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FEATURE

Pharmacist-initiated treatment of minor conditions: A call to action

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Accessing health care is important to promote and maintain health, prevent and manage disease, and reduce unnecessary disability and premature death.¹ There are many barriers inhibiting patients from accessing needed care including care for minor conditions, such as allergies or headaches, which are (1) common and (2) self-limiting or uncomplicated. Primary care physician (PCP) shortages, rural geographic limitations, limited appointment availability, finite office hours, and transportation barriers are just a few examples of why access to health care is challenging, especially in rural America.^{2,3} In 2017, the Association of American Medical Colleges estimated that there will be a shortage of 43,000 PCPs by 2030.⁴ In addition, the National Rural Health Association reported that the patient-to-PCP ratio in urban areas is 53.3 physicians per 100,000 patients, whereas it is only 39.8 physicians per 100,000 patients in rural areas.⁵ With the estimated number of PCPs declining, these ratios are expected to decrease.

Scheduling appointments for office visits is another barrier to receiving health care. Typically, physician appointments are available on weekdays during normal business hours, which are often restrictive and inconvenient for patients. Patients need access to care at convenient locations and times. In addition, an estimated 3.6 million Americans are unable to access care because of transportation issues, including lack of public or private transportation, transportation costs, and long travel distances.⁶ These scheduling and transportation obstacles leave few options for patients who need timely and important care; many patients turn to the emergency department (ED) for problems that could otherwise have been treated in an outpatient setting. From 2006 to 2009, 10.1% of ED visits were triaged as nonurgent, and 1 study found that 32% of nonurgent ED visits were due to patients' lack of accessibility to their PCP.^{7,8} For patients who are able to wait until their PCP has availability, physicians found that roughly 10% of these appointments could have been self-managed by the patient.⁹

Retail clinics in pharmacies started appearing in the Midwest in an effort to increase patient access to care in 2000. As of 2014, there were more than 2700 retail clinics across the United States, with nonphysician practitioners (i.e., nurse practitioners and physician assistants) providing common services, including treating minor conditions, providing immunizations, conducting sports physicals, and performing screening services. However, retail clinics have not solved the issue of increasing patient access to care because only 35% of the U.S. population live within a 10-minute drive of a retail clinic, and most clinics are located in affluent urban or suburban areas.¹⁰ In addition, an observational study showed that retail clinics near EDs did not decrease the number of ED visits for minor conditions.¹¹ This study did not investigate the impact retail clinics may have on urgent care centers, and publicly insured or uninsured patients were excluded, potentially influencing the results.¹¹ Despite good intentions, retail clinics have not been the solution to increasing patient access to care and decreasing health care spending. Pharmacists are a better solution to increasing patient access to care as nearly 92% of Americans live within 5 miles of a pharmacy.¹²

Definition

The definition of a minor condition is variable and can encompass a broad range of patient complaints. The ailments that fall under the realm of minor conditions vary by country, province, state, and organization. For example, whereas some pharmacists may not classify emergency contraception (EC) as a minor condition, pharmacists in New Brunswick, Canada are able to supply EC prescriptions for patients in accordance with their minor conditions program.¹³ Although there is variability in the definition, the general consensus from various other countries is that minor conditions are (1) common and (2) self-limiting or uncomplicated conditions that can be managed and resolved with appropriate interventions, and in some instances, a prescription.^{14,15} The United States currently has no set definition of minor condition. As pharmacy practice in the United States is regulated at the state level, it would be up to each state board of pharmacy to define minor conditions and pharmacist scope of practice regarding minor condition treatment initiation.

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For example, pharmacists in Washington can initiate treatment for allergic rhinitis, herpes zoster, and bronchospasms with prescription medications. Pharmacist-initiated treatment for minor conditions includes initiating an appropriate prescription or nonprescription medication for the patient. Prescription medications may be initiated when there are not nonprescription medications available for treatment or the patient is excluded from self-care. As the pharmacy profession continues to evolve and as pharmacists assume expanded patient care responsibilities, legislative efforts, practice models, and tools and resources for pharmacist evaluation, assessment, therapeutic decision making, and initiation of medications for the treatment of minor conditions are needed.

Pharmacists as a health care resource

Both the American Medical Association and the American Pharmacists Association (APhA) believe there is a need to reform the U.S. health care system to increase patient access to care and improve patient outcomes.^{16,17} Community-based pharmacists are an underused resource capable of being part of the solution owing to their accessibility and medication expertise. Historically, pharmacists have served patients primarily in dispensing roles, ensuring safe and accurate distribution of medications. As the practice of pharmacy and the training of pharmacists continue to evolve, pharmacists are now used for their expertise in optimizing medications through medication therapy management, chronic and acute disease state management, wellness and prevention services, and providing patient education and support—activities that are independent of, but can occur in conjunction with, the provision of a medication product.^{18,19}

Pharmacists are the third largest health care profession in the world and one of the most easily accessible health care providers.²⁰ As of 2015, there were more than 67,000 community-based pharmacies in the United States, with an average ratio of 2.11 pharmacies per 10,000 people, and in some areas, this ratio reached 13.7 pharmacies per 10,000 people.¹² Nearly 92% of Americans live within 5 miles of a pharmacy, and of the 26,789 chain pharmacies, 10.7% are open 24 hours per day.^{12,21} Accessibility is crucial to providing quality care to patients, and pharmacists are accessible and well positioned to provide care to patients.

Pharmacists are often the first point of contact for patients seeking medical advice or nonprescription medications.²² As a result, pharmacists are in an ideal position to assess and initiate prescription-only drug therapy for minor conditions, potentially decreasing unnecessary physician office and ED visits. In addition, pharmacists can provide care to patients outside of traditional physician office hours, such as during evenings, weekends, and holidays. Pharmacists have demonstrated their ability to reduce time to treatment initiation when patients have more complex conditions, such as influenza, so it is reasonable to assume that pharmacist-initiated treatment of minor conditions may also improve time to treatment.²³ Pharmacists are well suited to fill the gap in patient access to health care and manage minor conditions owing to their extensive training, drug information expertise, accessibility, and convenient locations and hours.

Pharmacist-initiated models of care for treatment of minor conditions in Canada and the United Kingdom

Literature related to treatment initiation for minor conditions by pharmacists is limited in the United States. A large systematic review of international minor ailment treatment programs revealed that most pharmacist-initiated treatment of minor conditions occurs in Canada and the United Kingdom, where this model of care has been studied extensively.^{13–15,24–33}

Canada

Canadian pharmacy organizations advocated for pharmacists' authority to prescribe for the treatment of minor conditions to alleviate wait times at physicians' offices and EDs.¹³ Consequently, pharmacists in Nova Scotia and Saskatchewan are able to independently initiate medications through Minor Ailment Programs (MAPs).¹³ In 2012, Saskatchewan became the first province to compensate pharmacists for minor condition treatment initiation for each claim approved by insurance.²⁴ The materialization of the MAP in Saskatchewan started with 3 pharmacist-treated conditions and has increased to 17 conditions. The guideline for pharmacist prescriptive authority in this province is unique in that it is based on the patient's self-diagnosis. This terminology was set in place to avoid concern over pharmacist diagnoses. Instead, the pharmacist must confirm the patient's self-diagnosis. Other provinces where MAPs have been established include Newfoundland, New Brunswick, Prince Edward Island, Manitoba, and Quebec. In Quebec, pharmacists are compensated per assessment for 7 conditions in which no diagnosis is required and for 12 conditions in which diagnosis and treatment are known.²⁵ Unfortunately, medical organizations in Ontario opposed pharmacist prescriptive authority because of concerns, such as lack of training and experience with diagnosing and prescribing, as potential threats to patient safety.¹³ Although there are no data to support these claims, a MAP has yet to be initiated in Ontario. There is, however, considerable support for expanding pharmacy services to include minor condition treatment among Ontario pharmacists.¹³ Minor conditions for which Canadian pharmacists can initiate treatment are listed in Table 1; although, each province has variability in which minor conditions pharmacists are authorized to treat, as shown in the studies by Taylor et al.¹³ and Mansell et al.²⁴

When pharmacist prescribing for minor conditions was evaluated for efficacy in Saskatchewan, the affiliated condition improved in 99.2% of patients, with 52.4% of the patients having complete resolution of symptoms.²⁴ The most common minor conditions treated by pharmacists were cold sores (34.4%), insect bites (20%), and seasonal allergies (19.2%). Of those patients, 38.6% would have gone to a physician or the ED if the minor condition service had not been provided by pharmacists.²⁴ Saskatchewan has also investigated the costs and savings associated with pharmacist-led MAPs and found that in 2014, pharmacists prescribing for minor conditions saved the province more than \$546,000. When these savings were projected over 5 years, the province was estimated to save more than \$3.482 million, illustrating that MAPs are cost-saving, in addition to improving access to care.²⁶

Table 1
Examples of pharmacist-treated minor conditions in Canada^{13,24}

Condition
Acne (mild)
Acute otitis media
Allergic rhinitis
Athlete's foot
Back pain (sprains and strains)
Bacterial conjunctivitis
Calluses
Canker sores
Cold sores
Contact dermatitis
Cough
Cystitis
Dandruff
Diarrhea
Dry eyes
Dysmenorrhea
Eczema
Emergency contraception
Folliculitis
Fungal dermatitis
Gastroesophageal reflux disease
Headache
Head lice
Hemorrhoids
Hives
Impetigo
Indigestion/heartburn
Insect bite
Insect sting
Joint pain
Muscle pain
Muscle spasms
Nappy rash
Nausea
Nicotine dependence
Pinworms
Ringworm
Sleep disorders
Sore throat
Teething
Thrush
Urinary tract infection
Vaginal yeast infection
Warts (hands and feet)

Note: Minor conditions eligible for pharmacist treatment vary by province.

The United Kingdom

Pharmacists in the United Kingdom were initially able to prescribe medications for the treatment of minor conditions through Pharmacy-based Minor Ailment Schemes (PMAS). The first PMAS was implemented in Scotland in 2006, and similar service models have since expanded across the United Kingdom.¹⁴ PMAS have evolved over time from limiting patient eligibility to now including patients who either live in the United Kingdom or are registered to see a U.K. general practitioner. For example, in Scotland, the National Health Services' (NHS) PMAS were for children, adults older than 60 years, patients with a medical exemption certificate, and people with certain benefits (Table 2).²⁷ Patients were required to register at the pharmacy to receive the service, and if eligible, they could receive free treatment for a minor condition. Today, this service in Scotland is called NHS Pharmacy First Scotland, and it is recommended that anyone with a minor condition first go

Table 2
Types of patient eligibility to use the NHS pharmacy-based minor ailment service in Scotland²⁷

Eligibility criteria
• Children • Adults older than 60 years • Patients with a medical exemption certificate • People with certain benefits: – Maternity exemption certificate – War pension exemption certificate – Named on NHS exemption certificate or HC2 certificate • People who receive: – Income support – Income-based jobseeker's allowance – Income-related employment and support allowance – Universal credit, pension credit, or guarantee credit

Abbreviations used: HC, health cost; NHS, National Health Service.

to the pharmacy for advice (Table 3).^{27,28} Pharmacists may refer the patient to their general practitioner or provide treatment, if needed. The NHS remunerates pharmacists for their consultations with patients and prescribing efforts.

Stakeholder perspectives in Nottingham found that most health care providers thought that the PMAS had a positive impact on patient care by improving access to care, providing patients with more choices, and being a convenient option for patients.²⁹ Both adequate demand and support for the treatment of minor conditions in the community pharmacy setting were demonstrated in a study examining community-based pharmacists screening and initiating treatment for urinary tract infections (UTIs); outcomes of this study suggest that community-based pharmacists can provide appropriate treatment for patients with uncomplicated UTIs and increase patient access to care.³⁰ A cost analysis of 3 PMAS in England showed that 58.1% of patients reported that if the PMAS were not available, they would have made an appointment with their general practitioner, potentially leading to delays in treatment.³¹

Until recently, each NHS England region designed its own PMAS, leading to differences in types of patients and conditions that could be treated in the community pharmacy setting. In October 2019, NHS England launched a new advanced pharmacy service, Community Pharmacist Consultation Service (CPCS), which replaced the PMAS to align treatment of minor conditions throughout the country and thus provide more continuity of care. CPCS offers patients the opportunity to seek care for eligible minor conditions by dialing NHS 111 and then being referred to a local community-based pharmacist.³² The pharmacist assesses the patient's condition and will either refer the patient to their primary care provider or dispense an emergency supply of a medication that the patient has been prescribed previously. Symptoms and conditions for which patients are referred to community-based pharmacists by NHS 111 are listed in Table 4.³² Minor conditions eligible for pharmacist treatment in Northern Ireland and Wales can be found at <http://www.hscbusiness.hscni.net/2055.htm> and <https://cwmtafmorgannwg.wales/services/pharmacy-medicines-management/common-ailments-service/>, respectively.

Models of minor condition care by pharmacists in the United States

In the United States, pharmacy practice is regulated at the state level, resulting in variability in scope of practice. There

Table 3
Examples of pharmacist-treated minor conditions in Scotland^{27,28}

Condition
Acne
Allergies
Athlete's foot
Backache
Bacterial conjunctivitis
Blocked/runny nose
Cold sores
Colic
Constipation
Cough
Cystitis
Diarrhea
Dry eye
Dysmenorrhea
Earache
Eczema and allergies
Hay fever
Headache
Head lice
Hemorrhoids
Impetigo
Indigestion
Mouth ulcers
Nappy rash
Pain
Period pain
Ringworm
Scabies
Scalp disorders
Sore throat
Threadworms
Thrush
Verrucae
Warts

are 2 primary models for pharmacists to initiate medications for patients: collaborative practice agreements (CPAs) and autonomous prescribing.³⁴ CPAs are agreements between a provider and a pharmacist that allow a pharmacist to practice within defined practice boundaries and beyond the scope of practice available without a CPA. These agreements often permit pharmacists to initiate, modify, or discontinue medication therapy while monitoring the patient in collaboration with the prescribing provider. CPAs can be patient-specific or population-specific and are more restrictive than autonomous prescribing. Autonomous prescribing for pharmacists is usually established with a statewide protocol that allows a pharmacist to initiate treatments for patients who meet the qualifying criteria. Statewide protocols are not limited to a specific practice site, and prescribing does not occur under the direct supervision of a collaborating provider.³⁴ One of the most common examples of pharmacists autonomously prescribing is naloxone for opioid overdose.

Currently, 3 states, Idaho, Florida, and Kentucky, have explicit legislation allowing pharmacists to initiate prescription medications for the treatment of minor conditions through CPAs or autonomous prescribing.^{35–39} Effective July 1, 2020, pharmacists in Florida may screen, test, and initiate treatment for minor, nonchronic health conditions within the boundaries of a written protocol with a supervising physician. Pharmacists performing this service are required to hold a certification by the Florida Board of Pharmacy (BOP) to test and treat minor conditions, obtained by completing a

Table 4
Examples of symptoms or conditions eligible for referral to a community-based pharmacist identified by NHS 111 under CPCS³²

Eligibility criteria
Acne, spots, pimples
Allergic reaction
Ankle or foot pain or swelling
Athlete's foot
Bites or stings, insect or spider
Blisters
Constipation
Diarrhea
Ear discharge or ear wax
Earache
Eye, red or irritable
Eye, sticky or watery
Eyelid problems
Hair loss
Headache
Hearing problems or blocked ear
Hip, thigh, or buttock pain or swelling itch
Knee or lower leg pain
Lower back pain
Lower limb pain or swelling
Mouth ulcers
Nasal congestion
Rectal pain
Scabies
Shoulder pain
Skin, rash
Sleep difficulties
Sore throat
Tiredness
Toe pain or swelling
Vaginal discharge
Vaginal itch or soreness
Vomiting
Wound problems, management of dressings
Wrist, hand, or finger pain or swelling

Abbreviations used: CPCS, Community Pharmacist Consultation Service. NHS, National Health Service.

Note: This list is not exhaustive but reflects expected cases based on NHS 111 calls.

continuing pharmacy education course offered collaboratively by the Florida Boards of Medicine and Osteopathic Medicine. This certification course focuses on patient assessments, point-of-care testing procedures, safe and effective treatment of minor conditions, and contraindications to treatment.^{35,36}

In late 2017, legislation was approved allowing the Kentucky BOP to develop protocols for pharmacists to assess and treat certain minor conditions; however, a prescriber must provide a signature allowing pharmacists to use these protocols. Prescribers are required to train the pharmacist in the treatment of eligible minor conditions before signing the protocol.³⁷ Although Florida and Kentucky pharmacists appear to be autonomously prescribing through a BOP-approved protocol, the model of initiating treatment for minor conditions in these states is best defined as using a population-specific CPA because a prescribing provider must sign the protocol before initiating treatment.

Idaho pharmacists were granted autonomous prescriptive authority in 2018 to initiate treatment through the Idaho BOP for a range of minor conditions, although some restrictions apply.^{38,39} Pharmacist prescribing for allergic rhinitis is limited to intranasal drugs, prescribing for mild acne is limited to

Table 5
Minor conditions U.S. pharmacists authorized to treat by state^{35-39,41,42}

State	Minor conditions treatable by pharmacists
Florida	Lice
	Skin conditions (ring worm, athlete's foot)
	Uncomplicated infections
Kentucky	Allergic rhinitis
	Uncomplicated UTIs
Idaho	Allergic rhinitis
	Cold sores
	Head lice
	Mild acne
	Mild cough
	Motion sickness
	Uncomplicated UTIs
	Allergic rhinitis
	Anaphylaxis
	Bronchospasms
Washington state ^a	Burns
	Headaches
	Herpes zoster
	Human, canine, and feline bite prophylaxis
	Insect stings
	Swimmer's ear
	UTIs
	Vaginal yeast infections

Abbreviation used: UTI, urinary tract infection.

^a Minor conditions included in the Clinical Community Pharmacist Training provided by Washington State Pharmacy Association.

topical drugs, and prescribing for mild cough is limited to benzonatate.

A fourth state allows pharmacists to initiate prescription medication for the treatment of minor conditions through CPAs, although its legislation is broad and not specific to minor conditions. Pharmacists in the state of Washington have been able to enter CPAs called "collaborative drug therapy agreements" with prescribers since 1979 and provide enhanced clinical services to patients, including initiating treatment for various minor conditions.⁴⁰ Current legislation requires commercial insurers to recognize pharmacists as providers, similar to physicians, nurse practitioners, and physician assistants, allowing pharmacists to bill commercial insurance for patient care services that are within the pharmacist's scope of practice.⁴⁰⁻⁴² The state offers advanced training to pharmacists through the Washington State Pharmacy Association to develop pharmacist competencies to serve patients; training focuses on how to identify illness, rule out complications, prescribe therapies, and develop this service in practice.⁴² Minor conditions eligible for pharmacist-initiated treatment are listed by state in Table 5.^{35-39,41,42} Pharmacists outside of these 4 states may still initiate treatment for minor conditions through CPAs, similar to Washington; although, Florida, Idaho, Kentucky, and Washington are the only known states currently enacting this practice.

Currently, there is no published literature regarding the safety and efficacy of pharmacists prescribing for minor conditions in the United States because this is a relatively new service. However, community-based pharmacists have demonstrated their ability to safely initiate medications for patients with potentially higher risk conditions, such as influenza, group A streptococcus, and hormonal contraception.^{43,44} It would be reasonable to assume that community-based pharmacists would also be able to safely initiate treatment of patients for minor conditions.

Opportunities to implement pharmacist-initiated treatment of minor conditions

Pharmacists have the accessibility, the knowledge, and the opportunity to improve service to patients in the community. There is demand for increased access to higher quality care, and pharmacists are uniquely positioned to meet this need. Advancing the scope of pharmacy practice will enable pharmacists to provide high-quality care to patients and generate revenue apart from dispensing prescriptions. APhA policy, developed by the APhA House of Delegates, serves as the official position of the organization and its members. The 2020 APhA House of Delegates adopted the following policy focusing on community-based pharmacists as providers of care:⁴⁵

- APhA advocates for the identification of medical conditions that may be safely and effectively treated by community-based pharmacists.
- APhA encourages the training and education of pharmacists and student pharmacists regarding identification, treatment, monitoring, documentation, follow-up, and referral for medical conditions that may be safely and effectively treated by community-based pharmacists.
- APhA strongly advocates for laws and regulations that allow pharmacists to identify and manage medical conditions that may be safely and effectively treated by community-based pharmacists.
- APhA strongly advocates for appropriate remuneration for the assessment and treatment of medical conditions that may be safely and effectively treated by community-based pharmacists from government and private payers to ensure sustainability and access for patients.
- APhA supports research to examine the outcomes of services that focus on medical conditions that may be safely and effectively treated by community-based pharmacists.

To advance toward implementation of these APhA policy statements, the authors recommend the following actions regarding legislation, model of care, and tools and resources for pharmacist-initiated treatment of minor conditions.

Legislation

- Laws and regulations should be created at the state level to allow for community-based pharmacists to initiate, modify, discontinue, and dispense treatments for minor conditions for all patients.
- Payment policy must be established to allow community-based pharmacists to receive payment for patient assessment and treatment of minor conditions.
- State pharmacy associations should have a government affairs committee promoting the advancement of pharmacy practice, including pharmacist-initiated treatment of minor conditions.

Model of care

- APhA should develop practice guidance for community-based pharmacists to implement treatment for minor conditions.

Tools and resources

- APhA should develop education, tools, and resources to support the development and implementation of services to help community-based pharmacists assess and treat minor conditions.
- Schools and colleges of pharmacy accredited by the Accreditation Council for Pharmacy Education (ACPE) should educate student pharmacists about patient care opportunities within community-based pharmacy practice, including applying the Pharmacists' Patient Care Process developed by the Joint Commission of Pharmacy Practitioners for assessing and treating minor conditions.
- ACPE-accredited schools and colleges of pharmacy should promote community-based pharmacy residency programs to student pharmacists seeking advanced community-based pharmacy education and training, including education and training in pharmacist-initiated treatment of minor conditions.
- ACPE-accredited schools and colleges of pharmacy should develop and incorporate professional advocacy courses into the curriculum to educate student pharmacists about how to advance pharmacy practice, including pharmacist-initiated treatment of minor conditions.
- ACPE-accredited schools and colleges of pharmacy should educate student pharmacists on how to assess minor conditions and initiate treatment.

Community-based pharmacists must continue to demonstrate their value beyond solely dispensing prescriptions. Action needs to be taken by all pharmacists to expand the scope of pharmacy practice, including pharmacist-initiated treatment of minor conditions, for the benefit of all patients and the profession. One step that individual pharmacists can take is to join their state and national pharmacy associations and aid in legislative efforts that expand practice authority through pharmacy advocacy.

Conclusion

Community-based pharmacists are accessible health care providers and are in an ideal position to prescribe treatments for patients with minor conditions and thus increase patient access to care. Pharmacist initiation of treatment for patients with minor conditions has been shown to reduce time to therapy and reduce health care spending. To expand the scope of practice, control health care spending, and increase patient access to care, practice models for pharmacist-initiated treatment of minor conditions are needed. APhA, state associations, and pharmacists should work together to ensure regulatory authority, confirm payment models, develop effective practice structures, and advance these pharmacist services.

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