

In the USA, provider payment models have been shifting from a fee-for-service to a value-based payment model. Value-based care focuses on paying for performance as opposed to the volume of care delivered. The intent is to demonstrate improvement in patient outcomes while reducing the total costs of care. In partnership with patients, successful implementation of value-based care models requires high-performing interprofessional care teams working together to drive optimal patient outcomes. Evidence clearly demonstrates when pharmacists are integral members of the healthcare team they: foster collaboration across all care settings; reduce unnecessary hospitalisations and decrease length of stay; lead medication stewardship and adherence activities; prevent adverse drug events; share accountability for improved clinical outcomes; improve patient access to care; and actively partner in the assurance of fiscal solvency.^{6–8}

The ASHP PAI 2030 recommendations and focused initiatives provide a framework, developed by a diverse group of stakeholders, to inspire change through practice transformation and measurement to guide the evolution of that progress. Understanding the professional, policy, payment and health information technology-related strategies at national, state and local levels helps enable the active pursuit of opportunities and the ability to overcome pharmacy practice barriers. As we look forward to the years ahead and anticipate the elimination of the burden of COVID-19, PAI 2030 provides a mechanism to recover from the devastation of the pandemic and build a more sustainable and impactful pharmacy practice.

Conflicts of interest statement

Dr. Abramowitz is chief executive officer of ASHP. Dr. Maroyka is senior director of the ASHP Center on Pharmacy Practice Advancement. The authors have declared no other potential conflicts of interest.

Paul W. Abramowitz PharmD, ScD (Hon), FASHP
Chief Executive Officer,
American Society of Health-System Pharmacists,
Bethesda, Maryland, USA

Eric M. Maroyka PharmD, BCPS
Senior Director,
Center on Pharmacy Practice Advancement, American
Society of Health-System Pharmacists, Bethesda,
Maryland, USA.
E-mail: EMaroyka@ashp.org

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COVID-19: FILLING THE MANY KNOWLEDGE GAPS AND SUPPORTING EVIDENCE-BASED VACCINATION

As we look into 2021, we inevitably reflect on the many challenges presented by COVID-19. We have needed to broaden our thinking and creativity to adapt to the many problems faced. As healthcare providers, it has been necessary to reform our own roles in care delivery while influencing change within our practice sphere and the policy that governs this work.

We are still struggling with the crippling impacts of the pandemic, with many countries across the globe continuing to endure increasing infections and deaths. Closer to my home in Melbourne, the New Year has been welcomed across Australia with very few community-acquired cases across the nation, with much owed to the community for their stoic and spirited responses to long lockdowns, isolation and separation.

During the last twelve months we have seen the profession respond and innovate. We have seen expanded roles for pharmacists on the frontline of healthcare

delivery, providing essential services in all settings, from acute care hospitals and community pharmacies to aged care facilities and in patients' homes. This has encompassed a diverse range of initiatives and services focusing not only on therapeutics, but also educational strategies and public health interventions amongst others.^{1,2} Yet there is still much to learn and implement. We are still learning about appropriate therapeutic interventions and the outcomes of our care, with local experiences of patients admitted to Australian intensive care units recently published in the literature, and their differences to international experiences being examined.^{3,4}

We will continue to experience the significant impact of COVID-19 on the healthcare workforce; the burden of delivering care during this time remains a challenge with no end date. We know care is compromised when the healthcare workforce must deliver it in an unsafe environment.⁵⁻⁷ The implementation of a global safe and effective vaccination program is the long-term solution for this pandemic, and is critical for all individuals, while including as a priority the protection of the healthcare workforce⁸ – as per Australia's COVID-19 vaccine and treatment strategy, a common feature of such strategies around the world.^{9,10}

The emergence of the plethora of potential vaccines is welcome, and with it comes the many challenges involved with providing timely, safe and effective programs across the globe.^{10,11} There will be a range of vaccinations adopted, with all countries working through the complexities associated with this at a time when urgency and lack of long-term data combine to make decisions much less clear than usual. In Australia, the Therapeutic Goods Administration (TGA) granted provisional approval on the 25th January 2021 to Pfizer Australia Pty Ltd for its COVID-19 vaccine, making it the first COVID-19 vaccine to receive regulatory approval in Australia. We are expecting two other vaccines to be approved in Australia, with vaccinations commencing in March, if not earlier.

This rapid implementation of vaccination programs is another demonstration of the importance of pharmacists' contributions to the healthcare team; pharmacists continue to be a critical pillar in providing appropriate and timely information and care to the community. This includes the care provided to individual patients, but also the broader levels of healthcare delivery relying on our practice, including public health, policy, surveillance, distribution and education. Evidence-based practice continues to be subject to tension during this pandemic, with evidence evolving month by month; decisions concerning medications for the treatment and

prevention of infection have already been complicated by this tension. This complexity will be amplified during any vaccine rollout, as individuals will need to make decisions regarding vaccination based on information available to them at that time.

It is imperative, then, that pharmacists are well placed and ready to support patients and practitioners to inform these decisions. This will be an expectation of the community. Evidence-based guidance regarding the efficacy and safety of vaccination, and the provision of this guidance, must include strategies to address misinformation circulating in the public.^{12,13} It continues to be critical that the workforce has access to timely and credible information to keep abreast of innovation in therapeutics – not just to inform clinical decisions, but also to allow us to inform our community, with whom the decision to be vaccinated (or not) ultimately lies.

We know there is still much to learn and many knowledge gaps to be filled.¹⁴ This is compounded by the speed of implementation of different vaccines and vaccination programs in many countries, as well as the adoption of variable approaches to dosing schedules of the same vaccine. We have seen the reporting of deaths in Norway and the potential efficacy impacts associated with different vaccination schedules of the Pfizer BioNTech vaccine.^{15,16} The emergence of more transmissible variants and potential alterations on virus virulence and pathogenesis add further unknowns.¹⁷ The need for systematic and evidence-based approaches to vaccination are crucial to enable healthcare practitioners to navigate at this time, with so many questions unanswered.¹⁸

The role of pharmacists in the distribution, preparation and administration of vaccines has always been crucial, but with the additional constraints complicating these particular vaccines – relating to cold chain and a lack of sufficient doses to vaccinate – this role is more compelling than ever. What's more, this historic effort must be undertaken while continuing to focus on strategies that stem transmission and continue to support our patients and colleagues during this time.

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Michael Dooley

BPharm, Grad Dip Hosp Pharm, PhD, FISOPP, FSHPA
Editor-in-Chief, *Journal of Pharmacy Practice Research*
E-mail: JPPREditor@shpa.org.au

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