

pharmacists within the emergency team. Effective, efficient, timely and equitable patient-centred care is what we all strive to deliver, within the many challenges of the environment and system in which we work. Clinical pharmacists are an essential part of the ED multidisciplinary team and the adoption into practice of the roles and services outlined in the SHPA Standard needs to be a priority to improve the care provided to our patients.

In my ED, we are fortunate to have ED pharmacists as a core part of our team. Their contributions are significant, including direct patient contact, liaising with GPs and other pharmacists, as well as contributing to the development of ED protocols, management pathways and the education of staff.

If our desire is to ensure our EDs are safer for patients, the broader inclusion of pharmacists as a part of the ED team is a step we need to take.

### Conflicts of interest statement

The author declares that he has no conflicts of interest.

**Simon Judkins**, MBBS, FACEM, President,  
Australasian College of Emergency Medicine,  
Melbourne, Victoria, Australia.  
E-mail: [simon.judkins@acem.org.au](mailto:simon.judkins@acem.org.au)

### REFERENCES

- 1 Patanwala AE, Hays DP, Sanders AB, Erstad BL. Severity and probability of harm of medication errors intercepted by an Emergency Department pharmacist. *Int J Pharm Pract* 2011; **19**: 358–62.
- 2 Fairbanks RJ, Hays DP, Webster DF, Spillane LL. Clinical pharmacy services in an emergency department. *Am J Health Syst Pharm* 2004; **61**: 934–37.
- 3 Australasian College for Emergency Medicine. Statement on the delineation of emergency departments. S12. West Melbourne Vic Australasian College of Emergency Medicine; 2012.
- 4 Roman CP, Edwards G, Dooley M, Mitra B. Roles of the emergency medicine pharmacist: a systematic review. *Am J Health Syst Pharm* 2018; **74**: 796–806.
- 5 Kohn LT, Corrigan JM, Donaldson MS. *To err is human: building a safer health system*. Washington, DC: National Academy Press; 2000.
- 6 Flynn EA, Barker K, Barker B. Medication-administration errors in an emergency department. *Am J Health Syst Pharm* 2010; **67**: 347–48.
- 7 Croskerry P, Shapiro M, Campbell S, LeBlanc C, Sinclair D, Wren P, et al. Profiles in patient safety: medication errors in the emergency department. *Acad Emerg Med* 2004; **11**: 289–99.
- 8 Roman CP, Dooley MJ, Mitra B. Emergency medicine pharmacy practice in Australia: a National survey. *J Pharm Pract Res* 2019; **49**: 439–46.
- 9 Welch S, Currey E, Doran E, Harding A, Roman C, Taylor S et al. Standard of practice in emergency medicine for pharmacy services. *J Pharm Pract Res* 2019; **49**: 570–584.

### THE CASE FOR DEVELOPING PHARMACIST WORKFORCE CAPACITY IN ADDICTION MEDICINE

Drug and alcohol use causes significant health-related harms in society. Addictive disorders are chronic, relapsing and life-threatening. In fact, one in twenty deaths in Australia is attributed to alcohol and other drugs.<sup>1</sup> In addition, the use of alcohol, tobacco, and opioids can significantly contribute to and complicate the clinical outcomes of many high-prevalence conditions including diabetes, cardiovascular disease, and chronic pain.<sup>2–4</sup> Fortunately, there are pharmacotherapy options for each of these substances when their ‘use’ develops into a ‘use disorder’. Although pharmacists in community settings have a long-established role dispensing opioid agonist treatments for opioid use disorder, the need for pharmacists as clinical pharmacotherapy specialists in addiction medicine goes well beyond this. Pharmacists in specialty addiction settings have important contributions to make, for example, in medically-assisted withdrawal management, promoting and managing pharmacotherapy for alcohol use disorder and for complex smoking cessation management (e.g. in comorbid psychiatric populations). This is particularly true in settings involving complex opioid therapy management, such as patients not responding to first-line opioid agonist therapy or those on high-risk opioid therapy for chronic pain. Taken together, these highlight the importance of specialist pharmacist expertise in this area to respond to the needs of those with substance use disorders among a wide range of patient populations. Currently, addiction medicine is not recognised as a specialist area in pharmacy practice in Australia; here we make the case for this recognition in Australia, using opioids and chronic pain as the example.

In Australia, opioids contribute to just over half of the disease burden from accidental poisoning.<sup>1</sup> The majority of deaths with opioids involve pharmaceutical opioids,<sup>5</sup> a trend that has been well established since the early 2000s. In fact, the average decedent in a drug-related death in Australia is a middle aged person who has taken opioids in the context of polypharmacy.<sup>6</sup> An Australian cohort study found that one in four patients who were prescribed long-term opioids for chronic pain met criteria for ‘addiction’.<sup>7</sup> The evidence of rising harms with opioids in Australia is starting to parallel

the international opioids crises that have been reported in the United States and Canada.<sup>8</sup> In response to rising harms with opioids in Canada, pharmacists' have been central in models of care that seek to support safer use of opioids in pain, including providing clinical leadership around buprenorphine induction and overdose prevention, in addition to more traditional opioid stewardship. The development of a specialist workforce requires that leading tertiary institutions provide training opportunities. One such facility is the Centre for Addiction and Mental Health (CAMH) in Toronto, Canada's largest mental health and addictions teaching hospital and one of the world's leading research centres in this field. The pharmacy service within CAMH has more than 30 pharmacists, providing pathways for specialised training and service to increase the capacity of pharmacists in mental health and addiction medicine.<sup>9</sup> Pharmacists conduct specialised patient assessments as members of the CAMH Interdisciplinary Pain and Addiction Recovery Clinic team and are fully integrated into the clinical services of the CAMH inpatient Medical Withdrawal Unit.<sup>10</sup> From these experiences, CAMH pharmacists promote capacity building by offering graduate training programs for pharmacists, through a CAMH pharmacy residency program, and by hosting a support network for pharmacists working in other specialist services in which addiction expertise plays a central role.<sup>11,12</sup>

Since opioid-related harms have long been rising in Australia, it seems an ideal time to develop services that can support the training and capacity building of a specialist pharmacist workforce in addiction medicine in Australia. Indeed, it is surprising that there has been little progress towards this. The Royal Australasian College of Physicians established a specialist chapter in addiction medicine in 2001,<sup>13</sup> with a national training program now well established. The Chapter was established to promote the study and advancement of knowledge in the field of addiction medicine, and to improve the skills and standards of practice of the workforce in this field. Although the specialisation of the pharmacy workforce has made great advances in many clinical areas over this time period, addiction medicine is not yet recognised as one of the 29 disciplines of the Society of Hospital Pharmacists of Australia's Specialty Practice program. It is timely to consider: why is addiction medicine left behind? Unfortunately, addiction is still associated with significant stigma that results not only in patients who are reluctant to seek help, but also in health care providers avoiding this specialty area. Awareness and education can help.

The next necessary step to progress this goal is to develop training sites where pharmacists can develop

advanced skills through working in interdisciplinary teams, particularly in services where tertiary addiction medicine specialists' services already operate. These pharmacists would then be well equipped to develop their roles in an expanding number of settings. Now is the time to move the profession forward and bring the benefits of pharmacists with addiction medicine expertise, practicing to their full scope of practice, to centres providing care for patients with complex addiction-related pharmacological problems.

### Conflicts of interest statement

The authors declare that they have no conflicts of interest.

**Suzanne Nielsen** BPharm, BPharmSc(Hons), PhD  
Monash Addiction Research Centre, Eastern Health  
Clinical School, Monash University, Melbourne,  
Australia.

E-mail: Suzanne.Nielsen@monash.edu

**Beth Sproule** RPh, BScPhm, PharmD  
Pharmacy Department, Centre for Addiction and Mental  
Health, Toronto, Canada;  
Leslie Dan Faculty of Pharmacy, University of Toronto,  
Toronto, Canada

### REFERENCES

- 1 Australian Institute of Health and Welfare. Impact of alcohol and illicit drug use on the burden of disease and injury in Australia: Australian Burden of Disease Study 2011. Australian Burden of Disease Study series no 17 Cat no BOD 19 Canberra: AIHW; 2018.
- 2 Mostofsky E, Chahal HS, Mukamal KJ, Rimm EB, Mittleman MA. Alcohol and immediate risk of cardiovascular events: a systematic review and dose-response meta-analysis. *Circulation* 2016; **133**: 979–87.
- 3 Engler PA, Ramsey SE, Smith RJ. Alcohol use of diabetes patients: the need for assessment and intervention. *Acta Diabetol* 2013; **50**: 93–9.
- 4 Morasco BJ, Gritzner S, Lewis L, Oldham R, Turk DC, Dobscha SK. Systematic review of prevalence, correlates, and treatment outcomes for chronic non-cancer pain in patients with comorbid substance use disorder. *Pain* 2011; **152**: 488–97.
- 5 Roxburgh A, Hall WD, Dobbins T, Gisev N, Burns L, Pearson S, *et al.* Trends in heroin and pharmaceutical opioid overdose deaths in Australia. *Drug Alcohol Depend* 2017; **179**: 192–8.
- 6 Australian Bureau of Statistics. 3303.0 – Causes of Death, Australia, 2016 ABS; 2018. Available from <<https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/3303.0-2016-Main%20Features-Drug%20Induced%20Deaths%20in%20Australia-6>>.
- 7 Campbell G, Bruno R, Lintzeris N, Cohen M, Nielsen S, Hall W, *et al.* Defining problematic pharmaceutical opioid use among

- people prescribed opioids for chronic non-cancer pain: do different measures identify the same patients? *Pain* 2016; **157**: 1489–1498.
- 8 Scholl L, Seth P, Kariisa M, Wilson N, Baldwin G. Drug and Opioid-Involved Overdose Deaths - United States, 2013–2017. *MMWR Morb Mortal Wkly Rep* 2018; **67**: 1419–27.
  - 9 Raphael C, Fedoruk E. Practice spotlight: pharmacists of the centre for addiction and mental health. *Canadian Journal of Hospital Pharmacy* 2008; **61**.
  - 10 CAMH IPARC and MWS Services. Available from <<https://www.camh.ca/en/your-care/programs-and-services/interprofessional-pain-and-addiction-recovery-clinic-iparc>> and <<https://www.camh.ca/en/your-care/programs-and-services/medical-withdrawal-unit>>.
  - 11 Murphy L, Ng K. Practice spotlight: "reaching new heights" in pharmaceutical care at Altum Health. *Canadian Journal of Hospital Pharmacy* 2011; **64**: 283–4.
  - 12 Womens College Hospital. Pain Program (TAPMI); 2019 [13/9/2019]. Available from <<https://www.womenscollegehospital.ca/programs-and-services/chronic-pain-tapmi>>.
  - 13 Royal Australasian College of Physicians. Australasian Chapter of Addiction Medicine Training Manual. Sydney; 2008.