



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Contents lists available at ScienceDirect

Journal of the American Pharmacists Association

journal homepage: www.japha.org

COMMENTARY

Pharmacist responsiveness and readiness for oral antivirals for COVID-19: A rebuttal to the AMA statement regarding the Biden administration's test-to-treat plan

David M. Hughes^{*}, Jason Mordino

ARTICLE INFO

Article history:

Received 7 March 2022

Accepted 25 March 2022

Available online 1 April 2022

ABSTRACT

On March 4, 2022, the American Medical Association (AMA) released a statement in response to the Biden administration's plan of a test-to-treat plan allowing pharmacists to serve as locations to test and provide prescriptions for oral antiviral therapies for the treatment of coronavirus disease 2019 (COVID-19) after a positive test result. The statement by AMA contradicts and underrepresents the impact pharmacists have on clinical practice. Pharmacists have been a crucial part of many efforts including mass vaccination efforts and furnishing of prescriptions for other complex disease states (e.g., pre-exposure prophylaxis and post-exposure prophylaxis therapy). Furthermore, health systems have proven that novel approaches to mitigate operational and clinical barriers to COVID-19 therapies may offset the increased demand needed by communities. Herein, this commentary will discuss a viewpoint and counterpoint to the statement put out by AMA, with a focus on pharmacists.

© 2022 American Pharmacists Association[®]. Published by Elsevier Inc. All rights reserved.

On March 4, 2022, the American Medical Association (AMA) released a statement in response to the Biden administration's decision incorporating a pharmacy-based clinic component to the test-to-treat (TTT) plan to help combat coronavirus disease 2019 (COVID-19).^{1,2} Although AMA's statement highlights several complexities, it diminishes the collaborative approach in the health care field among physicians and advanced practice providers (APPs) such as pharmacists, physician assistants, and nurse practitioners. AMA states that this approach "...oversimplifies challenging prescribing decisions by omitting knowledge of a patient's medical history, the complexity of drug interactions, and managing possible negative reactions." This assumes an approach of "test and dispense," without a careful history and review by pharmacists. Pharmacists have demonstrated their competence at handling complexity and making sound therapeutic decisions that optimize patient care and provide rapid access to appropriate medications in community and

hospital settings. Although all APP disciplines are capable of taking detailed and complete medical history, this commentary will focus solely on the pharmacist's role.

Pharmacists continue to be referred to as one of the most accessible and trusted health professionals to communities across the United States. As part of the mandated doctoral training in the profession, pharmacists are trained to evaluate patient medical history and complicating factors pursuant to pharmacotherapy treatment decisions including drug-drug interactions (DDIs), adverse effect management, and adherence barriers to therapy. In contrast to AMA's statement, the incorporation of pharmacists into the medication reconciliation process has led to decreased medication errors in the health system, decreased adverse drug events, and improved interdisciplinary communication across professions.^{3–5} Pharmacists are adept because they have had to overcome a lack of access to medical charts in the community. Models of expanding chart access to community pharmacists have demonstrated improved patient care, education, and care coordination.^{6–9} Rather than advocate against allowing drug experts to support direct patient care, AMA should be advocating to support nationalized chart access and increased transparency to community pharmacists for improved patient safety.

In addition to accurate medication and medical history, the pharmacist scope has continued to expand into areas including more complex therapeutic drug management, including areas such as human immunodeficiency virus (HIV). In 2019, the state

Disclosure: The authors declare no relevant conflicts of interest or financial relationships.

*** Correspondence:** David M. Hughes, PharmD, BCOP, Clinical Pharmacy Manager, Department of Pharmacy, Boston Medical Center, 830 Harrison Ave., Boston, MA 02118.

E-mail address: david.hughes@bmc.org (D.M. Hughes).

ORCIDiS

David M. Hughes: <http://orcid.org/0000-0002-0971-7265>

Jason Mordino: <http://orcid.org/0000-0002-5339-3691>

Key Points**Background:**

- On March 4, 2022, the American Medical Association released a statement that diminished a collaborative approach in health care with advanced practice providers and pharmacists.
- The statement oversimplified the role the both community and health-system pharmacists have in clinical practice and failed to recognize the clinical value of the multidisciplinary approach.

Findings:

- Pharmacists have continued to increase scope for complex disease state management areas such as human immunodeficiency virus (HIV), oral contraception, and influenza respiratory infections.
- Our academic medical center demonstrated pharmacist responsiveness and support of physicians to combat a COVID-19 surge in the face of new oral antivirals becoming available.
- Collaboration amongst larger organizations (e.g., AMA) should spear efforts on supporting a multidisciplinary approach and advocate for enhanced chart access to allow pharmacists to be able to continue to support our patients.

of California authorized a bill allowing pharmacists to furnish pre-exposure prophylaxis (PrEP) and postexposure prophylaxis (PEP), which include many complex DDIs, dosing concerns, and toxicity that require a thorough medical history.¹⁰ Although pharmacists do not have independent authority to order and perform wide-ranging and routine tests, states have granted drug therapy management protocols to meet a public demand. In the state of Oregon, pharmacists have the ability to perform point-of-care testing for HIV when furnishing PEP therapy. In addition, to furnish PrEP therapy, the pharmacist must verify laboratory tests associated with PrEP therapy in addition to a comprehensive medication and medical history.¹¹ As with the antiretroviral therapies used for PEP and PrEP, COVID-19 oral antiviral therapies require clinical interviewing for a robust medical history and careful consideration for therapy selection before furnishing prescriptions. In addition to PrEP and PEP, pharmacists have been extensively involved with dispensation of oral contraception and furnishing prescriptions related to streptococcal and influenza respiratory infections. Through these similarly complex therapeutic initiatives (PrEP and PEP), pharmacists have demonstrated their success to provide complex clinical services across community practice despite multiple challenges.

The experience by our medical center (and pharmacy department) directly refutes the statement put out by AMA by demonstrating that pharmacists possess clinical knowledge required for complex disease state management and furnishing oral antiviral therapies for COVID-19. Our health system, as with many others, was challenged by a rapid surge of patients with COVID-19. State and federal agencies released

guidelines to serve as a framework to prioritize the most vulnerable patients with a limited drug supply of oral antiviral therapies for COVID-19. The pharmacy department at our medical center recognized the need to implement a novel multidisciplinary system to rapidly increase appropriate prescribing, dispensing, and access to COVID-19 oral antiviral therapies to combat the Omicron surge. Outpatient pharmacists (at dispensing pharmacies) provided patient-centered education and coordination of care services to dispense more than 100 prescriptions to our community. They validated all contraindications, DDIs, and dosing implications adherent to state and federal guidance. This includes both health system-associated providers who have readily accessible electronic medical record (EMR) information and providers at outside practices who would require comprehensive medical history before dispensation. Ambulatory pharmacists at our center work under a collaborative scope of practice agreement with an attending physician supervisor. These agreements allowed pharmacists to write orders and monitor patients consistent with the attending physicians' specialized practice area. This expansion increased prescribing by more than 250% in the following 2 weeks. In addition, ambulatory pharmacists performed follow-up phone calls to assess adherence, toxicity, and ongoing symptoms of COVID-19 as a means to offset physician resources.

Subsequently, pharmacists developed a pilot service within our emergency department to screen COVID-19-positive patients for eligibility for treatment and prescribe appropriate therapy as granted under a scope of practice agreement with infectious diseases physicians (118 patients). Pharmacists were able to not only provide prescriptions to patients but also educate providers on the management of complex DDIs and improve functionalities within the EMR to lead the refinement of systematic processes. The infrastructure and services provided by our pharmacy teams were well supported by hospital and clinic leadership who recognize pharmacists' competency to make COVID-19 therapies safe and more accessible. The above-mentioned initiative is another example of pharmacists' demonstrating their adaptability in clinical practice and ability to manage complex therapeutic decisions and prescribing COVID-19 oral antiviral therapies.

This initiative and other models (at other areas of pharmacy practice) serve to supplement physicians as opposed to replacing clinical services with the current TTT plan proposed by the Biden administration. Given that many health professionals are at capacity, including physicians, our pilot using pharmacists' services demonstrate the utility of a collaborative approach to safely prescribing and dispensing COVID-19 oral antiviral therapies. In addition, the advancement of the pharmacist's scope to extend clinical services to the HIV population further supports this rebuttal. However, the challenge faced by communities' pharmacists will be primarily operational. Given that pharmacists have been a core contributor in the expansion of administration of COVID-19 vaccines, the additional clinical tasks will require support from senior leadership of respective pharmacies. Although the current TTT plan does not grant prescriptive authority to pharmacists, having pharmacists adjacent to these clinics renders rapid clinical support and integrated team work readily available. With a higher level of mutual collaboration across health care

disciplines, pharmacists would be able to apply existing clinical skills to deliver care to more patients.

Clinical complexities of pharmacotherapy, such as oral antiviral therapies to COVID-19, do not limit the pursuit of the administration's TTT program. Rather AMA, governmental administration, and pharmacy organizations should encourage the expansion of pharmacist prescriptive authority to include COVID-19 antiviral therapies, advocate for enhanced chart access for community pharmacists, and advocate for more interdisciplinary collaboration. Pharmacists have shown themselves to be the drug experts capable of complex medical and medication history taking, medication prescribing, and education. Their eclectic ability to provide safe, thoughtful, and educated recommendations for pharmacotherapy has improved access to community patient populations.

References

1. American Medical Association. AMA statement on administration's test-to-treat COVID-19 plan. Available at: <https://www.ama-assn.org/press-center/press-releases/ama-statement-administration-s-test-treat-covid-19-plan>. Accessed March 6, 2022.
2. U.S. Department of Health and Human Service. Office of the Assistant Secretary for Preparedness and Response organization chart. Available at: hhs.gov/about/agencies/orgchart/aspr/index.html. Accessed March 6, 2022.
3. Tam VC, Knowles SR, Cornish PL, Fine N, Marchesano R, Etchells EE. Frequency, type and clinical importance of medication history errors at admission to hospital: a systematic review. *CMAJ*. 2005;173(5):510–515.
4. Digiantonio N, Lund J, Bastow S. Impact of a pharmacy-led medication reconciliation program. *PT*. 2018;43(2):105–110.
5. Burgess LH, Kramer J, Castelein C, et al. Pharmacy-led medication reconciliation program reduces adverse drug events and improves satisfaction in a community hospital. *HCA Healthc J Med*. 2021;2(6).
6. Keller ME, Kelling SE, Cornelius DC, Oni HA, Bright DR. Enhancing practice efficiency and patient care by sharing electronic health records. *Perspect Health Inf Manag*. 2015;12(Fall):1b.
7. Kibicho J, Pinkerton SD, Owczarzak J, Mkandawire-Valhmu L, Kako PM. Are community-based pharmacists underused in the care of persons living with HIV? A need for structural and policy changes. *J Am Pharm Assoc (2003)*. 2015;55(1):19–30.
8. Held AD, Woodall LJ, Hertig JB. Pharmacists' familiarity, utilization, and beliefs about Health Information Exchange: a survey of pharmacists in an Indiana pharmacy organization. *J Am Pharm Assoc (2003)*. 2014;54(6):625–629.
9. Downard S, Galt KA, Reel AB. Pharmacists' use of electronic health records: silent leaders no more. *J Am Pharm Assoc (2003)*. 2007;47(6):680.
10. Cohen C, Taylor LM. Expanding PrEP and PEP Access in California [press release]. Available at: <https://healthlaw.org/expanding-prep-and-pep-access-in-california/#:~:text=Under%20California's%20new%20law%2C%20Senate,physicians%20for%20long%2Dterm%20care>. Accessed March 6, 2022.
11. Oregon Statewide PrEP/nPEP Workgroup. Pharmacist Prescribed PrEP and PEP in Oregon. Available at: https://www.oregon.gov/oha/PH/DISEASES/CONDITIONS/HIVSTDVIRALHEPATITIS/HIVPREVENTION/Documents/PrEP%20and%20PEP/Overview_of_Pharmacist_Prescribed_PrEP_and_PEP_in_Oregon.pdf. Accessed March 6, 2022.

David M. Hughes, PharmD, BCOP, Clinical Pharmacy Manager, Department of Pharmacy, Boston Medical Center, Boston, MA; and Assistant Professor, School of Medicine, Boston University, Boston, MA

Jason Mordino, PharmD, BCCCP, Clinical Pharmacy Coordinator, Department of Pharmacy, Boston Medical Center, Boston, MA