

Consortium recommendations for advancing pharmacists' patient care services and collaborative practice agreements

American Pharmacists Association Foundation and American Pharmacists Association

Abstract

Objective: To develop consensus recommendations that provide principles and strategies for effectively implementing health care system changes, including an optimized role for pharmacists to engage in team-based, patient-centered care.

Data sources: An interdisciplinary group of stakeholders representing 12 states and 10 pharmacy practice settings. Consortium participants represented many areas of pharmacy, medicine, and nursing.

Summary: The health care environment in the United States is undergoing unprecedented change, with myriad health care reform initiatives, mounting evidence for the positive contributions of pharmacists, and federal government interest in pharmacist-provided services from the Centers for Medicare & Medicaid Services, Centers for Disease Control and Prevention, and Surgeon General. Many individuals and groups have asserted that pharmacists are a dramatically underused resource that could help improve outcomes within our health care delivery system, if properly engaged as essential members of the health care team. In January 2012, the American Pharmacists Association Foundation convened a roundtable consortium in Washington, DC, for dialogue on the role of pharmacists in patient care. The consortium participants' seven recommendations for advancing pharmacists' patient care services and collaborative practice agreements included (1) use of consistent terminology; (2) provider control over collaborative practice details; (3) infrastructure that embeds pharmacists' patient care services and collaborative practice agreements into care; (4) use of electronic health records and technology in patient care services; (5) relationships among the health care team that are strong, trusting, and mutually beneficial; (6) incentive alignments based on meaningful process and outcome measures; and (7) redesign of health professionals' practice acts, education curriculums, and operational policies.

Conclusion: Pharmacists deliver many patient care services to sustain and improve health. In an era of health care reform, advancing the level and scope of pharmacy practice holds promise to improve health and reduce costs for care. Published evidence supports the role of pharmacists as essential members of the interdisciplinary health care team and emphasizes that pharmacists are well positioned to perform medication- and wellness-related interventions that improve patient outcomes. The consortium participants' seven recommendations provide methods and infrastructure for empowering collaborative, interdisciplinary care.

Keywords: Pharmacists, patient care services, collaborative practice agreements, patient-centered care, interdisciplinary care.

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The American Pharmacists Association (APhA) Foundation invited a group of 22 national stakeholders to a roundtable consortium for dialogue on the role of pharmacists in patient care. Consortium contributors are listed in Table 1. The interdisciplinary group convened on January 10–11, 2012, in Washington, DC, with participants representing 12 states and 10 pharmacy practice settings. State affiliation included Alabama, Colorado, District of Columbia, Georgia, Indiana, Maryland, Minnesota, Missouri, North Carolina, Ohio, Rhode Island, Virginia, and Wisconsin. Consortium participants represented nursing, physicians, and many areas of pharmacy, including academia, association, regulatory, national and regional chains, clinic (outpatient), consultant practice, consumer advocacy, federal, hospital/institutional (inpatient), independent, managed care, physician office-based practice, and supermarket pharmacy.

The goal of the consortium meeting was to gather information that would outline recommendations on how to advance pharmacists' patient care services and collaborative practice agreements. The recommendations included in the current work are intended to engage pharmacists, other providers, patients, payers,

policy makers, and the public in understanding and advocating for interdisciplinary patient care related to pharmacists' services that result in improved health outcomes, better health care, and lower costs. This white paper details the consortium participants' recommendations for more fully integrating collaborative practice agreements and patient care services provided by pharmacists into practice. The document is organized as follows:

- Introduction
- Interdisciplinary, patient-centered care
- Climate for change
- Terminology describing pharmacists' services
- Consortium recommendations
- Translation tools
- Conclusion

This initiative focuses on defining factors that could help expand the implementation of innovative and existing practice models whose success has been demonstrated in practice-based research projects like those supported and conducted by the APhA Foundation.^{1–8} Through the dissemination of the recommendations and a set of associated translation tools, the consortium aims to facilitate the implementation and delivery of interdisciplinary services proven to help patients manage their chronic diseases such as dyslipidemia, hypertension, and diabetes.

At a Glance

Synopsis: This article describes consortium participants' recommendations for stimulating increased integration of collaborative practice agreements and pharmacist-provided patient care services into practice. Published evidence supports the role of pharmacists as essential members of the interdisciplinary health care team and emphasizes that pharmacists are well positioned to perform medication- and wellness-related interventions that improve patient outcomes. The consortium participants' seven recommendations provide methods and infrastructure for empowering collaborative, interdisciplinary care.

Analysis: *U.S. health care is undergoing unprecedented change with an array of health care reform initiatives, mounting evidence of the positive contributions of pharmacists, and federal government interest in pharmacist-provided services. Consortium participants provided insight that could lead to consistency and standardization of care at a national level while allowing for flexibility to enable or expand local interdisciplinary processes of care. The provision of pharmacists' patient care services must be seamless for patients and other providers to recognize its value. Building a business model that is scalable, sustainable, and financially viable will be essential to supporting the pharmacists' role in delivering value to patients and reducing costs to the system.*

Interdisciplinary, patient-centered care

Pharmacist engagement in interdisciplinary health care with physicians and other providers can improve patients' health considerably, according to a recent systematic review and meta-analysis.⁹ More than 60,000 community-based pharmacies employ greater than 175,000 pharmacists across the United States. By using existing authority and practices or enacting policies that encourage pharmacists and physicians to engage in team-based, patient-centered care, a substantial portion of the population could have greater access to pharmacists' patient care services, which has the potential to result in improved health outcomes, better health care, and lower costs.

Including the pharmacist on an interdisciplinary care team has been evolving during the last few decades and has occurred in different practice settings at varying rates under numerous terms. It may be referred to as the clinical pharmacy movement that originated in ambulatory care practice settings in the 1960s.¹⁰ It may be the integration of pharmacists into federally funded primary care since that point in time or the evolution of pharmaceutical care in the 1980s. It may be consensus around medication therapy management in the 2000s or more recent terminology around patient-centered medical homes and accountable care organizations. Regardless of what *it* is called, the focus has remained the same—integrate pharmacists into health care teams to

Table 1. Roundtable consortium for discussing role of pharmacists in patient care: Participants and attendees

Participants and attendees	Organization/affiliation	State affiliation
Participants		
John Beckner	Martin's Pharmacy/Giant Foods, LLC	Virginia
Marialice Bennett	Ohio State University	Ohio
Marcie Bough	American Pharmacists Association	National
Ernest Boyd	Ohio Pharmacists Association	Ohio
Laura Cole	St. Vincent's Health System	Alabama
Christopher DuPaul	CVS Caremark	National
Scott Giberson	U.S. Public Health Service	National
Anita Glicklen	University of Colorado School of Medicine	Colorado
Doug Hillblom	OptumRx	California
Michael Hogue	Samford University McWhorter School of Pharmacy	Alabama
Jeffrey Kelman	Centers for Medicare & Medicaid Services	National
Sandra Leal	El Rio Health Center	Arizona
Daniel Luce	Walgreens	National
J. Paul Martin	Crescent Health Solutions	North Carolina
John O'Brien	CMS Innovation Center	National
George Oestreich	G.L.O. and Associates	Missouri
N. Lee Rucker	AARP	National
Steven Simenson	Goodrich Pharmacy	Minnesota
Rebecca Snead	National Alliance of State Pharmacy Associations	National
Margie Snyder	Purdue University College of Pharmacy	Indiana
E. Kim Swiger	Mirixa	Georgia
Troy Trygstad	Community Care of North Carolina	North Carolina
Attendees		
Kristen Betts	Division for Heart Disease and Stroke Prevention, CDC	
Benjamin Bluml	American Pharmacists Association Foundation	
Anne Burns	American Pharmacists Association	
Siobhan Gilchrist	Columbus Technologies and Services, Inc.	
Dyann Matson Koffman	Division for Heart Disease and Stroke Prevention, CDC	
Lynette Sappe-Watkins	American Pharmacists Association Foundation	
Caroline Shedlock	American Pharmacists Association Foundation	
Mindy Smith	American Pharmacists Association Foundation	
Jim Owen	American Pharmacists Association	
Farah Towfic	American Pharmacists Association Foundation	
Lindsay Watson	American Pharmacists Association Foundation	

help patients improve health outcomes through optimal use of medications.

In March 2012, the chief executives of nine national pharmacy organizations articulated the profession's commitment to collaborative practice, stating, "The construct of collaborative practice agreements between physicians and pharmacists are mutually agreed upon, voluntary in nature, and contain appropriate communication mechanisms between the physician and pharmacist to coordinate care. Initiation and monitoring of therapy occurs per protocol post-diagnosis and uses the expertise of the pharmacist in managing multiple medication regimens, including chronic disease management." APhA CEO Thomas Menighan, BSPHarm, MBA,

ScD, FAPhA, captured the essence of the professions' interdisciplinary intent most succinctly by writing, "Pharmacists seek collaboration, not independence."¹¹

Climate for change

The health care environment in the United States is undergoing unprecedented change, with myriad health care reform initiatives, mounting evidence for the contributions that pharmacists make to the health care team and improving patient care, and federal government interest in pharmacist-provided services. Numerous articles have been published during the previous few decades related to the positive impact of pharmacists. In a recent systematic review and meta-analysis

of 298 research studies that integrate pharmacists into direct patient care, the results have shown favorable outcomes across health care settings and diseases.⁹

Examples of federal government interest in pharmacy include activities of the Centers for Medicare & Medicaid Services (CMS), Centers for Disease Control and Prevention (CDC), and Surgeon General. CDC recently expressed interest in improving medication use through pharmacist-provided care in a team-based approach, as evidenced by the 2012 recommendations of the Community Preventive Services Task Force in support of pharmacists working in collaboration with primary care providers, patients, and other professionals.¹² In addition, in a letter in response to the 2011 Report to the U.S. Surgeon General, *Improving Patient and Health System Outcomes Through Advanced Pharmacy Practice*, U.S. Surgeon General Regina Benjamin, MD, MBA, wrote, "This report provides the evidence health leaders and policy makers need to support evidence-based models of cost effective patient care that uses the expertise and contributions of our nations' pharmacists as an essential part of the healthcare team."¹³

Pharmacists could help to improve our health care delivery system if properly engaged as members of the health care team. The interest of government agencies in improving health care delivery, coupled with a wealth of clinical evidence, creates a unique opportunity for pharmacist-provided services to take root as part of the essential care that patients receive. More information about examples of the CDC's efforts related to pharmacists' services and about the Report to the U.S. Surgeon General are included in Appendix 1.

Terminology

In this article, *pharmacists' patient care services* and *collaborative practice agreements* are the two terms that will be discussed regarding the process by which pharmacists provide care and the types of services provided. Descriptions of these terms appear below.

Pharmacists' patient care services

Pharmacists' patient care services include the broad array of services that every pharmacist can provide based on their scope of practice, local privileges, and practice setting. These can include patient care services such as medication review, lab interpretation, disease screening, patient assessment and counseling, continuity of care, medication reconciliation, and referral as well as selecting, initiating, administering, monitoring, modifying, or discontinuing medication therapy. The exact scope of what pharmacists' patient care services can encompass depends on each state's practice act; therefore, initiating, modifying, or discontinuing medication therapy may be pursuant to physician authorization or the use of collaborative practice agreements.

Collaborative practice agreements

Collaborative practice agreements (CPAs) are used to create formal relationships between pharmacists and physicians or other providers. CPAs define certain patient care functions that a pharmacist can autonomously provide under specified situations and conditions. Many of these agreements are used to expand the depth and breadth of services the pharmacist can provide to patients and the health care team. When a CPA is in place, a licensed health care provider makes a diagnosis, maintains ongoing supervision of patient care, and refers the patient to a pharmacist to provide patient care functions as authorized by the provider. These functions can include any or all of the pharmacists' patient care services described above. Of important note, CPAs are not required for pharmacists to perform many patient care services (e.g., medication reviews, patient education and counseling, disease screening, referral).

CPAs in state practice acts

As of 2009, a total of 37 states have added specific language to their pharmacy laws authorizing CPAs. In 2012, according to the National Alliance of State Pharmacy Associations (NASPA), a total of 46 states address or mention some form of CPAs and/or protocols between physicians and pharmacists.^{14,15} States typically regulate these practices through scope of practice acts and boards of pharmacy and medicine regulations. Currently, many states restrict the care that a pharmacist can provide because of the specificity of the collaborative practice authority. However, some states expand the role of pharmacists through practice acts that are less restrictive and more empowering.

Consortium recommendations

To identify key factors that would facilitate the implementation and delivery of interdisciplinary, patient-centered care that includes pharmacists, the APhA Foundation hosted a 2-day, face-to-face consortium meeting during which participants discussed experiences related to collaborative care delivery processes. Participants were invited to take part in the consortium based on field of expertise, organizational affiliation, and specific experiences that would help inform the discussion. The consortium participants were directly connected to current interdisciplinary care practices, which provided the group with unique knowledge of and experience with successful practice-based initiatives and barriers to implementation.

To evaluate ways to position pharmacists to serve as essential members of the health care team, the participants also drew on the documented history showing that pharmacists can improve patient outcomes while saving health care costs. The rich dialogue included experiences from successful practice-based initiatives describing the barriers and adversities overcome during implementation, facilitators of success, and other key components and measures that were needed dur-

ing their launch and implementation. Consortium participants provided insight that could lead to consistency and standardization of care at a national level while allowing for flexibility to enable or expand local interdisciplinary processes of care.

Following the face-to-face meeting, APhA Foundation staff reviewed the proceedings and reached out to consortium participants to gather more facts about topics that were discussed. Seven key themes emerged from the proceedings, and those served as the basis for the seven consortium recommendations for advancing pharmacists' patient care services and CPAs. APhA staff partnered with consortium members to review the recommendations and drafts of the white paper. Comments were used to inform this final version of the white paper. The principles and supporting background that follow represent a synthesis of information, opinions, and expertise that emerged from the consortium participants.

1. Use consistent terminology and language that is readily understandable by all potential audiences

Various terms describe similar activities related to pharmacists' patient care services, and it can be difficult for people outside of the health care system, including legislators, to distinguish among them. A lack of understanding may exist that these terms are actually referring to similar functions or sometimes used interchangeably. Advocates for CPAs and pharmacists' patient care services must find a simple, consistent way to describe the relationships and processes used to help patients in these models.

Education for the public, policy makers, payers, and other stakeholders should focus on describing the clinical capabilities that pharmacists bring to the health care team in communicating and collaborating with physicians and other prescribers, increasing quality of medication management, and improving public health. Consortium participants agreed that the best approach for this education is to be clear and concise when describing CPAs and pharmacists' patient care services. It was also recommended that advocates use terms that match what the audience currently understands, such as better health, better health care, and lower costs. The common theme of all messaging should be focused on improving people's health and empowering patients to be healthier through active involvement in their care.

2. Allow health care providers who enter into the collaborative practice agreement to define the details of each agreement

Consortium participants agreed that to maximize effective patient care, each agreement should be written, executed, reviewed, and renewed on the terms that are set among the collaborating health professionals. Limiting the scope of collaborative practice agreements (CPAs) limits the care patients could receive. Success of CPAs centers on demonstrated competence, local rela-

tionships, and levels of trust among providers establishing the scope of collaboration and privileges (depending on practice setting). Many participants had experiences in which state laws limited the activities that could be performed under CPAs, which ultimately restricted an otherwise flourishing patient-centered partnership among pharmacists, physicians, and other providers on the health care team.

Consortium participants support providers' ability to practice to the fullest extent of their licenses while collaborating. Participants discussed examples that highlighted successful collaborations that have developed and evolved as pharmacists and other providers grew to trust each other on a practitioner-to-practitioner level. The success was directly tied to each health professional understanding that the collaborating health professionals were committed to providing the best care to the patient and then consistently taking steps to share information and work as a team.

In addition, it was identified that successful methods of implementing CPAs in one setting may not produce the same results in another. Participants expressed that laws should allow for systems that work in various types of practices and geographic locations across the health care system, while allowing practitioners to determine the best ways to overcome local challenges. The goal is to have infrastructure that encourages CPAs to form, enables local adaptations to meet patients' needs, and empowers collaboration to expand relative to the level of trust and interest within each individual partnership. As discussed, this evidence-based model has been used successfully in multiple sectors of pharmacy practice for decades.

Based on the varying state practice acts, the consortium expressed that legislative or regulatory changes may be needed to allow these broad, unrestricted CPAs to exist or be fully implemented. Also, it may be optimal for pharmacists to develop relationships with local providers through information exchange related to pharmacists' patient care service encounters. Such communication and outreach should help develop grassroots support for pharmacists' services and create a basis for future CPAs when laws allow for their implementation.

3. Create and expand an infrastructure that embeds pharmacists' patient care services and collaborative practice agreements into care, while creating ease of access for patients

Consortium participants noted that CPAs and pharmacists' patient care services can serve to reduce fragmentation and optimize outcomes in today's health care system if implemented and legislated properly. Participants focused on two key components to facilitating successful implementation and use of pharmacists' services: infrastructure that embeds pharmacists' patient care services into current care processes and public education to help patients understand the services to

which they will have access. Participants recommended that policies should be focused on creating an environment in which both of these necessary components can be established.

The provision of pharmacists' patient care services must be seamless for patients and other providers to recognize its value. Building a business model that supports the pharmacists' role in delivering value to patients and reducing costs to the system is essential. This business model must be *scalable, sustainable, and financially viable* to be feasible in the evolving health care system. Participants discussed how these three components create a backbone for the successful delivery of pharmacists' patient care services.

Scalable. Implementation mechanisms that work in one practice setting may not work in others. Pharmacists' patient care services and CPAs are local processes and partnerships that may need to be implemented differently based on the needs of each practice. Policies supporting a health care system that focuses on specific, meaningful outcomes while allowing different providers to create market-driven methods to achieve them would empower pharmacies and pharmacists to scale up and offer a wider array of services across the United States.

Sustainable. Many segments of the current health care system do not invest in the lifelong health of people as a result of the ever-changing insurance coverage throughout life. This contributing factor plays a role in patients' motivation toward healthy lifestyles and contributes to a large amount of unnecessary health care spending. An investment in wellness, prevention, and education could create a sustainable system that incentivizes the preservation of health and ultimately controls health care costs.

Financially viable. Value tied to pharmacists' patient care services is not always recognized immediately or easily quantifiable. Often this value is realized long after services are delivered. Acute interventions, such as teaching patients how to take their medications correctly, may help patients avoid emergency department visits, stay healthier, and improve patient satisfaction in the short term. Alternatively, pharmacists' patient care services focused on health promotion and health management ultimately result in avoiding long-term complications. The health care system must be willing to invest in prevention, patient health, and disease management to ensure provision of these services. To do this, payers must recognize that the value of these services could be realized months and years in the future when the beneficiaries they are covering do not have uncontrolled chronic diseases and their complications. Without this investment, pharmacists and other providers will not have the resources to provide high-quality, integrated care.

One method that would create a business model is

pharmacists' formal recognition as providers in Medicare Part B. This recognition would create a clear mechanism for pharmacists to complement other health care providers with whom they collaborate to provide care to Medicare patients and allow pharmacists to be compensated for their services. Consortium participants noted that modifications to the Social Security Act and to state Medicaid rules would be key legislative changes required for this recognition to occur. Recognition in Medicare Part B could help drive adoption of other payment models through federal, state, or other public and private payment opportunities, including those using bundled payments to integrated care teams, accountable care organizations, and medical homes. Because pharmacists deliver varying levels of patient care services, these models may find success if compensation is based on the level of care provided, much like the medical model.

The integration of pharmacists' patient care services into various existing workflows and practice settings will ease adoption for patients and providers. Consortium participants recommended that this integration be facilitated by effective CPAs, well-informed medical and pharmacy teams, and meaningful multidirectional communication among providers. Process changes to facilitate this integration can include referrals for pharmacists' patient care services. Seamless delivery of pharmacists' patient care services also must include providing services to patients in a way that easily fits into their lifestyles and expectations.

The public may not be aware that they can receive clinical services in their pharmacy, which underscores the need to provide education about the potential for collaborative care with pharmacists and other providers. This education should come from every channel possible, including pharmacies, primary care offices, hospitals, private insurers, state agencies, federal agencies, national associations' public campaigns (e.g., National Consumer League's Script Your Future Campaign, APhA's American Pharmacists Month), and federal and state Medicare and Medicaid programs (e.g., Million Hearts Campaign, Partnership for Patients, CMS Medicare and You Handbook). Widespread promotion of pharmacists' services through these channels will create an expectation with patients and physicians that pharmacists' patient care services are available and that CPAs should be established to help patients optimize their health.

4. Incentivize and facilitate the adoption of electronic health records and the use of technology in pharmacists' patient care services

Pharmacists' patient care services and CPAs are highly dependent on multidirectional sharing of information among providers. Electronic health records (EHRs) and other health information technology (HIT) can greatly facilitate this process and should be viewed as

key components to facilitate adoption of this care model. Interoperable systems must be integrated into current pharmacy platforms to ensure that pharmacists can send and receive care notes, intervention records, lab and assessment values, and patient information. The adoption of standards such as Health Level Seven will provide a solid framework for the exchange, integration, sharing, and retrieval of electronic health information by defining how information is packaged and communicated from one party to another, thereby setting the language, structure, and data types required for seamless integration among systems.¹⁶ These systems will aid in medication reconciliation, hospital discharge, transitions of care, coordinated billing for services, patient referrals, and understanding patient health statuses. Participants proposed that laws that incentivize the adoption of these systems would facilitate the implementation of CPAs.

Such efforts for pharmacy integration of EHR functionality should align and build on federal incentive programs already in place through CMS. Under the Health Information Technology for Economic and Clinical Health (HITECH) Act (PL 111-5), CMS ties incentive payments specifically to the achievement of advances in health care processes and outcomes, also called "meaningful use" criteria. Eligible professionals, eligible hospitals, and critical access hospitals are required to demonstrate meaningful use to qualify for Medicare and/or Medicaid EHR incentive payments. Currently, pharmacists and pharmacies are not listed in the HITECH governing law as eligible providers in the CMS incentive programs.¹⁷ However, the information collected during pharmacists' patient care services and the multidirectional information exchange that occurs within CPAs contribute to the role pharmacists can play in demonstrating the meaningful use of EHRs. The expansion of incentive programs to help pharmacy practice settings invest in HIT can benefit all providers who are seeking to use EHRs in a meaningful way.

As meaningful use regulations continue to evolve, an understanding is developing that pharmacy needs to be connected with other providers to share crucial information for improving outcomes, medication safety, and overall patient care. The Pharmacy e-Health Information Technology Collaborative is working on HIT and privacy issues to help ensure that pharmacies are able to effectively contribute to and use the evolving HIT infrastructure.¹⁸ The commitment from the nine pharmacy organizations that formed the Pharmacy e-HIT Collaborative emphasizes the pharmacy profession's focus and ongoing efforts to find meaningful ways to integrate HIT standards and systems into pharmacy practice.

5. Encourage pharmacists to maintain strong, trusting, and mutually beneficial relationships with patients, physicians, other providers; encourage those individuals to promote pharmacists' patient care services

Through the formation of local relationships and the experience of engaging in pharmacists' patient care services, individuals develop an appreciation for the contributions that pharmacists can make to patient care. People outside of pharmacy can serve as powerful advocates to help policy makers and others understand the value of CPAs and pharmacists' patient care services. Consortium participants shared examples from Virginia, Texas, Alabama, and Ohio related to the powerful support that is generated when pharmacists create personal relationships with other providers and patients. These examples are described below.

Virginia. Pharmacists visited physicians for face-to-face meetings to describe pharmacy services that can be offered to patients. As the relationship developed, pharmacists asked physicians to write referrals and the physicians recognized the value of this endeavor. They even began to refer patients regardless of which pharmacy they used for dispensing services.

A local physician signed an initial protocol authorizing pharmacist-provided immunization delivery. As this physician became more comfortable with pharmacists providing services, he expanded the current protocol and even served as a champion by using immunizations as a springboard for pharmacist involvement in collaborative care.

Texas. A large national pharmacy chain implemented a pilot program with approximately 2,000 patients enrolled in which pharmacists provided education, made appropriate interventions, and communicated this activity back to local physicians. After continued pharmacy outreach and intervention, physicians responded with progressive levels of acceptance and approval, which indicated that pharmacy's persistent efforts for collaboration helped change physicians' perspective of pharmacists' capabilities and willingness to form a relationship.

Alabama. Longstanding relationships with providers at a university allowed for the formation of a blanket CPA for all pharmacists in the county in which the university resides.

Ohio. A physician champion who believed that pharmacists are a key part of the team generated acceptance and support for many ambulatory care pharmacy services at a large Ohio medical center.

The physicians in each of the above examples served as key supporters for the implementation of team-based care that includes pharmacists. This support and that of patients influenced by pharmacists could be leveraged to educate lawmakers and others about the importance of collaborative relationships that can grow with the developing partnership between patients and providers. Individuals outside of pharmacy should advocate for CPAs and pharmacist patient care services to affirm the value of these activities to patients and the health care system.

6. Properly align incentives based on meaningful process and outcome measures for patients, payers, providers, and the health care system

Two core components of successful CPAs are meaningful process and outcome measures along with appropriate incentives for all engaged in patient care. Members of the consortium agreed that these two components are tightly linked in that incentives should be based on the reported measures. Policies that include both can empower pharmacists' patient care services. The APhA Foundation's successful research initiatives have used a simple paradigm to describe how to best ensure that this is accomplished: *Align the incentives. Improve the outcomes. Control the costs.* The APhA Foundation's paradigm and consortium participants' comments and examples are detailed below.

Align the incentives. Patients, providers, and payers all must receive appropriate incentives while collaborating to advance patient health.

For patients, these incentives may be discounted co-payments, free medical supplies, gift cards to purchase healthy food, free screenings or medical consultations, or some other item or experience that motivates patients to take actions that will improve their health.

For pharmacists and other providers, a payment mechanism that supports pharmacist patient care services must exist. Consortium members discussed the North Carolina model, which builds on the patient-centered medical home (PCMH) concept. In North Carolina, more than 1,500 primary care practices are being supported with monetary and structural support to integrate their PCMH activities with other community providers, including pharmacists. Funding is allocated on a per beneficiary per month basis to the PCMH and community providers to engage in population health activities such as care coordination and targeting of at-risk patients, nearly all of whom have a need for medication reconciliation, review, and education. Additional avenues that are currently being pursued include obtaining provider status for pharmacists in the Medicare Part B and state payment models and using and refining recognized payment mechanisms such as Current Procedural Terminology codes to fit into the current billing models.¹⁹

For payers, the ultimate incentive is to provide all necessary services and reduce unnecessary services while minimizing total expenditures. To accomplish this, payers must first invest in prevention, screening, and health management services. Clinical and economic data then can be used to monitor the health of the patient population and improve control of health care spending as the patient population ages.

Improve the outcomes. Improving the health of patients is the goal of CPAs and pharmacist patient care services. Accountability is key. Tracking progress and reporting outcomes are the only ways to ensure that all

members of the health care team involved in patient care are aware of the impact of the collaborative efforts. Currently in many areas of the United States, physicians and clinics are evaluated based on clinical measures such as blood glucose, blood pressure, cholesterol, and smoking status. Optimizing patient outcomes should be a driving force for collaboration, with a goal of improving clinical measures. Because pharmacists play a key role in improving health outcomes, particularly for chronic diseases, including a pharmacist in the patient's health care team will ultimately elevate the evaluations of all team members.

The measures associated with these clinical outcomes must focus on only meaningful measures that truly capture each patient's health status. The consortium participants expressed concern that simply focusing on traditional pharmacy measures, such as adherence, may not evaluate the true impact on patients and their outcomes. Tracking which providers were involved in each intervention and associated outcome also may be useful. Doing so could contribute value to the collaborative model in which all members of the health care team are responsible for the patient's health. Outcomes then can be used to advocate for wider expansion of CPAs and pharmacists' patient care services.

Control the costs. The aligned incentive for the health care system is similar to that for each payer. Controlling overall health care costs in the United States is a top priority, and agreement generally exists that a more collaborative environment in which information is shared between providers and patients would help keep people healthier. These healthier patients would require less care in the future, thereby decreasing the burden on the health care system regardless of who insures the patients. Collaborative, interdisciplinary care that includes pharmacists' patient care services has been proven to have a beneficial economic impact by reducing and controlling health care costs.^{2,3,7,8,20}

APhA Foundation research and the experiences of numerous consortium participants have shown that overall costs are reduced and appropriate care is optimally delivered to patients when incentives are properly aligned for each stakeholder.

7. Examine and redesign health professionals' practice acts, education curriculums, and operational policies to create synergy, promote collaboration, and optimize support staff

The structure of the current health care system must be realigned to develop the complementary skills of various health professionals into operational collaboration. Consortium participants acknowledged that levels of integration vary among state practice acts. Some practice acts currently create an environment that has led to successful CPAs, which should be emulated throughout the nation. However, areas of the country could benefit from creating interdisciplinary teams, ensuring that

each professional is practicing at the top of his/her license, and enabling support staff to take on more roles as appropriate. One of the best ways to optimize the role of all providers on the health care team is for various health professions to simultaneously and collaboratively examine and revise their practice acts.²¹ Providers who are passionate about collaboration and patient care will be empowered by this type of system change.

Laws, education, and policies would need to adapt to accomplish these changes. A natural place to begin this paradigm shift is in the interprofessional education of future providers. Teaching providers about the roles of each health professional helps build a team-based mindset and a focus on collaboration toward optimized patient outcomes.²² As this interdisciplinary collaboration takes root with new practitioners, it will be important to have a system that supports these relationships. Practice acts that specifically encourage CPAs, working at the top of the professional license, and optimizing use of support staff will help providers integrate pharmacists and the services they can provide into current practice models. Local operational, liability, and legal policies will adapt to ensure a team of health providers are collectively responsible for the care of each patient.

Recommendations for advancing pharmacists' patient care services and collaborative practice agreements (CPAs)

1. Use consistent terminology and language that is readily understandable by all potential audiences
2. Allow health care providers who enter into the CPA to define the details of each agreement
3. Create and expand an infrastructure that embeds pharmacists' patient care services and CPAs into care while creating ease of access for patients
4. Incentivize and facilitate the adoption of EHRs and the use of technology in pharmacists' patient care services
5. Encourage pharmacists to maintain strong, trusting, and mutually beneficial relationships with patients, physicians, other providers; encourage those individuals to promote pharmacists' patient care services
6. Properly align incentives based on meaningful process and outcome measures for patients, payers, providers, and the health care system
7. Examine and redesign health professionals' practice acts, education curriculums, and operational policies to create synergy, promote collaboration, and optimize support staff

Translation tools

Upon finalization of the recommendations, the APhA Foundation began developing translation tools for four specific audiences. The goal of the translation tools is to inform each audience about the recommendations described in this article and the importance of implementing pharmacists' patient care services and CPAs where appropriate. These tools can be used independently by

the four audience groups or by pharmacists when interacting with these audiences. The identified audiences are the general public (patients), providers (e.g., physicians, pharmacists, nurse practitioners, physician assistants), potential payers (e.g., federal, state, private insurers, self-insured employers), and policy makers (e.g., state and federal representatives and senators, health affairs staff). The tools can be found at www.aphafoundation.org.

Conclusion

Pharmacists deliver many patient care services to sustain and improve health. In an era of health care reform, advancing the level and scope of pharmacy practice holds promise to improve health and reduce costs for care. Published evidence supports the role of pharmacists as essential members of the interdisciplinary health care team and emphasizes that pharmacists are well positioned to perform medication- and wellness-related interventions that improve patient outcomes. This white paper has addressed certain concepts that serve as an engagement point for pharmacists, providers, patients, payers, and legislators to understand and support the role of pharmacists in interdisciplinary care. The consortium participants' seven recommendations provide methods and infrastructure for empowering collaborative, interdisciplinary care. The intent of this guidance document and the policy translation tools is to provide principles and strategies for effectively implementing health care system changes that include an optimized role for pharmacists to engage in team-based, patient-centered care.

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Appendix 1. CDC's pharmacist-focused initiatives

Pharmacy Outreach Project. This project's goals are focused on developing a campaign to offer the support needed by pharmacists to help them provide advice and resources to patients with high blood pressure. It also is intended to increase public awareness of the importance of staying on blood pressure medications as prescribed and to let the public know that pharmacists are equipped and available to support them in their ongoing blood pressure management efforts.

Pharmacy Case Study Project. This project is designed to identify and develop case studies for three community or state-implemented collaborative practice initiatives. The purpose is to understand and describe the key policy and other components, planning and implementation processes, facilitators, barriers, strengths, and to the extent possible, the effect of pharmacists' patient care service initiatives on health outcomes such as high blood pressure and cholesterol.

Pharmacy Policy and Implementation Project. There is wide variation in health policies and resources among states related to pharmacy practice laws that facilitate collaborative practice agreements. This project gathers a consortium of experts, examines key factors and lessons learned contributing to the adoption of collaborative practice agreements, identifies key policy elements and implementation strategies, and develops translation tools to educate partners about pharmacists' patient care services. This white paper is within the context of this project.

2011 Report to the U.S. Surgeon General

In 2011, Rear Admiral (RADM) Scott Giberson, BSPharm, PhC, NCPS-PP, MPH, Chief Professional Officer for Pharmacy for the Public Health Service and U.S. Assistant Surgeon General, submitted a report to the Surgeon General titled *Improving Patient and Health System Outcomes through Advanced Pharmacy Practice*. This report provided rationale and compelling discussion to support health reform through pharmacists delivering expanded patient care services.²⁰ Regina Benjamin, MD, MBA, U.S. Surgeon General, wrote a letter to publically support the report. The Surgeon General's letter specifically cites the following four cases:

1. Health leadership and policy makers should further explore ways to optimize the role of pharmacists to deliver a variety of patient-centered care and disease prevention services, in collaboration with physicians or as part of the health care team. These collaborative pharmacy practice models can be implemented to manage and prevent disease, improve health care delivery, and address some of the current demands on the health care system.

2. Use of pharmacists as an essential part of the health care team to prevent and manage disease in collaboration with other clinicians can improve quality, contain costs, and increase access to care.
3. Recognition of pharmacists as health care providers and an essential part of the health care team is appropriate given the level of care they provide in many health care settings.
4. Compensation models, reflective of the range of care provided by pharmacists, are needed to sustain these patient oriented, quality improvement services. This may require further evolution of legislative or policy language and additional payment reform considerations.