service of all humankind” in the first sentence underscores pharmacists’ obligation to use their education to improve health equally and without prejudice. Revisions to the Oath approved in 2007 by the AACP House of Delegates re-emphasize this obligation with the statement, “I will do my utmost to serve my community and humankind as a citizen as well as a pharmacist.”

The most recent iteration of the Educational Outcomes promulgated by AACP’s Center for the Advancement of Pharmaceutical Education (CAPE) recognized the need for pharmacists to render population-specific disease state management that takes into account risk factors and pharamcoeconomic data, and challenged practitioners to “assure that all relevant members of a patient population receive needed services” (Pharmacy Practice supplemental outcomes).⁶ The Social and Administrative Sciences CAPE supplemental outcomes specifically addressed the need for the provision of culturally appropriate pharmaceutical care, and urged the academy to embrace the critical role of the profession in assuring access to care and to “demonstrate an awareness of health disparities and means of addressing the problem.”⁶

The academy has long recognized the value of structured, reflective service-learning experiences in advancing social justice, professional responsibility, critical thinking skills, and a truly caring disposition. These skills and attitudes are particularly critical when the health of underserved communities is at stake. Many service-learning

projects reported in the pharmacy education literature have involved underserved populations⁷⁻¹² and a supplement issue of the *Journal* was devoted to this topic in 2004. In 2000-2001, the AACP Professional Affairs Committee set the stage for the work described in this manuscript when it competently addressed its multifaceted charge to: (1) develop strategies and identify resources needed to provide care to underserved populations and instill an action-oriented concern for the underserved as a core professional value, and (2) identify programs and services to promote the development of service-learning initiatives with underserved or disadvantaged populations.⁷

The AACP Argus Commission focused its 2004-2005 report on community engagement, which was defined as “the application of institutional resources to address and solve challenges facing communities through collaboration with these communities.”

The Commission stated that the academy must “help our students see the challenging issues confronting every aspect of society and draw out in them a sense of purpose that, as a learned professional, they have a moral responsibility to engage communities in meaningful ways to resolve community problems.”¹³ In order to be sufficient, cultural competence must be accompanied by overt actions motivated by a sense of social justice. Educators should therefore expose students to ideas and experiences that compel them to action. To that end, the Commission put forth a proposed policy statement encouraging students and faculty members to deliver culturally competent care as part of their efforts to eliminate disparities and inequalities that exist in the health care delivery.¹³

Institute of Medicine (IOM). In their 2001 report, *Crossing the Quality Chasm: A New Health System for the 21st Century*,¹⁴ the IOM proposed 6 aims to help ensure that health care services were consistently safe, effective, patient-centered, timely, efficient, and equitable, irrespective of the socioeconomic status, ethnicity, geographic location, and gender of the patients. The inter-organizational offering by the IOM, the Association of American Medical Colleges (AAMC), and Association of Academic Health Centers (AAHC), entitled *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in the Health Professions*,¹⁵ argues convincingly for sustained efforts in attracting a more diverse pool of candidates into health professions education programs, as one effort to improve care for underserved populations. Yet it also recognizes the need for all practitioners to be able to care effectively for disadvantaged populations in order to ensure improved access and quality for all. More recently, in its 2003 report entitled *Health Professions Education: A Bridge to Quality*,¹⁶ the IOM emphasized the need for providers capable of providing patient-centered team-based care to address

the paucity of resources available to reach and serve disadvantaged populations. Patient-centered team-based care is advocated as the standard of practice in Indian Health Service (IHS) facilities, Area Health Education Centers (AHECs), and Community Health Centers (CHCs), all of which serve traditionally underserved communities.

Accreditation Council for Pharmacy Education (ACPE). The importance of introducing pharmacy students to their professional responsibility of caring for the disadvantaged in our society was supported by the Accreditation Council for Pharmacy Education (ACPE) in the development of Standards 2007.¹⁷ The Standards and Guidelines demand Schools and Colleges address cultural competency and health disparities and promote wellness and disease prevention in all populations, including those “at-risk” (eg, minorities, low income groups, the elderly, children, women, rural residents, and individuals with special health care needs). The guidelines also require programs to ensure that graduates are able to develop, implement, and assess pharmacy care plans that address issues pertaining to cultural diversity and health literacy commonly associated with underserved populations.

School and College of Pharmacy Mission Statements. In early 2007 a review of the mission, vision, goal, and strategic plan statements found on the web sites of 92 accredited schools and colleges of pharmacy assessed how many included care for underserved populations. Fifty-seven of the institutions reviewed were public and 35 were private. Seventy percent of the programs reviewed addressed community outreach or service to society somewhere in these agenda-directing statements. This represents 77% and 35% of the private and public institutions reviewed, respectively. Twenty-eight percent of the programs reviewed formally recognized the need to be engaged within national and/or global communities, and 8.6% specifically mentioned the importance of caring for underserved communities, public advocacy, and helping those in need. Slightly less than 10% of the programs specifically addressed the need to serve in diverse communities.

Despite academic mandates and well-intentioned mission statements, there are currently no formal standards or guidelines available to assist pharmacy educators in developing curricula specific to addressing the awareness, knowledge, and skills needed to effectively serve and work with disadvantaged populations. To our knowledge, no efforts have been made to develop universal standards in this area for use in pharmacy education. Curricula addressing the needs of certain underserved groups (eg, the elderly, women), however, are available.¹⁸⁻²¹ Most educational efforts to train students to identify and assess the health care needs of and develop and deliver

appropriate care and services to the underserved have fallen under the umbrella of cultural competence expectations and service-learning opportunities. In addition, standards for other health professions disciplines have been developed and could be adapted for our use.²²

ESTABLISHMENT OF A CURRICULUM TASK FORCE

To collaboratively address the need for development of pharmacy curricula which enable students to acquire the abilities described above, AACP partnered with HRSA's Pharmacy Services Support Center (PSSC), an organization whose purpose is to provide agencies rendering care to underserved populations with the information, education, and policy analysis needed to enhance medication use and improve health outcomes. In 2005, a joint AACP-PSSC task force was created to review and develop curricular resources that would compliment and support this mission.

At its inception, the task force was charged with: (1) developing a curriculum framework appropriate for professional pharmacy education that addressed the preparation of practitioners educated to serve underserved communities; (2) identifying quality instructional materials to facilitate the integration of the framework throughout PharmD curricula; and (3) identifying gaps between the desired curriculum and existing resources. The task force chose to use the Clinical Prevention and Population Health Curriculum Framework for Health Professions²⁴ as a foundation for the identification of content areas, educational outcomes, and resources for implementing a curriculum that addresses the wide-ranging aspects of providing health-care to underserved populations. The 4 main content areas included in this model are: (1) Evidence Base for Practice, (2) Clinical Preventative Services – Health Promotion, (3) Health Systems and Health Policy, and (4) Community Aspects of Practice. Within each area, subsections were identified and terminal learning outcomes that tailor each framework element to underserved populations were delineated. Currently available resources were then matched with outcomes to support instructional development.

The Curriculum Framework developed by the AACP-PSSC task force is available online at the AACP web site (www.aacp.org). Although text and electronic resources to support curriculum objectives were plentiful, a problematic gap between reality and the ideal existed with regard to support for developing and sustaining programs that ensure success. The task force's efforts were subsequently re-channeled to: (1) sensitize pharmacy students, faculty, and practitioners, and other stakeholders to the important social justice and professional practice issues related to proving healthcare to underserved populations;

(2) educate the academy on the components of a comprehensive pharmacy curriculum related to these populations; and (3) prepare students to meet specific needs of underserved communities through school-sponsored service-learning experiences and, ultimately, in practice. This manuscript was written in partial fulfillment of the goal to educate the academy.

DISCUSSION

Framework Implementation

Shepherding students successfully through this comprehensive, integrated curriculum takes a solid commitment on the part of a school's faculty and administration. Success in implementing the framework demands that faculty members believe that caring for the underserved is a professional responsibility worthy of their instructional and nurturing efforts. Academic administrators can facilitate faculty members' endorsement by encouraging and rewarding engagement in this curricular initiative through mission-based leadership and resource provision. Student affairs personnel must be equally diligent in molding student attitudes to be receptive to the instruction they will receive in their didactic and experiential curriculum.

The task force recommends that the framework be formally shared with faculty, preferably by the dean or her/his designee in order to send the clear message that this issue is of high importance. Interdepartmental focus groups can be hosted to allow faculty members to discuss in small group how the framework's concepts could be applied, and to identify an emphasis that "rings true," given their institutional mission. Town hall meetings can bring all faculty members together to share ideas and come to a consensus on goals related to incorporating care for the underserved into the professional curriculum. Experts can be brought in as needed to provide a common understanding of the issues related to underserved communities, and to stimulate creative thinking and planning. At some point, schools and colleges should revisit their mission statements to see if revisions or refinements are needed based on these faculty discussions and decisions.

The task force recommends that curriculum committees be charged to (1) study models that incorporate care for the underserved into the existing professional curriculum, and (2) explore mechanisms to horizontally and vertically integrate this content. Other health professions disciplines should be brought in to discuss best practices and to establish the foundation for interprofessional team-based approaches to care for the underserved. Teams of faculty members can then be formed around the horizontal and vertical curricular threads to ensure consistency of

message, and to properly reinforce concepts and experiences introduced earlier in the curriculum.

Didactic learning must also be translated into meaningful experiences with actual patients during the professional school years. The ACPE mandate for IPPE education that is continuous and integrated with didactic learning¹⁷ provides an opportunity to thoughtfully incorporate service-learning in underserved communities into the professional curriculum. To meet ACPE standards, service-learning experiences must be precepted by a practicing pharmacist and/or focused on the practice of the profession. If those mentoring students in underserved community IPPEs are not pharmacists, ACPE expectations can be met by bringing students together during and after the experience to engage in serious, pharmacy faculty-guided reflection on its significance to their professional development and the advancement of the profession as a whole.

Meaningful engagement with underserved communities in the early didactic years prompts selection of rotations and additional practice experiences with these populations in the final rotational year or post-graduation.¹² Faculty members should be encouraged to work together to develop elective courses that advance the initiative and expand opportunities for focused learning related to care for the underserved. To meet the anticipated demand for involvement with the underserved during clinical rotations, experiential education directors must develop sustained relationships with multiple community partners working in underserved communities to prepare them to educate students in high quality advanced pharmacy practice experiences (APPEs). The literature is replete with guidance on making these mutually beneficial partnerships succeed.^{7, 12, 25-27}

To summarize, if schools and colleges: (1) commit to an emphasis on service to the underserved that meshes with their institutional mission, (2) construct a curricular model to integrate this critical content throughout the didactic and experiential curriculum, (3) engage their entire faculty in being a “part of the solution” to the current health care disparities faced by underserved communities, and (4) reward individual and group contributions to the common cause, the goals of the underserved curriculum created by the task force will have been met.

Schools and colleges will need to assess the extent to which the underserved curriculum implemented within their institutions meets the goals they have established for student learning, institutional growth, community betterment, and the advancement of mission. Assessing the extent to which the underserved curriculum goals have been achieved should most certainly result in data that can be critically analyzed, reflected upon, and published.

Likewise, the task force will need to assess the impact of the underserved curriculum framework against its purpose in order to fully honor its charge. We recommend that the AACP Institutional Research Advisory Committee (IRAC) commit to identifying a process by which the Association can capture this important data and make it available in aggregate for study and benchmarking.

CHALLENGES AND OPPORTUNITIES

The challenges to implementing the framework may include time and effort to establish new partnerships with previously unfamiliar organizations that serve the underserved, financial limitations of both academic institutions and community-based organizations, a lack of existing knowledge on the part of faculty and academic administrators about how to navigate the safety-net health care environment, and/or a lack of familiarity on the part of safety-net organizations with respect to hosting educational experiences. However, when institutions explore the process of creating this type of curricular change, tremendous opportunities exist that can help ensure the success of this important work.

Partnering with the Community. Institutions can start by “mapping” federally qualified organizations that provide care to the underserved through a search of the HRSA Office of Pharmacy Affairs database (<http://opanet.hrsa.gov/opa/Login/MainMenu.aspx>).²⁸ This database lists federally-qualified organizations (such as CHCs, disproportionate share hospitals, migrant health programs, etc.), and also identifies local pharmacies that have contracted with these organizations to provide medication-related services to their patients. Partnering with pharmacists affiliated with safety-net organizations for the purpose of delivering IPPEs and APPEs is one way to increase student exposure to cultural and systems-based issues in caring for underserved populations. Establishing underserved-focused experiential education relationships with familiar practices (e.g., community pharmacies), institutions can subsequently allow Schools and Colleges to forge a direct relationship with safety-net organizations. This, in turn, opens the door to program expansion to additional primary care settings.

To comprehensively seek out productive community-based partnerships independent of funding source demands a more broad-based research effort. One potential source of information is a state’s Primary Care Association and/or Primary Care Office.²⁹ These entities serve an organizing and advocacy role to support service providers working with underserved populations within a given state. Other potential points of contact for community service organizations include local United Way, YMCA and Volunteers of America affiliates. Connecting

with these entities offers Schools and Colleges another productive means of identifying potential collaborators in experiential and service-learning opportunities, centered on disadvantaged citizens.

Financial Constraints. The need for committed fiscal resources can threaten the development of new initiatives with underserved populations. State and federal grant opportunities represent one source of fiscal funding. Schools and Colleges should become familiar with programs offered through their state's Office of Primary Care or Department of Health, and federal programs administered by Agency for Healthcare Research and Quality (AHRQ) and HRSA (particularly HRSA's Bureau of Health Professions, Bureau of Primary Health Care and/or Office of Rural Health Policy). A broader search of funding opportunities can be accessed at www.grants.gov. Many state and federal grant programs target organizations that directly provide health care services, therefore academic institutions may not qualify as a sole or lead applicant. Understanding the nature of available grants and blending educational opportunities with initiatives directed at service expansion can allow Schools and

Colleges to create win-win opportunities for both themselves and partner service providers.

In addition to government-sponsored programs, many private foundations, community-based organizations and pharmacy-based foundations have grants that support innovative solutions to caring for the underserved. Schools and Colleges can seek funds directly or in collaboration with community partners. Table 1 provides a list of private organizations that may serve as a potential funding sources.

Faculty Development and Administrative Support. A lack of pertinent expertise among existing faculty members can significantly challenge the development of initiatives related to caring for the underserved. Faculty development programs will likely be organized around the framework, and that this document will be used by the academy to facilitate the development of educational initiatives and the people who lead them. Work of the task force will stimulate a nationwide faculty dialog about the humanistic responsibility to care for disenfranchised populations, and prompt mechanisms to identify and share best educational practices for advancing care for the underserved.

Table 1. Selected Grant Programs Supporting Work Directed at Underserved Populations

Aetna Foundation Regional Community Health Grants Program

http://www.aetna.com/foundation/grants_reg/index.html

Proposals should address one of the following areas of health disparities among racial and ethnic populations:

Cultural Competency

Disease prevention (Children's Oral Health, Diabetes, Depression)

Josiah Macy Jr. Foundation

<http://www.josiahmacyfoundation.org>

The Josiah Macy Jr. Foundation accepts letters of inquiry from projects that improve medical education in the context of the changing health-care system; projects that increase diversity and promote collaboration among health-care professionals; and educational programs that expand care for underserved populations.

W.K. Kellogg Foundation

<http://www.wkcf.org>

The W.K. Kellogg Foundation makes awards to non-profits in health and "cross-cutting themes." Kellogg also gives smaller grants to promote health care systems that include family-centered, community-based services involving collaboration from multiple sectors.

Mattel Foundation Domestic Grants Program

http://www.mattel.com/about_us/Comm_Involvement/ci_mcf_philanthropy_grantmaking.asp

Two types of grants will be considered for the program:

Program-specific grants – Funding for launch of new programs or expansion of existing programs. However, the Foundation will give preference to programs with multiple funding sources.

Robert Wood Johnson Foundation

<http://www.rwjf.org>

Commonwealth Fund Health Grants

<http://www.cmwf.org/grantseekers/index.asp?link=4>

Regulatory Issues. Schools and colleges work regularly with state boards of pharmacy to assure quality and patient safety during APPEs, and many students earn internship hours for successfully completing clinical rotations. State regulations pertaining to rotations, preceptors, and students must be considered when establishing APPEs in settings that provide care to underserved patients. Some states require preceptors to be licensed pharmacists and many place restrictions on the ratio of preceptors to interns. If a client or outreach site provides outstanding learning opportunities for students and high quality patient care despite an increased intern to preceptor ratio, schools and colleges should provide the board with documentation supporting an exception to the mandated maximum ratio. In settings without a pharmacist, the school or college may need to request a waiver from the board to allow the student to earn intern hours or credit for the experience. Opportunities to gain experiences in alternative settings and engage in interdisciplinary care should be proactively pursued. Boards of pharmacy should be made aware of quality experiences that are available to students, and consulted to assure these alternative sites meet the regulatory and safety standards for the state.

Competing Faculty Priorities. Working with the underserved often demands providing care under less-than-optimal conditions, which requires time-consuming dedication and persistence. Physical environment limitations, such as a lack of space and computer equipment for faculty members and/or students participating in patient care encounters can pose challenges to the patient care and learning environment. Lack of resources, such as interpreters, to facilitate culturally competent care can also negatively impact the learning environment. In addition, as with the general population, many underserved individuals may not fully understand the nature of their disease states, the need to make lifestyle changes, and/or take medications as prescribed. Faculty members working with underserved populations must often devote the time needed to help and empower patients with simple but essential preliminary activities before procuring appropriate medical care. If limited in English proficiency, illiterate, and/or under-education, patients may have a difficult time understanding the paperwork they need to submit before accessing needed services. These realities, coupled with often changing residencies and erratic employment, may compete with something as seemingly simple as keeping an appointment with a health care provider. Such time-intensive activities may take a toll on the time faculty members have to prepare lectures, write grants, and engage in scholarly endeavors.

Faculty members can turn these challenges into opportunities to advance scholarship that is often of primary importance to promotion and tenure petitions. There are many opportunities to research improvements in clinical activities, work flow, and medical care in clinics targeting the underserved, and the literature recounts the positive outcomes facilitated by pharmacists who have provided quality care in these types of situations.^{30, 31} Examples of faculty-established clinical laboratories addressing the needs of the underserved can also be found among the HRSA Grant Clinical Pharmacy Demonstration Projects, which describe sites where faculty members have established new clinical services to expose students to safety net providers.³² Research opportunities in underserved clinics can also include demonstration of care in Health Professions Shortage Areas (HPSAs), studying barriers in obtaining care, barriers in obtaining and taking medications, drug utilization reviews and patient surveys.

Student interest and engagement. In our global society, multilingual students are eager to use their language skills to help others. Others apply their talents to find unique ways to help clinic settings provide care. Drug information searching skills, setting up databases, performing chart reviews, and providing patient information and counseling in different languages are just some of the ways that students can optimize care for disadvantaged individuals.

In contrast to traditional settings, students often feel as if their efforts have made a greater difference in a patient's potential quality of life in underserved patient care settings. Students evolve in a positive way to become uniquely trained to address the special needs of others as they are challenged to find ways to help individuals in significant need, such as in situations where language barriers are present. Potential difficulties can bring out the best in students and often result in a clearer understanding of the barriers of access to health care, problems with disease management, and challenges related to trying to reach target therapy goals that would be "non-issues" in non-disadvantaged populations.

If possible, students should be given a choice as to whether they wish to train in a particular underserved practice setting. It is important to note that students who are interested in service-learning may be more likely than others to seek these opportunities to help the underserved. Some of these unique learning opportunities may subsequently lead to pharmacy career choices targeting disadvantaged communities.

Recommendations

The AACP-PSSC task force's work has prompted several specific recommendations to the academy and the

Association to advance the important mission of educating students to provide care for underserved populations.

- Schools and colleges should re-evaluate their mission, vision and values, and strategic plans, in the context of community engagement, specifically engagement with the underserved communities in the region the institution serves.
- Deans and other university administrators should ensure that their institution's promotion and tenure system, and merit salary increase guidelines, tangibly recognize and reward faculty members who are meaningfully engaged in education, research, and/or professional service with underserved communities.
- Curriculum committees should be charged to analyze current educational strategies and define new curricular initiatives to support education in this area. Faculty members involved in the implementation of new initiatives should be provided with training and development, and time needed to ensure sustained success.
- Each school or college should identify at least one faculty member "champion" responsible for the underserved initiative. Key roles for this individual may include:
 - Working with faculty members across multiple courses and defined learning experiences to facilitate the use of tools and resources that enhance learning about providing care to the underserved.
 - Identifying the health care safety net organizations within the geographical region, defining where partnership opportunities may exist, and assisting in forging productive campus-community relationships.
 - Serving as a resource for the identification of funding agencies that support education and outcomes-based research with underserved communities.
- Schools and colleges should adopt existing recruitment and admissions practices that ensure that qualified applicants from underserved communities are able to successfully gain admission to the pharmacy program.
 - Scholarships should be established to support students from disadvantaged backgrounds or who indicate a desire to practice in underserved communities.
 - Mechanisms should be devised to specifically mentor and guide students to ensure not only their success in the academic program, but to

nurture their interest in serving the underserved, increasing the likelihood that they will actually choose this career path.

- As schools and colleges develop curricular initiatives that support the education of pharmacy students in this area, they should publish their work in referred journals and/or communicate their findings at national meetings of health professions educators, scholars, and practitioners.
- Schools and Colleges should consider the development, maintenance and support of post-graduate residency/fellowship training that is partially or wholly focused on optimizing care and research for underserved populations.
- The AACP Institutional Research Advisory Committee (IRAC) should commit to serving as a clearinghouse for important data related to educating students to care for underserved populations. The IRAC should make these data available in aggregate form for assessment of the impact of the task force's work, as well as for further study and benchmarking.

CONCLUSION

The Caring for the Underserved Curriculum Task Force has developed a curriculum framework that provides schools and colleges of pharmacy with a blueprint for developing the knowledge, skills, and attitudes needed to provide quality care to the disenfranchised and underserved in our local and global communities. Coupled with the availability of the essential resources of time, money, and committed collaborators from community safety net organizations, a collective implementation of the framework can help the academy can take definitive steps to ensure its fulfillment of the professional mandate to proactively provide the highest quality care for all. The task force encourages schools and colleges to reflect upon the issues presented here, and take stock of the extent to which they are honoring the goal of educating students to be patient-centered advocates and champions of social justice. We further encourage institutions to share their experiences with framework implementation through publication and scholarly presentation so that best practices can be identified and disseminated for the benefit of all.

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