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VIEWPOINTS

Opportunities and Responsibilities for the Academy in the Medical Home

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The Patient Protection and Affordable Care Act has created significant traction for the delivery of team-based, interdisciplinary care. New care delivery models such as medical homes, accountable care organizations (ACOs), and coordinated care organizations (CCOs) are examples of integrated care models growing at an accelerating rate among public and private payers. These models are based upon the conceptual framework that a patient or family should have a "home" where health care is provided, and through which this care is coordinated, all in an effort to enhance quality of care while managing the costs of health care. The academy must work to ensure pharmacists and student pharmacists are prepared to fulfill critical roles and provide leadership, as providers, policy makers, and payers explore ways to achieve the triple aim[1] through coordinated, high-value care.

The Pharmacy Workforce Commission has made its pharmacist workforce projections based on traditional dispensing roles that are largely centered around the consumption of pharmaceuticals.[2] The commission's report acknowledges that the demand for pharmacists will be higher should pharmacists assume a larger role in patient care management. Further, employers in community, hospital, and managed care pharmacy are interested in hiring pharmacy graduates with collaborative, interprofessional, and team-based care skills.[3] Colleges and schools of pharmacy are well positioned to model and expand the role of pharmacists as new primary care delivery models are implemented.

Pharmacist faculty members have a long tradition of serving as role models for progressive services. Faculty placements in institutional settings have contributed to the expansion of clinical pharmacy services and postgraduate residencies.[4] Faculty members can dedicate the time required to demonstrate the value of clinical pharmacy services separated from traditional distributive functions. Unfortunately, while pharmacists in community pharmacy settings are considered the most accessible healthcare professionals, the percentage of faculty members integrated into interprofessional team practices or community pharmacy clinical positions is low. The academy must intensify efforts to identify opportunities for faculty placement within innovative community pharmacy and primary care settings seeking to develop or modify current practice models to meet patient care delivery goals outlined in the current health care legislation. Practice settings should embrace experimentation and evaluation of novel ideas that aim to enhance patient outcomes and provide cost-effective care. Faculty members will provide the added benefit of keeping community pharmacy colleagues informed about current and evolving developments in health care policy, and emerging opportunities for pharmacy integration into new practice models.

Community-based pharmacists in states with collaborative drug therapy agreements, in particular, can initiate clinical services with physician practices to monitor and manage patients with chronic conditions and complex regimens between primary care physician office visits. Physicians participating in new collaborative care models increasingly see value in clinical pharmacy services, and consumers who may be reluctant to interrupt the workflow of a busy community pharmacy will likely find their pharmacist to be more accessible for questions and medication management. There are clearly multiple opportunities

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for the academy and employers to partner in the development of cost-effective care models and innovative educational programs. These will, in turn, increase the visibility of a pharmacist's role as a medication management expert to patients, health care colleagues, payers, and policymakers.

The responsibility for providing a robust, well-prepared cadre of pharmacists to fulfill expanded expectations for clinical pharmacy services also falls upon the academy. We need to seriously consider how we can best prepare future students, and retrain current practitioners, for new direct patient care medication management roles.[5] Pharmacy has advocated for meaningful roles in collaborative interprofessional care, while we have concurrently sought educational strategies and existing practice models required to develop in students the knowledge, skills, attitudes, and values required for a pharmacist to operate at the "top of their license." Acceptance of pharmacists as full members of high functioning, collaborative, interprofessional healthcare teams will be dependent upon the capacity of the academy to guarantee consistency in the abilities of all graduates through curricular revision and assessment.

Now a decade past, the requirement of an entry-level doctor of pharmacy degree stimulated by work of the American Association of Colleges of Pharmacy Commission to Implement Change in Pharmaceutical Education[6] has helped to standardize the content of pharmacy curricula. Colleges and schools of pharmacy have worked to integrate foundational sciences into an expanded treatise and application of clinical sciences. The 2004 Center for Advancement of Pharmacy Education (CAPE) outcomes, in turn, brought more focused attention to direct patient care and involvement of pharmacists in discussions of public health and wellness.[7] Increasingly, the integration and application of knowledge, skills, attitudes, and values in team-based care are at the center of collaborative care efforts in these new models of care.

Our efforts begin with a responsibility to identify mature students with a breadth and depth of preparation and experiences that allow them to be competent and confident in dynamic team settings. The CAPE 2013 outcomes highlight a need to build upon that base and redouble our energy to lead students in building collaborative team skills, leadership abilities, and habits of self-reflection that complement the knowledge and capacity for patient care expected of a medication expert.[8] As a first step, many curricula now include greater emphasis on communications, patient assessment and monitoring, and problem-solving skills using common chronic diseases for case studies.

Accompanying the opportunity for community-based faculty practices in expanding the role of pharmacists is a critical need to model collaborative patient-centered care for current pharmacy students through experiential education. Emerging medical home, ACO, and CCO models create greater urgency for interprofessional education and involvement in interprofessional practice models throughout the educational process that will establish a routine of participation in team-based problem solving and patient care. Students need to experience innovative, collaborative practice models to learn how pharmacists can contribute their expertise both in health systems and community-based practice settings. Clinical pharmacy services in community pharmacies offer a wealth of experiences for students both in introductory pharmacy practice experiences as well as longer advanced pharmacy practice experiences. Similarly, the medical home model can be expected to catalyze new opportunities for community-based postgraduate residency training and be a rich source for health services research by pharmacy faculty members.

Health services research (HSR) is a multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures and processes, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately our health and well-being.[9] Its research domains include individuals, families, organizations, institutions, communities, and populations. HSR opportunities include research that focuses on medication use and safety in primary care, new team-based care delivery and payment models, use of health information technology, and health care policy changes. HSR impacts patient care quality and medication safety initiatives, expands professional practice opportunities (eg, direct patient care roles in chronic disease management, community-based health care teams), and informs health care policy. Faculty members in colleges and schools of pharmacy are ideally positioned to lead HSR initiatives that assess clinical and economic outcomes of linking pharmacists and clinical pharmacy services to medical homes, ACOs, and CCOs. Credible, peer-reviewed research will be key to demonstrating the value proposition for the overall health system and to expanding the role of pharmacists in new, collaborative, interprofessional models of care.

Integrated, interprofessional care models represented by medical homes, ACOs, and CCOs outline a new vision for healthcare delivery in the United States. Clinical pharmacy services will be required in order to fulfill this vision, but the pharmacy profession is responsible for demonstrating that pharmacists are best equipped to meet that need. Health services research conducted by faculty members in colleges and schools of pharmacy should be at the center of an iterative development process for

implementation of healthcare reform. Incorporation of faculty members in collaborative care models will be critical in continuing efforts to demonstrate pharmacist involvement is a sound investment economically and therapeutically. Sustaining an expanded role for pharmacy is dependent upon a strong cohort of pharmacists prepared to contribute fully and, when appropriate, lead interprofessional healthcare teams. Ensuring consistent strength of graduates through curricular redesign and opportunities to experience problem solving in these emerging collaborative settings remains a primary responsibility of the academy.

REFERENCES

1. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood).* 2008;27(3):759-769.
2. US Health Resources and Services Administration, US Department of Health and Human Services. *The Physician Workforce: Projections and Research Into Current Issues Affecting Supply and Demand.* Washington, DC: 2008.
3. Vlasses PH, Patel N, Rouse MJ, Ray MD, Smith GH, Beardsley RS. Employer expectations of new pharmacy graduates: implications for the pharmacy degree accreditation standards. *Am J Pharm Educ.* 2013;77(3):Article 47.
4. Smith MA. Pharmacists and the primary care workforce. *Ann Pharmacother.* 2012;46(11):1568-1571.
5. Draugalis JR, Beck DE, Raehl CL, Speedie MK, Yanchick VA, Maine LL. Call to action: expansion of pharmacy primary care services in a reformed health system. AACP Argus Commission Report 2009-2010. http://www.aacp.org/governance/COMMITTEES/argus/Documents/ArgusCommission09_10final.pdf. Accessed April 22, 2013.
6. American Association of Colleges of Pharmacy Commission to Implement Change in Pharmaceutical Education. Entry level education in pharmacy: commitment to change. *Am J Pharm Educ.* 1993;57: 366-374.
7. American Association of Colleges of Pharmacy. Center for the Advancement of Pharmaceutical Education. Educational outcomes 2004. http://www.aacp.org/resources/education/Documents/CAPE2004.pdf. Accessed May 31, 2013.
8. American Association of Colleges of Pharmacy. Center for the Advancement of Pharmaceutical Education. Educational outcomes 2013. http://www.aacp.org/resources/education/Documents/CAPE2013.pdf. Accessed May 31, 2013.
9. Definition of health services research. Academy Health. https://www.academyhealth.org/About/content.cfm?ItemNumber=831&navItemNumber=514. Accessed April 22, 2013.