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AACP REPORTS

Report of the 2010-2011 Standing Committee on Advocacy: Leveraging Faculty Engagement to Improve Public Policy

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INTRODUCTION

According to the Bylaws of the American Association of Colleges of Pharmacy (AACP), the Advocacy Committee:

> *"will advise the Board of Directors on the formation of positions on matters of public policy and on strategies to advance those positions to the public and private sectors on behalf of academic pharmacy."*

COMMITTEE CHARGE

President Rodney Carter charged the 2010-2011 Advocacy Committee to:

> *"examine the question how can AACP and its members most effectively leverage faculty scholarship/research to impact on public policy at the state and federal level?"*

The Committee met in-person in October in Arlington, VA to discuss the charge and determine the approach to meeting the charge. After a wide-ranging discussion guided by the Chair the Committee agreed that a case study approach would meet the intent of the charge and serve the broader Academy by providing examples of evidence-based advocacy. Committee members agreed that the case studies could include completed, ongoing, or developing examples of how faculty scholarship and research did or failed to impact public policy. A framework for case study submission was developed and agreed to by the Committee.

Case Study Framework: Each advocacy committee member will present one initiative that supports the integration of the pharmacist or recognizes academic pharmacy as a resource for evidence-based public policy development as a case study that provides a "roadmap for implementation" for AACP members. Each case study will be included as a section in the report. Each section will use the following format:

1. State the healthcare reform/advocacy issue and the opportunity or expectation for the integration of the pharmacist;
2. Describe the development of the partnership with the academic or community-based partner and their understanding and expectation of the integration of the pharmacist into issue activities or how pharmacy faculty can contribute to furthering public policy development;
3. Describe through examples of teaching, research, or service, current activity at the college or school level to address the issue;
4. List the AACP/other resources that provide evidence of academic activity that support the selected issue; and
5. Recommendations regarding additional resources or evidence needed to advance the role of the pharmacist into the activities supporting the healthcare reform/advocacy initiative.

BACKGROUND

Leveraging public policy development to your advantage requires strong evidence that supports or opposes the policy. Public policy is advanced by science-based contributions.[1,2] It is helpful to keep in mind that there is no guarantee that evidence improves the final policy since politics can be a dominant influence. However the strength of the evidence can contribute to its consideration in public policy.[3] How and to whom the evidence

is presented remains an essential element of influencing public policy. The creation of new knowledge and evaluation of existing knowledge are responsibilities of every faculty member of a college or school of pharmacy. Therefore, leveraging public policy development requires 1) identification of public policy of personal or professional interest and those supporting or opposing the policy, 2) assessing the policy for personal or collective contribution opportunities, and 3) determining the best approach for contributing the evidence. For instance, a significant piece of public policy, the Patient Protection and Affordable Care Act, includes provisions that seek to increase access to medication therapy management. The specific public concern being poor medication management is costly in terms of health and economic outcomes. This public concern was leveraged by evidence generated, translated and provided by pharmacy faculty. This evidence included examples of research, some of it supported by federal grants,[4] demonstrating improved health outcomes associated with the provision of MTM services.

Influencing public policy through evidence-sharing will continue to be an important goal of academic and professional organizations. The Patient Protection and Affordable Care Act creates many opportunities for academic pharmacy to leverage its implementation through the creation of new knowledge or evaluate current knowledge and translating both new and current knowledge into programs and services that meet the intent of the law.[5] Members of the Academy are already providing significant contributions to the literature supporting the integration of the pharmacist across the continuum of care competent to provide patient-centered, team-based care.[6,7] Likewise, daily activities such as interactions with state-based organizations, community partners, health insurance payers and even accrediting organizations provide opportunities for your position to be articulated and supported through evidence-sharing. The ability to leverage policy development requires an understanding and appreciation of other individuals and groups that will be engaged in the creation of new policy and its eventual implementation. Understanding and appreciation, regardless of whether you agree or disagree, requires the development of relationships with individuals, institutions and organizations involved in influencing public policy you deem important or relevant to your personal or professional goals. Understanding the advocacy or public policy goals of others is the first step in determining how what information you will provide to leverage their goals to your advantage.

Through discussions with other individuals and groups you begin the second step, to assess the relevance of their goals to yours. Identification of goal alignment is an important step toward influencing public policy. Shared goals strengthen advocacy. The recognition of this strength regularly results in the establishment of coalitions and task forces that combine individual or organizational goals into a larger presence to influence public policy development, implementation and evaluation. Coalitions and other groups built upon mutual advocacy goals are sustained and strengthened through the evidence they are able to share with those developing or implementing the policy. Toward this end, pharmacy faculty are able to leverage public policy by working with others that share their goals, creating and communicating evidence that supports those goals.

PURPOSE

Provide AACP members with a road map for the provision of resources and supporting evidence to community partners and other organizations so that the intent of a particular issue whether a reorganized healthcare system or gaining accreditation for your institution by participating on your accreditation self-study team, becomes a reality.

APPROACH

The innovative approaches to teaching, research, and service of faculty at colleges and schools of pharmacy supported the vision of a reorganized healthcare system as expressed in the Patient Protection and Affordable Care Act.[5] Implementing the vision requires working directly with community-based organizations and partners. Current approaches to teaching, including interprofessional education, can leverage the development of patient-centered, team-based care as envisioned by provisions authorizing the establishment of pilot projects to create and evaluate medical homes and accountable care organizations. Improving care coordination through the integration of the pharmacists across the healthcare continuum can be leveraged by identifying experiential education rotations that focus on medication reconciliation at transfers of care and leveraging this into a standard of care. Increasing access to clinical and community preventive services through integration of the pharmacist and be leveraged by bringing to the attention of state and local public health agencies the contemporary pharmacy curriculum's emphasis on public health.

Committee members, by selecting an issue of personal or institutional significance approached community-based organization expected to play a significant role in implementation of the issue, determined a timeline for implementation and facilitated academic pharmacy inclusion into the development process addressing issues such as resources and evidence that support that inclusion.

By reviewing resources such as the AACP Web site and articles in the *American Journal of Pharmaceutical Education*, Committee members will be able to make an informed issue selection.[6-11] This selection is facilitated by discussion with colleagues as to institutional activities that can be leveraged to include pharmacy faculty, students and practicing pharmacists into the associated issue implementation. The Committee member determined the appropriate individual within the community-based organization to establish a relationship to fulfill the expectations listed above.

Upon review of AACP resources, Advocacy Committee members:

- selected one issue that recognizes academic pharmacy as a resource for evidence-based policy development, implementation or evaluation;
- contacted the appropriate community-based partner to discuss their understanding of the issue;
- determined the evidence required by the community-based partner to support and actively engage in the issue;
- assessed current AACP resources capacity to fulfill the evidence requirement;
- provided the community partner with the AACP resources; or
- determined what information is required to fulfill the evidence requirement; and
- prepared a submission to the AACP Advocacy Committee report that:
  - states the issue and the opportunity;
  - describes the development of the partnership including the outcome or expected outcome with the community-based partner and their understanding and expectation of the issue describes through examples of teaching, research, or service, current activity at the college or school level to address the issue;
  - lists the AACP resources that provide evidence of academic activity; and
  - recommends additional resources or evidence needed.

Members of the committee submitted case studies with the following titles:

- Opportunity for faculty to influence local health insurance benefit design
- Strength through collaboration-establishing an advocacy net linking student pharmacy organizations and state and national pharmacy organizations
- Integration of a pharmacist into tobacco cessation clinics at a public health district
- Perceived usefulness and comfort level of local primary care physicians in referring patients for pharmacist-provided clinical services compared to patients' perceived monetary value of pharmacist-provided clinical services
- The impact of a political advocacy course on student pharmacists' level of advocacy
- Integration of pharmacists services into the office of a U.S. Senator
- Defining the role of the pharmacist in the patient-centered medical home

These submissions serve as case studies for evidence-based advocacy. They demonstrate the breadth of scope of activities that advocacy encompasses. Any and all of these activities should foster greater participation by members of our Academy and other aspiring advocates and greater recognition that they are already engaged in being an advocate at some level.

Opportunity for Faculty to Influence Local Health Insurance Benefit Design (University of Minnesota)

In spite of some putative successes in advancing the acceptance of the pharmacists value in managing the use of medicines such as the "Medicare Prescription Drug, Improvement, and Modernization Act of 2003" wherein medication therapy management (MTM) is a covered benefit for Medicare enrollees, the use of pharmacists' services has still to reach a level that supports a sustainable practice. The hoped for benefits of the Part D programs was that pharmacists would be compensated to provide services to the Part D members in their practices. Instead, according to the Centers for Medicare and Medicaid MTM Fact Sheet, only 20% of these Part D plans use community-based pharmacists to provide services.

Among several reasons for this is a principle fact that there remains a lack of understanding what the service really is. The healthcare and economic value of these pharmacist-provided services is not recognized by consumers or the employers and their agents in managed care. This puts us into a "dog chasing its tail" conundrum. Lack of consumer understanding drives the lack of employer demand of the managed-care organizations, which drives the lack of inclusion in the benefit design, which causes the member to not understand the value, which . . .

For many years curricula have reflected the profession's belief that pharmacists should provide patient-centered clinical services. The expectation being that pharmacists trained to provide these services would drive changes in practice. Many in the profession's leadership and in academe believed that if pharmacists provided the service the value would be recognized and compensation would soon follow, notwithstanding the economic fact that no other legal business provides the service before the price is agreed upon.

How does a faculty member stop the dog from chasing its tail? Regardless of whether a college of pharmacy is stand-alone or part of a university, there is a health benefit plan. As with most employer-based insurance plans, including university/college plans, medication management services are rarely a part of the benefit design. If a faculty is committed to patient-centered pharmacist services in the curriculum it must be based in the reality that the program's graduates will be able to use their knowledge and skills in practice. The college/university health plan is a plan that faculty can readily influence.

In 2006, the faculty of the Department of Pharmaceutical Care and Health Systems (PCHS) at the Minnesota College of Pharmacy believed that it had sufficient evidence of cost savings and improved outcomes of pharmacist-provided MTM to approach the administration of UPlan, the university's health plan. The plan agreed to put in place a pilot project for the Duluth campus of 1,500 employees in 2007. Based on the positive results of the pilot the benefit was extended to all 39,000 UPlan members in March 2009.

The many structural differences that exist in plans, notwithstanding, there are opportunities for faculty to work with their institution's central administration and human resources to include a medication management benefit in the university/college plan. The UPlan design recognized that any pharmacist graduated after 1996, regardless of practice site, would be qualified to provide services. Those graduating prior to 1996 would be credentialed by existing programs.

It can no longer be asserted that there is little documentation of the benefits of these services. There are now ample articles that document the economic and healthcare value of pharmacist-provided MTM services. Faculty members Isetts, Schondelmeyer, et al., investigated and published several works on the benefit of pharmacists-provided medication management including a review of the Minnesota state Medicaid MTM benefit.[14,15] Additional work was done by the Peters Institute at the College in developing documentations and reimbursement systems.

Sufficient evidence exists of both the economic and clinical benefit of pharmacists-provided medication management services to support the inclusion of these services in a plan design. A literature review published in the October 2010 *American Journal of Health-System Pharmacy* provides a good overview.[16] There needs to be additional resolve among faculties to aggressively seek to incorporate the skills and knowledge of their graduates into their college/university health plans.

Evidence is sufficient for faculty to present an actionable case to their university/college benefits department and health plan administrators to incorporate an MTM benefit into their health plans. This benefit should use the services of qualified pharmacists practicing in any location in the university/college plan market. The medication management benefit should provide for appropriate electronic documentation and billing. It should also serve as a leadership example for the community of the benefit of the expansion of pharmacists' roles in healthcare delivery.

Strength Through Collaboration-Establishing an Advocacy Net Linking Student Pharmacy Organizations and State and National Pharmacy Organizations (The University of Rhode Island)

Student pharmacists, academic faculty, and pharmacy practitioners infrequently interact with state legislators. If they do, it's often unrecognized, such as filling a legislator's prescription at a community pharmacy, thought of as a confidential, counseling interaction, and not an opportunity for grassroots professional advocacy. Change-driven pharmacy advocates in colleges and schools of pharmacy need to establish, strengthen, and promote their relationships with state pharmacy organizations, linking students, faculty, and associations in a statewide, grassroots, advocacy net.[17-19]

The University of Rhode Island (URI) participates in an annual Face of Pharmacy Advocacy day along with the Rhode Island Pharmacists Association (RIPA), the Rhode Island Society of Health-System Pharmacists (RISHP), student associations including the Association of Student Pharmacists (ASP) and the Student Societies of Health-System Pharmacy (SSHP) and URI faculty. This annual event, held in the capitol rotunda at the start of the Rhode Island General Assembly's session, promotes cutting edge pharmacy practice. The event brings students, faculty and the associations' professional and student membership together to rally behind issues and/or legislation affecting pharmacy practice. The goals of the event are to have legislators: "see" pharmacy practice and interact with students, professionally dressed in their white coats; expand their impression of pharmacy practice; and support legislative changes to permit wider adoption and implementation of clinical pharmacy services. This builds on the success of student engagement in the development of legislation permitting pharmacists to administer vaccines described in a comprehensive history of pharmacist advocacy.[20]

Demonstration tables, staffed by APPE students, preceptors, and faculty provide free services to the legislators such as: hypertension, diabetes, and cholesterol screenings; body fat analysis; immunizations; and medication therapy management and counseling. P1 students

interact with pharmacists at the tables and learn what changes in pharmacy they should promote in meetings with legislators. A speaking program highlights legislation important to pharmacists and desired changes not yet legislated. Past speakers include the director of the state health department, the governor, a pharmacist-legislator, the chair of the board of pharmacy, the presidents of RIPA and RISHP and a student pharmacist chosen based on his or her advocacy efforts. Often a keynote speaker highlights one particular issue that have included immunizations, reimbursement, medication therapy management and importation of medications from Canada.

I recommend that AACP develop a toolkit for colleges and schools of pharmacy for building advocacy-centered collaborations with their state pharmacist (practitioner) associations. Students, faculty, and association leaders can first align their goals and strategies using content from, "Leadership and Advocacy for Pharmacy," in which the authors use personal experiences to guide the reader through all of the steps necessary for advocacy success.[17] Nationally, AACP can strengthen and leverage existing partnerships with the National Alliance of State Pharmacy Organizations (NASPA) and the National Association of Chain Drug Stores (NACDS), both members, along with AACP, in the Alliance for Pharmaceutical Care. Each of these organizations has tools useful for AACP members and their students. NASPA offers grants that AACP members can use to develop data; RIPA and URI faculty are completing one such grant, "Increasing Awareness and Access to Pneumococcal Vaccine through Community Pharmacists." NACDS connects faculty, administration, and students with their national legislators in Washington, DC annually through RxImpact Day. Elements of this program, from meetings with legislators to letter-writing campaigns, can be replicated for connecting state pharmacy organizations, student associations and their state representatives. AACP should encourage scholars to analyze and publish the results and outcomes of these collaborations, such as regulatory and legislative changes that benefit students, practitioners, academia, and primarily patients. AACP could also promote and provide continuing professional development programs and certifications for preceptors and practitioners that include advocacy lessons focused on the particular certification, i.e., expanding immunization to 9-18 year olds.

Integration of a Pharmacist into Tobacco Cessation Clinics at a Public Health District (Roseman University of Health Sciences)

The Patient Protection and Affordable Care Act (PPACA) of 2010 creates several opportunities for pharmacist-engagement in the provision of services.[5] Moreover, many of these opportunities created new avenues for pharmacists to be reimbursed or receive payment for providing services. One such opportunity, found in Title IV, Subtitle B, and Section 4107 of the legislation, authorizes the coverage of counseling and pharmacotherapy for cessation of tobacco use by pregnant women. Specifically, the legislation now requires these services and products to be covered by Medicaid.

In assessing how this opportunity might be implemented in a manner that would allow the Roseman University of Health Sciences, formerly known as the University of Southern Nevada (USN) College of Pharmacy to engage the issue, college administration looked to already existing collaborations with its community partners. Currently, the College of Pharmacy has a very strong collaboration with the Southern Nevada Health District (SNHD), with the College of Pharmacy providing all pharmacy-related support to SNHD clinics throughout the Las Vegas Valley through a clinical services agreement that includes a College of Pharmacy faculty member assigned to SNHD as a practice site. In return, the College uses the clinics as ambulatory care training sites for its students. Moreover, SNHD and the College have agreed to add another faculty member in the next fiscal year. Although several of the specialized clinics currently are supported by the one USN faculty member assigned to SNHD (including the tuberculosis, HIV/AIDS, Immunization, and STD clinics), SNHD currently does not have a smoking cessation clinic. Moreover, although SNHD does have a family planning clinic for women, it does not currently have any programs supporting pregnant women, nor does it have a smoking cessation program as part of its portfolio. Thus, for SNHD, initiating a tobacco cessation program for pregnant women as described in the PPACA is an opportunity to provide new services that would be supported through Medicaid reimbursement. For the College of Pharmacy, initiating a new service at SNHD with the pharmacist as the primary provider of services represents an opportunity to engage further in provision of services to the community, to increase ambulatory care rotation options for students, and perhaps most importantly, to advocate for the role of the pharmacist as central to patient counseling and pharmacotherapy and to support pharmacist reimbursement for services. Currently, discussions are ongoing with SNHD with respect to this initiative, and initial responses have been positive.

In addition to providing a practice site, creating additional experiential opportunities for students, and advocating for the profession, this initiative also has the potential create research opportunities for the College. The college's curriculum includes a requirement for all

students to complete the CEASE (Continuing Education Aimed at Smoking Elimination—formerly known as Rx for Change) program. Thus, the potential to explore how students incorporate this didactic training into an actual smoking cessation program as part of an ambulatory care Advanced Pharmacy Practice Experience would be of value. Additionally, ample research into the pharmacist-led smoking cessation services in terms of patient satisfaction, economic impact, and patient outcomes would also be possible.

There is ample evidence that the Academy has engaged in and continues to engage in generation of data supporting the pharmacists' role in tobacco cessation programs. Much of this comes from within the Academy itself with research focusing on online tobacco cessation courses for health professions students (Purdue University), as well as train-the-trainer programs for tobacco cessation for pharmacy school faculty (University of California, San Francisco and Purdue University).[21,22] Additionally, there is evidence that the Academy collaborates with its community partners in providing pharmacist-based tobacco cessation programs and have done research that substantiates the positive patient outcomes resulting from pharmacist-led tobacco cessation services (University of Texas Health Science Center, University of Houston, Virginia Commonwealth University, and University of Montana).[16,24-26]

In addition to existing resources, it would be helpful for AACP to develop a compilation of "best practices" for pharmacist/pharmacy faculty providing tobacco cessation services as well as incorporation of students into tobacco cessation clinics as part of experiential learning. The Academy should encourage its members' involvement in provision of tobacco cessation programs to analyze not only patient outcomes, but also the pharmacoeconomic impact of faculty-run, student-supported clinics and to publish their data. These practical and research-based resources would further other schools' efforts to advocate for the role of the pharmacist in tobacco cessation clinics and reimbursement for those services as outlined in the PPACA.

Perceived Usefulness and Comfort Level of Local Primary Care Physicians in Referring Patients for Pharmacist-Provided Clinical Services Compared to Patients' Perceived Monetary Value of Pharmacist-Provided Clinical Services (University of Arkansas for Medical Sciences)

Pharmacist-provided clinical services are becoming more and more common across the country. Their need and benefit has already been proven in some disease states; however, pharmacists may still see some boundaries to starting these services in their pharmacy. This study will impact the ability to market and price these types of services and will help us understand which services are most useful to physicians. With this information we can also inform policy makers of the importance of the pharmacist's role in patient care. We can then begin to make changes regarding payment and reimbursement models. This survey may be useful in educating physicians on the services pharmacists are trained to provide. More education and interaction between pharmacists and physicians is critical to increasing their comfort level with pharmacist-provided patient care services.[27]

This research project is a result of a partnership between the University of Arkansas for Medical Sciences (UAMS) and Kroger Pharmacy. A community residency program established between UAMS and Kroger Pharmacy provides a community partner for the college to examine the services available by community pharmacists to physicians and patients in central Arkansas. The data from this needs assessment survey can be used to help community pharmacists develop clinical services at their practice site.

Two separate surveys will be distributed. A three-question survey will be mailed to 100 local primary care physicians and administered face-to-face to 250 patients in multiple Kroger pharmacies. Physicians will have the opportunity to return the survey by fax for one month. Physicians will receive a notice of the survey by fax and a fax reminder to return the survey at two weeks and four weeks. Physicians who are interested in services will have the opportunity to provide information to be contacted after the study.

The five-question patient survey will be distributed at multiple locations of a chain retail pharmacy and at local community screenings. These surveys will be filled out on site and returned to the pharmacist immediately.

One of the barriers pharmacists face in providing clinical services is negative push-back from physicians and barriers regarding reimbursement models. Studies like this to determine needs and payment information will help other pharmacists develop successful programs in the community. Preliminary results show that physicians have an increased comfort level with pharmacists providing service like diabetes education over lipid panel monitoring, INR monitoring, and travel immunizations. This may be a result of documented pharmacist intervention in these areas. Physicians are familiar with Ashville Project and Diabetes 10 City Challenge, which provides evidence of pharmacist's interventions. More outcomes data is necessary to show the overall impact pharmacists have on positive patient outcomes.[28]

The Impact of a Political Advocacy Course on Student Pharmacists' Level of Advocacy Submitted for Publication Jan. 2011 (University of Arkansas for the Medical Sciences)

Pharmacy curricula prepare students to be competent pharmacists and members of our profession. With that competence comes a responsibility to advocate on the behalf of the profession. A survey was administered to determine the impact of a political advocacy elective on the willingness of student pharmacists to be advocates for their profession.

An elective in political advocacy is offered to 1st, 2nd, and 3rd year student pharmacists at University of Arkansas for the Medical Sciences College of Pharmacy since 2008. The elective course objectives include recognizing different forms of advocacy, discussion regarding current events related to pharmacy both on the local and national level, understanding the legislative process, and identifying advocacy efforts of state and national pharmacy associations. A survey was developed to assess the students' perceived knowledge of the issues affecting the pharmacy profession, their willingness to vote in an election, their current level of advocacy, and their likelihood for advocacy after graduation. The survey also assessed the students' current leadership activities, involvement in local and national pharmacy organizations, and prior experience with professional pharmacy issues. The survey was voluntarily administered to the student body. Comparisons were made between those students who were enrolled in the elective class and the student body as a whole. Descriptive and inferential statistics were used to examine the results of the survey.

Of the 462 students, 100 completed the online survey for a response rate of 21.6%. Students who took the elective rated their knowledge of current issues significantly higher than those who did not. A greater percentage of students who took the course reported participating in advocacy activities within the last month compared to those who did not (41.2% vs. 14.8%). Finally, the students who took the course expressed significantly more personal responsibility for being politically active compared to those who did not take the course. These results demonstrate the need for increased advocacy training and education in the pharmacy curriculum. Encouraging advocacy begins before graduation.

After reviewing the literature, there seems to be more information in the literature regarding advocacy in the curriculum for other healthcare professionals. Increased advocacy in pharmacy curricula and increased efforts to disseminate information regarding advocacy in pharmacy course work is needed in the pharmacy literature.

Integration of Student Pharmacists Into the Office of a US Senator (Touro College of Pharmacy-New York)

Student pharmacists can participate in the offices of local, state and government officials to work with the voter to answer healthcare questions, to work with the healthcare aide of the official to do research, and to do community outreach on health education and public health awareness activities and programming. Partnerships between pharmacy faculty and public officials provides faculty the opportunity to provide input into policy, whether it be city, state or national. Laws affecting patients, healthcare and pharmacists specifically can be impacted by the faculty and student involvement. In addition, the public official, and the constituents come to view the pharmacist as one who can implement changes, be involved in healthcare policy, and who is aware of the patient issues and education.

This specific case study describes the development of a relationship with a state Senator. The initial contact with the local office in New York came through a relationship developed with the legislative assistant in the Senator's Washington, DC office. The faculty from the school reached out to discuss whether there were interns from law firms, or other educational programs in the Senator's office to determine whether there was already a sense of what students could do. When the faculty from the school first spoke with the legislative assistant they immediately felt that a student might be able to do some of the health research, and answering calls from constituents in the office. There was also an understanding that the faculty member would be able to help with policy, especially since this specific Senator had a large role in healthcare reform. The relationship is in its early phases, but the Senator has taken more than one student with him to health programs in the city.

The legislative assistant in New York and in Washington, DC are both approved as preceptors for the public health components of the College of Pharmacy curriculum. Introductory and Advanced Practice course syllabi have been approved in the offices and students have been scheduled for both introductory and advanced practice courses. The Directors for Practice Experience are the primary contacts with the preceptor in the Senator's office. The development of the course is in its third year for the introductory practice experience and in the first year for the advanced practice experience. As with any partnership, it takes time to develop trust and communication.

The Touro College of Pharmacy-New York implemented this partnership with the Senator's office because of an already established relationship and "in" with the legislative assistant in the Washington, DC office. Other

officials have been contacted. A city representative has indicated a desire to have student pharmacists in his offices. This opportunity developed from an immunization clinic that the faculty members helped to coordinate in the city for city leaders and workers. The faculty members have been great advocates for increasing immunization rates in Harlem and the Bronx. Several partnerships with non-profit organizations that work to reduce health disparities have been formed because of the immunization outreach. This may provide the opportunity to invite state and national elected officials to review what pharmacists are doing for their constituents and may lead to the development of a partnership between Touro and the offices of these officials.

Visits to Capitol Hill by pharmacy faculty and leaders support the development of relationships with members of Congress. The AACP advocacy Web pages include information on how to contact the offices of the senators and Congressional representatives. Additionally, the AACP Vice President for Policy and Advocacy can provide names and introductions in many cases to assist colleges and schools of pharmacy interested in developing similar programs with their members of Congress.

There is sufficient evidence to advance the role of the pharmacist into legislative policy or other public policy settings. Similar to the goal of the American Association for the Advancement of Science (AAAS) science and technology policy fellowships, academic pharmacy should seek to enhance the development of public policy through the "infusion" of pharmacist knowledge.[29]

Expanding the Role of the Pharmacist in the Patient-Centered Medical Home (University of Washington)

The patient-centered medical home (PCMH) has been characterized as a model of healthcare delivery that facilitates comprehensive and coordinated care. PCMH services are intended to be continuous, team-based, and actively involve patients and their caregivers.[30] The contributions of pharmacy faculty and pharmacists to the team in areas such as: collaborative drug therapy management; health information technology; personalized medicine; and the integration of advocacy and community-engagement learning activities into the professional curriculum are essential toward improving the quality of care, cost-effectiveness, and the patient experience.[16] Relationships established by University of Washington faculty with community partners and sustained through their teaching, research and service are described in four activities that support and strengthen the PCMH model.

Collaborative Drug Therapy Management. One of the underpinnings of a patient-centered medical home is the interprofessional team's effectiveness in providing coordinated and integrated care. Collaborative drug therapy agreements protocols help facilitate achievement of this goal. In 2003, the American College of Clinical Pharmacy published a position paper on the involvement of pharmacists in Collaborative Drug Therapy Management (CDTM). Included in this paper was a discussion of the evidence supporting CDTM, as well as future areas of research.[31]

Currently there are over 1000 active CDTM protocols in the State of Washington that allow pharmacists to: provide immunizations; manage anticoagulant, high blood pressure, or diabetes therapy; provide tobacco cessation counseling; and provide pain management services. Harborview Medical Center (HMC) is one of many practice settings where CDTM protocols are readily employed. HMC provides ambulatory care services through multiple primary and specialty care clinics. Pharmacists play a critical role on interprofessional teams in all seven primary care clinics and in many of the specialty clinics as well. A description of the practice model was published by ASHP in "Collaborative Drug Therapy Management Handbook."[32]

With the current pay-for-performance incentives, clinical pharmacists are full participants in quality improvement initiatives within their clinics and provide leadership for medication-related measures. As compared to non-pharmacist care teams, those with a pharmacist have shown improved HgA1c, blood pressure and lipid management in diabetic patients; improved adherence to evidence-based therapy in patients with congestive heart failure; enhanced adherence to antiretroviral therapy in HIV+ patients; and reduced hospitalization/ER visits for children with asthma.

Pharmacists also participate in public health initiatives including the management of the smoking cessation program and are involved in health literacy projects including translating patient information sheets into multiple languages. Pharmacists bill for services using the facility fee portion of a clinic charge based on time and intensity. These visits require documentation in the medical record, which includes time spent on patient education. In order to bill for services, the pharmacists undergo the same credentialing process as physicians that includes a scope of practice document and source verification of their education, training, licensure and credentials.

Due to the pharmacist practice model and active engagement between University of Washington faculty and HMC administration, HMC clinics are very popular APPE and IPPE sites. A recent IPPE project had P2 student pharmacists participating in the HMC-wide medication reconciliation program. Student pharmacists conducted patient interviews to obtain complete medication histories and

entered the information into the electronic medical record in preparation for medication reconciliation to go live. In 2007, a 2-year pharmacy administration residency program was created in concert with the Master in Health Administration degree to address the impending pharmacy leadership gap. Graduates of the program have successfully entered health-system leadership roles immediately following completion of the program. Additionally, HMC has developed a comprehensive 4-year internship program that is structured to coordinate pharmacy practice activities with the intern's didactic content which enables the interns to staff as pharmacists and provide integral clinical services during their P4 year. The program also has a leadership track that provides additional mentoring and support for pharmacy leadership activities.

Health Information Technology Research. The University of Washington (UW) School of Pharmacy and The Everett Clinic have been collaborating on medication safety projects since 2001. The Everett Clinic, the largest independent medical group in Washington State, developed a comprehensive, homegrown electronic health record beginning in 1995. In 2003 they added the electronic prescribing module to improve medication safety and invited investigators at the University of Washington to collaborate in measuring this effect. Clinical pharmacists employed at The Everett Clinic led major aspects of electronic prescribing implementation including software design, system implementation and physician training.

Investigators at the UW School of Pharmacy obtained support from several grants (American Society of Health-System Pharmacists Research & Education Foundation, Merck Foundation, University of Washington Royalty Research Fund, and two grants from the Agency for Healthcare Research and Quality) to characterize medication errors before implementation of electronic prescribing and to explore the impact of electronic prescribing on medication errors and adverse drug events. Results revealed that implementation of the electronic prescribing system resulted in a 55% reduction in medication errors (from 18% to 8%); a reduction in adjusted odds of 70%.[33,34] These same investigators at the School of Pharmacy continue their efforts in this field with three projects evaluating the impact of clinical decision support tools, provided in the context of electronic prescribing. The first project, being conducted at The Everett Clinic, evaluates the impact of clinical decision support tools on prescriber adherence to guidelines for appropriate laboratory monitoring for specified medications. The second evaluates the impact of presentation of patient-specific pharmacogenomic biomarker results on physician prescribing patterns. The third evaluates the impact of a new method of alerting clinical pharmacists to out-of-range laboratory values on time to addressing this important medication safety issue. The latter two projects are being conducted at UW Medical Center. In a different setting, others have shown that pharmacist-led interventions significantly increase the frequency of appropriate laboratory monitoring for medications.[35]

The clinical pharmacists at The Everett Clinic continue to play an instrumental role in providing population-based pharmaceutical care as employees of a physician group practice.[36] They have led disease management programs, guided the local pharmacy and therapeutics committee, implemented target drug programs and prescription to over-the-counter switches. They have negotiated pharmacy budgets with health plans and led patient assistance programs.

Personalized Medicine. The University of Washington recently founded the Northwest-Alaska Pharmacogenomics Research Network (NWA-PGRN), addressing pharmacogenomic research in American Indian and Alaska Native (AI/AN) and rural Pacific Northwest populations.[37] It is one of the 14 centers in the nation funded by the National Institutes of Health (NIH) and involves multiple campus units including, the Department of Pharmaceutics, the Department of Bioethics and Humanities, the Center for Genomics and Healthcare Equality, the Institute for Public Health Genetics, the Deep Sequencing EXOME Project, the Center for Ecogenetics and Environmental Health, the School of Pharmacy and the School of Law. The NWA-PGRN partners are the Confederated Salish Kootenai Tribes, the Center for Alaska Native Health Research, the Yukon Kuskokwin Health Corporation, the Montana Cancer Institute Foundation, the University of Montana, University of Alaska (Fairbanks), Group Health Research Institute, the Puget Sound Blood Center, the Southcentral Foundation and the University of Washington.

The formation of the NWA-PGRN was a result of earlier collaboration among faculty in the Institute of Public Health Genetics. http://depts.washington.edu/phgen/

Also beneficial to this collaboration were existing relationships between American Indian and Alaska Native populations and faculty and students actively participating in the PGRN.

The NWA-PGRN is a multi-disciplinary program that will encompasses five areas of emphasis:

1) Consultation and qualitative research to support community-university research partnerships and identify potential barriers and facilitators for use of phamacogenomics in healthcare;

2) Discovery and characterization of novel variation among AI/AN people for genes that contribute to the disposition and pharmacological response of the drugs warfarin, tamoxifen, and tacrolimus;
3) Demonstration that genetic testing predicts individual differences in warfarin, tamoxifen, and tacrolimus disposition and response in AI/ANs, and assessment of whether unique dietary factors modify genotype-phenotype association related to warfarin and tacrolimus;
4) Assessment of whether pharmacogenomic testing provides unique advantages in rural populations, including AI/AN communities, due to differences in therapeutic monitoring; and
5) Identification of methods for identifying adverse drug reaction occurring in rural populations, as a basis for potential future pharmacogenomic research.

Creating Advocates and Engaged Citizens. Engaging students in solving real-world challenges provides the foundation for them to become change agents and patient advocates. Key elements in the activities described below are 1) raising awareness of healthcare issues, and practices or policies in need of improvement; 2) creating an environment that enables students to feel that they can be a change agent, 3) understanding the viewpoints of all the stakeholders, 4) requiring students to "champion" and take ownership of their change efforts, 5) bringing about a positive outcome or reviewing and revising strategies if the outcome is not achieved.

Fix the Law Project. For nine years, Pharm.D. students at the University of Washington have participated in the "Fix the Law Project." Student groups identify a "broken law" and participate in policy analysis to propose a change to the law. This project has been positively received, with the students' background research and proposed language being included into revised laws and policy at the state and federal level.[38]

Leadership and Practice Advancement APPE. The development of leadership and practice APPEs provide students with opportunities to create new patient care practice models, involving interprofessional teams. As part of a leadership APPE, two students worked with a faculty member to develop, implement and then evaluate a MTM service at a community clinic. One of the deliverables of this rotation was constructing a Web site that provided MTM and Collaborative Drug Therapy Agreement (CDTA) resources for student use. Templates were created so that students and pharmacists can easily learn the process to create a CDTA and modify it to fit their practice setting.

The Web site includes patient encounter worksheets, disease specific encounter guides, and other clinical references that would assist students and practitioners in developing Medication Therapy Management Services (MTMS). MTMS marketing materials specifically targeted for providers and patients are provided, as well as CDTA templates. A CDTA workshop was provided to all students prior to entering their APPEs and a presentation is planned for pharmacists at the Washington State Pharmacists Association's Annual Meeting.

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CONCLUSION

With the case studies included in this paper the reader should begin to appreciate the breadth of activity that pharmacy faculty engage in on a regular basis. The impact of this engagement purposefully and sometimes unexpectedly influences the way communities, professionals and policy makers think about a particular issue. The important contribution of this report is to strengthen the value of being an engaged citizen and contributing to the public dialogue based on your experience. All too often we fail to maintain the importance of community engagement in our everyday life. The uniquely American approach to community engagement, commented on by Alexis de Tocqueville,[39] stated eloquently by President John Kennedy,[40] and defined as a faculty member's responsibility, is essential to the continuation of our form of representative democracy. Other nations are just beginning to recognize the impact that a strong advocate can have on changing that nation's public policy.[41] Pharmacy faculty should find comfort that their teaching, research, and service - similar to the case studies included in this report - provide substantial opportunities to community building and civic improvement.

RECOMMENDATIONS

AACP should develop a mechanism for the submission and sharing of institutional and individual advocacy efforts of AACP members.

AACP will offer an active-learning session on advocacy at the Annual Meeting to assist member understanding of the "why" and "how" of advocacy which provides attendees with an individualized advocacy plan.

AACP will discuss with AJPE the research criteria associated with article submissions in order to develop/increase the scholarly submissions that can be used as evidence to leverage public policy development.

AACP will recommend that each Section, SIG consider and participate in relevant advocacy opportunities.

AACP should develop a toolkit for colleges and schools of pharmacy for building advocacy-centered collaborations with their state pharmacist (practitioner) associations.

AACP should encourage scholars to analyze and publish the results and outcomes of these collaborations in key journals such as Health Affairs and others that get the attention of policy makers, on the regulatory and legislative changes that benefit students, practitioners, academia and primarily patients.

AACP should develop a leadership and advocacy special interest group (SIG) to facilitate programs, collaborations, sharing of best practices and projects, and develop leadership and advocacy programming.

SUGGESTIONS

Colleges and schools of pharmacy are encouraged to develop faculty/student created video presentations of advocacy efforts related to the pharmacist integration into healthcare reform initiatives.

Colleges and schools of pharmacy are encouraged to develop an award associated with the recognition of faculty advocates.

Deans of colleges and schools of pharmacy are encouraged to recognize active advocacy of faculty in their promotion and tenure guidelines.

All faculty are encouraged to identify and integrate opportunities for student engagement to become the foundation for patient and professional advocacy.

Colleges and schools of pharmacy should promote and provide continuing professional development programs and certifications for preceptors and practitioners that include advocacy lessons focused on the particular certification, i.e. expanding immunization to 9-18 year olds.

All faculty are encouraged to identify and integrate opportunities for community and practice-based research networks.

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