



Submission to the Australian Commission on Safety and Quality in Health Care – National Opioid Analgesic Stewardship Program

The Society of Hospital Pharmacists of Australia is the national professional organisation for more than 5,000 pharmacists, pharmacists in training, pharmacy technicians and associates working across Australia's health system. SHPA is committed to facilitating the safe and effective use of medications, which is the core business of pharmacists, especially in hospitals. SHPA has more than 1,000 pharmacists engaged in each of our Pain Management, Emergency Medicine, and Medication Safety Specialty Practice streams, and between 800-900 pharmacists engaged in each of our Surgery and Perioperative Medicine, and Education and Educational Visiting Specialty Practice streams, providing care to patients who are prescribed opioid analgesics in hospitals and health service facilities nationally.

SHPA welcomes the opportunity to respond to the Australian Commission on Safety and Quality in Health Care's (the Commission) discussion paper on National Opioid Analgesic Stewardship Program and congratulations the Commission on establishing this program of work, which addresses key recommendations made in SHPA's *Reducing opioid-related harm: A hospital pharmacy landscape paper*¹.

Clinical pharmacists are experts in complex medication management for people who are acutely unwell. Opioid Analgesic Stewardship Pharmacists are clinical pharmacists with expertise in pain and analgesia management, practicing within a hospital multidisciplinary team with a key focus on promoting safe and effective use of opioids, reducing the incidence of serious adverse events and improving patient care. Depending upon the capacity and preferences of the hospital, Opioid Analgesic Stewardship Pharmacists work with multidisciplinary committees to support effective governance including policies, procedures to drive improved patient care.

The harm caused by opioids is well-known in Australia and internationally; the misuse of pharmaceuticals is now the greatest cause of drug-related death in Australia.² The medical use of opioids prescribed in a hospital setting has been identified as a key risk for ongoing use.³ Opioids are commonly prescribed to treat acute pain⁴ which is common post-surgery. With more than 2.2 million surgeries in Australia in 2016-2017⁵ this has substantial implications for the treatment of pain in a hospital setting. A systematic review has indicated that post-surgical prescribing in hospitals at discharge, is an important point of intervention.⁶

The dose and quantities of opioids prescribed at discharge have been identified as a risk factor for long-term use.⁷ In addition, the risk of harm is considerably higher with sustained-release opioids compared to immediate-release opioids (24.5% versus 3.5%)⁸ which are commonplace despite revised pain management advice from professional bodies.⁹

Policies establishing how many days' supply of medicine a patient should receive on discharge vary significantly in hospitals across Australia.⁴ Many hospitals do not have a pharmacist review opioid prescribing or supply post-surgery, despite evidence showing a link between prescribing quantities and opioid use of more than five days associated with an increased risk of long-term opioid use.¹⁰ This is especially marked for patients who have undergone day surgery. Seventy per cent of hospital respondents to an SHPA survey¹ reported that even when opioids had not been required in the 48 hours prior to discharge, they were still provided to the patient to take home 'just in case'.

In 2018, SHPA's *Reducing opioid-related harm: A hospital pharmacy landscape paper*¹ reported that only 31% of principal referral hospitals had dedicated pharmacists working with patients in both surgical and perioperative wards. Less than 5% of respondent hospitals had a formal Opioid Stewardship Service and respondents were overwhelmingly (nearly 95%) supportive of Opioid Stewardship programs being expanded to meet the needs of patients.



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SHPA's recent audit of hospital activities found that the presence of an Opioid Stewardship service substantially increased the likelihood of a range of opioid-related harm minimisation activities being implemented across both medical and pharmacy areas. An audit of a service delivered for two years in a major Victorian hospital reflected an increase in smaller quantities of oxycodone dispensed to patients and increased analgesic weaning in hospital and inclusion in medical discharge summaries. A Queensland trial in public hospitals involving SHPA members has found similarly positive impacts.

In this submission, SHPA makes a range of recommendations regarding the role of hospital pharmacists in the safe and appropriate use of opioid analgesics in hospitals and the implementation of Opioid Analgesic Stewardship Programs. The key aspect is a re-orientation of hospital governance towards the importance of the work of Opioid Analgesic Stewardship Pharmacists and clinical pharmacists in the emergency, and perioperative and surgical settings, to ensure safe and optimal use of opioid analgesics for all Australians in the acute care setting.

Whether it is the employment of clinical pharmacists in the emergency, and perioperative and surgical teams, to provide clinical pharmacy services, the implementation of pharmacist-led Opioid Analgesic Stewardship interventions, or the national implementation of electronic medication management (EMM) systems across all Australian hospitals, all our recommendations link to a fundamental change of culture in hospitals and a prioritisation of Opioid Analgesic Stewardship.

A holistic approach is necessary to reduce opioid-related harm highlighted in the discussion paper and address the ways in which the topics listed below are interlinked. Of additional value during this period of innovation, would be a committed and coordinated approach to identifying successful practices systematically for wider implementation.

If you have any enquiries or would like to discuss this submission further, please contact Jerry Yik, Head of Policy and Advocacy, jyik@shpa.org.au.



Recommendations

Topic 1: Emergency Department

Recommendation 1: Pharmacist-led Opioid Analgesic Stewardship initiatives should be embedded in all hospital emergency departments, to support the safe and appropriate use of opioid analgesics.

Recommendation 2: All emergency departments should have dedicated clinical pharmacy services, to support the safe and responsible prescribing of opioid analgesics.

Topic 2: Perioperative and surgical services

Recommendation 3: Pharmacist-led Opioid Analgesic Stewardship initiatives should be embedded in all hospital perioperative and surgical services, to support the safe and appropriate use of opioid analgesics.

Recommendation 4: Multidisciplinary acute pain outreach services including Opioid Analgesic Stewardship Pharmacists should be established to provide follow up to patients discharged from hospital post-surgery with opioid analgesics.

Recommendation 5: All perioperative and surgical services should have dedicated clinical pharmacy services, to support the safe and effective use of opioids, including medication reconciliation, clinical review of patients and risk factors, and a review of post-surgery opioid analgesic use.

Recommendation 6: All prescriptions of opioid analgesics in the post-surgical setting should be accompanied by an opioid de-escalation or cessation management plan for the patient, carer and primary care provider.

Topic 3: Prescriber education and training

Recommendation 7: Opioid Analgesic Stewardship Pharmacists should be involved in the provision of review and feedback to prescribers on an individual and small group level, to influencing prescribing behaviour in units with high opioid analgesic usage.

Recommendation 8: Opioid Analgesic Stewardship Pharmacists should lead and contribute to the development, promotion, implementation and maintenance of best practice opioid analgesic prescribing guidelines, procedures and protocols concerning the optimal use of opioids and analgesia.

Recommendation 9: National implementation of electronic medication management (EMM) systems across all Australian hospitals to support the gathering and collation of nationally standardised data sets for organisations to benchmark against and to aid in timely extraction of prescribing data to be used in educating and training of prescribers.



Topic 1: Emergency Department

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Best practice in addressing prescribing of opioid analgesics in the emergency department in 2021

1. Embedding clinical pharmacists as part of multidisciplinary teams in emergency departments

Clinical pharmacists practicing in emergency departments, also known as emergency medicine pharmacists, play an integral role in ensuring the safe and quality use of opioid analgesics in the emergency setting. SHPA recommends a 1:10 full-time equivalent pharmacist-to-patient ratio to deliver a best-practice clinical pharmacy service in this setting.¹¹ Emergency medicine pharmacists integrated as part of a multidisciplinary team are well placed to influence opioid analgesic prescribing through access to urgent clinical pharmacy services including medication reviews and advice on medication usage.

Acute pain is a common component of emergency department patient presentations. Emergency medicine pharmacy services play an imperative role in optimising pain management and the safe and quality use of opioid analgesics for individual patients. Emergency medicine pharmacists often provide input into workflow design, policy development, clinical audit and multidisciplinary staff education and training, to optimise opioid analgesic prescribing and the management of acute pain (and acute exacerbations of chronic pain) presenting to the emergency department.¹²

Opioid Analgesic Stewardship activities should begin in the emergency department and should include the assessment of pain, selection of appropriate opioid analgesic therapies where necessary, in the context of previous patient experiences and current risk factors, utilisation of local hospital analgesic ladders, provision of take-home naloxone on discharge, and compliance with hospital-based policies. There is increasing evidence to support the benefit of emergency medicine pharmacists in Antimicrobial Stewardship activities¹³ which can be extrapolated to Opioid Analgesic Stewardship activities.

2. Opioid Analgesic Stewardship clinical champions at senior levels across various disciplines to promote opioid analgesic stewardship principles in emergency departments

Engaging senior clinicians across various disciplines to champion and support the Opioid Analgesic Stewardship program is a key factor for successful implementation and uptake. This is evidenced in Antimicrobial Stewardship programs.^{14,15} Clinical leadership in this space promotes responsible opioid analgesic use within an organisation. SHPA members advise that clinicians also respond well to other senior clinicians from within their own discipline who champion stewardship initiatives.

3. Utilisation of a real time prescription monitoring (RTPM) system to support informed decision making in the emergency department setting

Real time prescription monitoring (RTPM) systems are essential clinical decision-making tools, particularly with regards to safe opioid analgesic prescribing in the emergency setting. Being a fast-paced environment where patients presenting are often acutely unwell, clinicals are left to make clinical decisions based on limited information. Reliable tools such as RTPM systems support emergency prescribers and pharmacists to make safe decisions with regards to the use of opioid analgesics.

System-wide challenges for addressing prescribing of opioid analgesics in the emergency department

Limited access to clinical pharmacy services in the emergency setting impacts on the safe and appropriate use of opioid analgesics in this setting. This includes the timely transfer of hospital emergency department



summaries to a patient's general practitioner to indicate the intention of the opioid analgesics prescribed and the expected duration of therapy.

Another system-wide challenge is the expected turnaround time on attending to patients in the emergency setting coupled with limited access to acute pain teams means that emergency junior medical staff are often tasked with managing a patient's complaint of pain. Another aspect to this issue is managing the expectations of general practitioners referring their patients to the emergency department for pain management.

Finally, the lack of an integrated national RTPM system available to prescribers and pharmacists in an emergency setting impacts on the information available to them at the time of prescribing and dispensing. There is a strong need for a well-integrated national RTPM to support clinical decision making in this setting and ensure patient safety.

Gaps in current processes that inhibit positive patient outcomes related to prescribing of opioid analgesics in the emergency department

Due to the fast-paced and time poor nature of an emergency department setting, there is a need for the implementation for simple and integrated Opioid Analgesic Stewardship strategies such as analgesic ladders for prescribing, or a pre-populated opioid analgesic discharge plan. These small interventions would support prescribers practicing in this high-pressure environment, to make more suitable prescribing choices.

Monitor progress and measuring outcomes of opioid analgesic stewardship initiatives on prescribing of opioid analgesics in the emergency department by:

- Monitor which opioid analgesics are being used in the emergency department and on discharge.
- Monitor the number of prescriptions that include an opioid analgesic at discharge from the emergency department.
- Monitor the quantity of prescribed opioids at discharge.
- Monitor the number of patients discharged from the emergency department with long-acting opioid analgesics.
- Measure the number of patients discharged with opioid analgesics who are also given take-home naloxone.
- Monitor the number of unintentional versus intentional overdoses that present to the emergency department.
- Measure the number of patients who continue to use opioid analgesics several weeks post-discharge from the emergency department.
- Measure the number of times patient are re-admitted to the emergency department for pain and/or opioid analgesics. This information would be best gathered at a state-wide level to capture patients who present to various emergency departments.



Topic 2: Perioperative and surgical services

Recommendation 3: Pharmacist-led Opioid Analgesic Stewardship initiatives should be embedded in all hospital perioperative and surgical services, to support the safe and appropriate use of opioid analgesics.

Recommendation 4: Multidisciplinary acute pain outreach services including Opioid Analgesic Stewardship Pharmacists should be established to provide follow up to patients discharged from hospital post-surgery with opioid analgesics.

Recommendation 5: All perioperative and surgical services should include a clinical pharmacist, to support the safe and effective use of opioids, including medication reconciliation, clinical review of patients and risk factors, and a review of post-surgery opioid analgesic use.

Recommendation 6: All prescriptions of opioid analgesics in the post-surgical setting should be accompanied by an opioid de-escalation or cessation management plan for the patient, carer and primary care provider.

Best practice in addressing perioperative and surgical services use of opioid analgesics in 2021

1. Clinical pharmacists practicing on the perioperative and surgical wards involved in pre-operative consultations.

Clinical pharmacists involved in pre-operative consultations can assess patient history and risk factors for opioid use and identify and monitor high-risk patients to ensure safe opioid analgesic prescribing if necessary post-surgery. RTPM systems are an important tool that aid clinical decision making in this space and provide useful information to pharmacists and prescribers in the pre-operative phase. Information obtained from the RTPM system provides a more complete and accurate medication history with regards to the use of controlled substances and supports clinicians in determining the risk factors for prescribing opioid analgesics to patients post-surgery.

2. Opioid Analgesic Stewardship Pharmacists informing formulary restriction and approval systems that include restricting opioid analgesic use to patients in whom their use is clinically justified.

Formularies can be used to influence patterns of opioid analgesic use in hospitals. Hospitals should have formularies for opioid analgesics, and the Drug and Therapeutic Committees within each hospital should define rules that restrict access to particular opioid formulations. Experts providing the approval should be members of the Opioid Analgesic Stewardship teams who should also be available at all times to provide point-of-care guidance to prescribers along with the Acute Pain services team.

While Opioid Analgesic Stewardship programs are relatively new interventions, strategies for influencing prescribing behaviour should be based on other well-established, best practice stewardship models such as, Antimicrobial Stewardship. The Commission's *Antimicrobial Stewardship in Australian Hospitals*¹⁶ states restrictive methods, such as requiring approval to prescribe an antimicrobial, are one of the most effective strategies implemented in Antimicrobial Stewardship models. The use of antimicrobial approval systems has been associated with reduced volumes of medications used, reduced cost of medicines, fewer adverse drug reactions and shorter lengths of stay. SHPA supports a similar document to be produced by the Commission on Opioid Analgesic Stewardship which discusses how to implement such a service.

There is a need for national evidence-based best-practice guidelines on opioid analgesic prescribing, tailored to each clinical setting, which could be appropriately described in the next edition of *Therapeutic Guidelines: Analgesic*. These guidelines should be expanded to discuss appropriate dose quantities in different clinical settings as well as opioid de-escalation strategies and plans. These would then become



a stronger tool to inform formulary restrictions and approval systems for opioid analgesics in hospitals. Opioid Analgesic Stewardship Pharmacists should be supported by the hospital in enforcing opioid analgesic prescribing policies, including formulary restrictions and encouraging adherence to prescribing guidelines.

3. Clinical pharmacists practicing on the perioperative and surgical wards involved in pain assessment and review of opioid analgesics prescribed prior to discharge from hospital.

Review of a patient's use of analgesic medications to inform and individualise discharge prescribing is best practice however, it is common practice for discharge prescriptions to be written immediately post-surgery, and for discharge plans to be drafted post-discharge.

Clinical pharmacists are well placed to assess patient opioid analgesic use prior to discharge and develop an individualised opioid analgesic discharge and weaning plan to be provided to the patient and their primary care provider. However, clinical pharmacists are not always allocated to perioperative and surgical units as there is a perceived low risk to patient health outcomes.

According to SHPA standards, all patients admitted to a surgical ward should be prioritised for clinical pharmacy services as this allows identification of patient factors that may influence risk of medicine misadventure and risk of re-hospitalisation. The stratifying of patient risk to determine patient care is common in healthcare and relatively sound, however, results indicate that gaps in pharmacy services exist which exclude patients from appropriate care. The sheer level of demand and complexity of patient needs in an acute setting may contribute to patients with uncomplicated surgical outcomes receiving lower priority. However, it is known that the simplicity of a surgical procedure from a clinician's perspective does not correlate with a lower risk of opioid harm.¹⁷

Research has indicated that 19% of patients prescribed oxycodone on discharge from a large Australian teaching hospital had not needed any opioids in the 24 hours prior, raising questions whether supply was necessary.¹⁸ SHPA's *Reducing opioid-related harm paper: A hospital pharmacy landscape paper*¹ found more than 70% of respondents reported that even when opioids had not been required in the prior 48 hours, they were still provided to the patient to take home 'just in case'. This is concerning given research finding the provision of a prescription or supply of opioids places the patient at higher risk of opioid harm, which may be unnecessary in these cases.

System-wide challenges related to addressing perioperative and surgical services use of opioid analgesics

As discussed above, limited access to clinical pharmacists due to insufficient staffing in the perioperative and surgical units, is a barrier to supporting safe and quality use of opioid analgesics post-surgery and at discharge, as well as providing appropriate clinical pharmacy services. Without clear expectations on acceptable opioid analgesic prescribing patterns in the perioperative and surgical setting to shine a light on the current problem, there is a lack of incentive for organisations to employ additional clinical pharmacists and improve health outcomes for perioperative and surgical patients.

Another system-wide challenge is the lack of a national RTPM system to guide prescribing in this setting. A well-integrated national RTPM system would ensure consistency in information provided to practitioners across all Australian hospitals and would be a useful tool to help identify at risk patients and appropriately support them post-surgery. Given the fast-paced nature of the perioperative and surgical units, integration of a national RTPM system with the hospital's existing electronic medication management (EMM) system is key to its success.



Gaps in current processes that inhibit achieving positive patient outcomes related to perioperative and surgical services use of opioid analgesics

Current processes around poor transfer and documentation of opioid analgesic medication management plans, which document the indication and the intended weaning process, inhibits positive patient outcomes in this area. Particularly at the transitions of care, the prescribing of opioid analgesics post-surgery should be coupled with the intended duration of treatment and/or cessation date. Current prescribing practice by hospital doctors and General Practitioners frequently do not include a cessation date for opioid analgesics. Pharmacists embedded in perioperative and surgical teams and in Opioid Analgesic Stewardship multidisciplinary teams are able to play a key role in ensuring appropriate documentation is provided to the primary care provider post-surgery, to support them in managing appropriate cessation and de-escalation of opioids. These can be described in patient-centred clinical documents such as:

- Medication lists and charts (including in the Pharmacist Shared Medicines List)
- Medication management plans or medicines section within discharge summaries
- Opioid analgesic de-escalation and weaning charts

Monitor progress and measuring outcomes of opioid analgesic stewardship initiatives on perioperative and surgical services use of opioid analgesics

- Audit prescriber compliance with the formulary restrictions and approval processes on a regular basis.
- Monitoring the number of patients prescribed opioid analgesics at discharge post-surgery that are provided with a multidisciplinary pain management plan
- Measure the proportion patients prescribed opioid analgesics post-surgery who have the indication and intended duration of treatment documented on discharge summaries, medication management plans and medication lists.
- Monitor the number of patients prescribed opioid analgesics at discharge post-surgery that receive take-home naloxone.



Topic 3: Prescriber education and training

Recommendation 7: Opioid Analgesic Stewardship Pharmacists should be involved in the provision of review and feedback to prescribers on an individual and small group level, to influencing prescribing behaviour in units with high opioid analgesic usage.

Recommendation 8: Opioid Analgesic Stewardship Pharmacists should lead and contribute to the development, promotion, implementation and maintenance of best practice opioid analgesic prescribing guidelines, procedures and protocols concerning the optimal use of opioids and analgesia.

Recommendation 9: National implementation of electronic medication management (EMM) systems across all Australian hospitals to support the gathering and collation of nationally standardised data sets for organisations to benchmark against and to aid in timely extraction of prescribing data to be used in educating and training of prescribers.

Best practice in addressing prescriber education and training to improve prescribing of opioid analgesics in 2021

1. Opioid Analgesic Stewardship Pharmacists creating awareness through usage-based feedback comparing individual prescribing patterns to that of their peers.

Best practice education and training on the appropriate prescribing of opioid analgesics involves academic detailing to ensure prescribers are given one-on-one and/or small group education tailored to their clinical area of practice. Opioid Analgesic Stewardship Pharmacists practicing independently or in multidisciplinary Opioid Analgesic Stewardship teams, are well placed to provide review and feedback to prescribers on their prescribing patterns in accordance with accepted standards or best practice. Once again, strategies for influencing prescribing behaviour should be based on other well-established, best practice stewardship models such as, Antimicrobial Stewardship.

The Commission's *Antimicrobial Stewardship in Australian Hospitals* states that the prospective audit of antimicrobial use with direct interaction and feedback to the prescriber, performed either by an infectious diseases physician or a clinical pharmacist with infectious diseases training, can result in reduced inappropriate use of antimicrobials.¹⁶ This is in line with advice received from SHPA members stating that Antimicrobial Stewardship Pharmacists performing prescribing audits and providing usage-based feedback to individuals and teams, comparing their prescribing patterns to that of their peers, has shown success in changing prescribing patterns. Although highly effective, the gathering of usage data in organisations that do not have an electronic medication management system can be a very manual, time consuming and inefficient process.

Opioid analgesic review and prescriber feedback should be a routine part of clinical care. A multicentre quality improvement initiative supported by the National Prescribing Service known as CAPTION, aimed to improve antimicrobial use in the management of community acquired pneumonia in Australian emergency departments.¹⁹ One of the key measures provided as feedback to hospital staff was the concordance of antimicrobial prescribing with accepted national guidelines. A set of tailored interventions were rolled out in participating hospitals included one-on-one education visits, group education sessions that included the feedback of audit results and point-of-prescribing prompts. An overall 1.5-fold improvement in concordant antimicrobial prescribing was reported.

Practice reviews and audits often use national evidence-based guidelines as the standard to compare prescribing practice. Without clear national opioid analgesic prescribing guidelines, the notion of 'best practice' becomes subjective, and unclear and lacks consistency. SHPA recommends sector-wide involvement in the development of national evidence-based guidelines, with information tailored to



different clinical areas (e.g. surgical and perioperative care, emergency care etc.), to be used as a decision-making support tool for all hospital prescribers and pharmacists. Opioid Analgesic Stewardship Pharmacists in each hospital can utilise these guidelines when providing point-of-care training to prescribers, and to compare the opioid analgesic prescribing patterns of individuals and teams, with that which is recommended nationally.

However, attempts to impact on prescribing behaviour is stunted by the lack of a nationally consistent approach to the implantation of EMM systems across all Australian hospitals. The implementation of EMM systems in Australian hospitals will allow timely access to usage-based data for individual and team prescribing patterns. It will also enable the embedding of guidelines into clinical decision support for electronic prescribing systems, to provide further opportunity to guide prescribing at the point of care. Finally, the implementation of EMM systems across all Australian hospitals will enable the extraction of nationally standardised data sets, an effective tool for organisations to benchmark against.

System-wide challenges related to addressing prescriber education and training to improve prescribing of opioid analgesics

There is currently no impetus for prescribers to upskill and take part in opioid analgesic education and training, shifting the responsibility to individual hospitals or clinical areas to determine mandatory training for prescribers. The Medical Board of Australia along with prescriber peak bodies, should place an emphasis on the importance of such training and encourage members to take part, particularly if they practice in a setting where opioid analgesic prescribing is common.

Hospital executive and management committees do not always recognise the critical nature of opioid analgesic prescribing, and hence the need for Opioid Analgesic Stewardship Programs, which impacts on the funding provided to resource this service. Insufficient funding means that Opioid Analgesic Stewardship Programs cannot reach their potential to have the desired impact on the opioid crises in Australia.

As mentioned above, a more streamline implantation of EMM systems should be expected of all Australian hospitals. This will enhance the real-time data available to be used in the provision of appropriate education and training to prescribers on their opioid analgesic prescribing patterns. It will also improve access to resources to guide clinical decision making at the time of prescribing, and support point-of-care training for prescribers.

Gaps in current processes that inhibit positive patient outcomes related to prescriber education and training on the appropriate prescribing of opioid analgesics

A gap in the current process points to the culture of discharge prescribing, particularly in the surgical and perioperative setting. Junior doctors are often tasked with preparing discharge prescriptions and are often not empowered to change the 'standard/accepted' opioid analgesic prescribing patterns upon discharge post-surgery. A study²⁰ found that medical teams were more likely than surgical teams to accept recommendations since the surgical unit interns frequently sought consultant advice before making changes, compared with medical interns who were empowered to act independently. It is therefore essential that education and training is delivered to prescribers right across the whole prescribing hierarchy, including the more senior specialists.

Monitor progress and measuring outcomes of opioid analgesic stewardship education and training initiatives on prescribing behaviours by:

- Measure the prescription volumes and quantities of opioid analgesics across different units in the hospital.
- Measure adherence of prescribing practice to accepted standards or guidelines if available.
- Monitor the rate of re-presentation/re-admission due to uncontrolled pain post-discharge.



- Monitor the number of patients still on opioid analgesics at follow up outpatient appointments post-discharge from hospital.
- Gather feedback from prescribers on the education and training provided to ascertain what works best for different individuals and units.
- Establish a National Opioid Utilisation Surveillance Program (similar to National Antimicrobial Utilisation Surveillance Program funded by ACSQHC) for hospitals to monitor opioid analgesic usage rates and enable benchmarking with similarly peered hospitals to identify areas for improvement.



References

- ¹ The Society of Hospital Pharmacists of Australia. (2018). Reducing opioid-related harm: A hospital pharmacy landscape paper. SHPA: Melbourne.
- ² Penington Institute. (2018). Australia's Annual Overdose Report 2018, Melbourne: Penington Institute. [Publication].
- ³ Burcher KM, Suprun A, Smith A. (2018). Factors for Opioid Use Disorders in Adult Postsurgical Patients. *Cureus*,10(5): e2611. Available from: <https://www.cureus.com/articles/10503-risk-factors-for-opioid-use-disorders-in-adult-postsurgical-patients>
- ⁴ Edlund MJ, Martin BC, Russo JE, DeVries A, Braden JB, Sullivan MD. (2014). The role of opioid prescription in incident opioid abuse and dependence among individuals with chronic noncancer pain: the role of opioid prescription. *Clin J Pain*, 30:557–64. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4032801/>
- ⁵ Australian Institute of Health and Welfare. (2018). Admitted patient care 2016–17: Australian hospital statistics. Health services series no. 84. Cat. no. HSE 201. Canberra: AIHW. Available from: <https://www.aihw.gov.au/getmedia/acee86da-d98e-4286-85a4-52840836706f/aihw-hse-201.pdf.aspx?inline=true>
- ⁶ Wetzel M, Hockenberry J, & Raval M V. (2018). Interventions for Postsurgical Opioid Prescribing: A Systematic Review. *JAMA Surg*. doi:10.1001/jamasurg.2018.2730.
- ⁷ Shah A, Hayes CJ, Martin BC. (2017). Factors Influencing Long-Term Opioid Use Among Opioid Naive Patients: An Examination of Initial Prescription Characteristics and Pain Etiologies. *J Pain*,18(11):1374-83. Available from: [https://www.jpain.org/article/S1526-5900\(17\)30635-1/abstract](https://www.jpain.org/article/S1526-5900(17)30635-1/abstract)
- ⁸ Deyo RA, Hallvik SE, Hildebran C, Marino M, Dexter E, Irvine JM et al. (2016). Association Between Initial Opioid Prescribing Patterns and Subsequent Long-Term Use Among Opioid-Naive Patients: A Statewide Retrospective Cohort Study. *Journal of General Internal Medicine*, 2;1-7. Available from: <https://doi.org/10.1007/s11606-016-3810-3>
- ⁹ Australian and New Zealand College of Anaesthetists, Faculty of Pain Medicine.(2018). Position statement on the use of slowrelease opioid preparations in the treatment of acute pain. Available from: <http://www.anzca.edu.au/resources/endorsed-guidelines/position-statement-on-the-use-of-slow-release-opioids>
- ¹⁰ Shah A, Hayes CJ, Martin BC. (2017). Factors Influencing Long-Term Opioid Use Among Opioid Naive Patients: An Examination of Initial Prescription Characteristics and Pain Etiologies. *J Pain*,18(11):1374-83. Available from: [https://www.jpain.org/article/S1526-5900\(17\)30635-1/abstract](https://www.jpain.org/article/S1526-5900(17)30635-1/abstract)
- ¹¹ Clinical Pharmacy Standards of Practice. (2013). *Journal of Pharmacy Practice and Research*, 43, 2. Retrieved from https://www.shpa.org.au/sites/default/files/uploaded-content/website-content/SOP/sop_clinical_pharmacy_s32-s34_chapter9.pdf
- ¹² SHPA Standards of Practice in Emergency Medicine Pharmacy Practice. (2006). *Journal Of Pharmacy Practice And Research*, 36(2), 139-142. doi: 10.1002/j.2055-2335.2006.tb00591.x
- ¹³ Roman C, Edwards G, Dooley M, Mitra B. (2018). Roles of the emergency medicine pharmacist: A systematic review. *Am J Health Syst Pharm*, 75: 796–806.
- ¹⁴ Centers for Disease Control and Prevention. (2012). Antibiotic stewardship driver diagram. Atlanta (GA): CDC.
- ¹⁵ Pakyz AL, Moczygemba LR, VanderWielen LM, Edmond MB, Stevens MP, Kuzel AJ. (2014). Facilitators and barriers to implementing antimicrobial stewardship strategies: results from a qualitative study. *Am J Infect Control*, 42(10 Suppl):S257–63.
- ¹⁶ Duguid M and Cruickshank M (eds). (2010). Antimicrobial stewardship in Australian hospitals, Australian Commission on Safety and Quality in Health Care, Sydney.
- ¹⁷ Brummett CM, Waljee JF, Goesling J, et al. (2017). New Persistent Opioid Use After Minor and Major Surgical Procedures in US Adults. *JAMA Surg*, 152(6):e170504. doi:10.1001/jamasurg.2017.0504.pdf
- ¹⁸ Platis A, Wenzel T. (2011). Hospital oxycodone utilisation research study (HOURS). Adelaide: Pharmacy Department Royal Adelaide Hospital. [Cited in: The Royal Australian College of General Practitioners. (2018). A quick briefing document: Discharge Opioid Management.]
- ¹⁹ Maxwell D, McIntosh K, Pulver L, Easton K. (2005). Empiric management of community-acquired pneumonia in Australian emergency departments. *Medical Journal of Australia*,183(10):520–524.
- ²⁰ Cosgrove S, Patel A, Song X, Miller R, Speck K, Banowitz A, Hadler R, Sinkowitz-Cochran R, Cardo D, Srinivasan A. (2007). Impact of different methods of feedback to clinicians after postprescription antimicrobial review based on the Centers for Disease Control and Prevention's 12 steps to prevent antimicrobial resistance among hospitalised adults. *Infection Control and Hospital Epidemiology*,28:641–646.

