Welcome to today’s Insight / APSAD webinar.
We’ll be starting a little after 10am (QLD time).

- Use the chat icon for all questions and comments – select All panelists and attendees.
- If you are experiencing other problems or require further technical assistance call Zoom on 1800 768 027.
- A pdf version of today’s presentation will be available soon in the chat window.
- A recording of this webinar will be available on our YouTube channel in the coming weeks.

For more information head to www.apsadconference2021.com.au
Preparing for QScript: Identifying and discussing opioid-related risks

Q-Script seminar series
August 25, 2021

Suzanne Nielsen BPharm BPharmSc(Hons) PhD MPS
Associate Professor and Deputy Director
Monash Addiction Research Centre
NHMRC Career Development Fellow
I acknowledge the Traditional Owners of the land on which we all meet and pay respect to Elders past and present.
Overview

1. Tools to identify clinical risk with opioids
2. Difference between Q-script algorithms and clinical outcome tools
3. Integrating prescription monitoring and clinical information

I won't cover specifics of Q-script use, but there are lots of resources on that and more on the Queensland Health Website.
Background: opioid-related harm in Australia

- When considering deaths with *opioids used for pain* (fentanyl, morphine, oxycodone, tramadol, codeine, *i.e. excluding* methadone and buprenorphine)
  - Half had chronic pain documented
  - Less than one in four had history of injection drug use

Roxburgh et al 2019 Drug and Alcohol Dependence
doi.org/10.1016/j.drugalcdep.2019.06.035

Opioid-related deaths in Australia (AIHW 2021)

- Heroin
- Prescription opioids

DrSuziNielsen

Roxburgh et al 2019 Drug and Alcohol Dependence
doi.org/10.1016/j.drugalcdep.2019.06.035
OPIOID-RELATED RISK IS COMMON

• **One in four** prescribed long term opioids (24%) meet criteria for ‘addiction’ (American Pain Society et al. ‘impaired control over drug use, compulsive use, continued use despite harm, and cravings’)

• **Four in five** have meaningful opioid overdose risk (per CDC criteria)², yet little knowledge around risk or symptoms³

• **Half** (47%) have ‘intermediate-high’ with concerns about their opioid use, yet few < 5% receive help⁴

• Many health care professionals lack confidence in how to approach risk⁵

---

Prescription Drug Monitoring Program

What it **is:**
- An information system on prescribed/supplied and dispensed monitored medicines
- A prompt to view a patient history of monitored medicines
- A provider of alerts from algorithms based on medications supplied

What it **is not:**
- A clinical decision
- An indication of if a medicine is appropriate or not
- A barrier to prescribing or dispensing
Alerts in Q-Script

- High opioid doses: more than 100mg daily Oral Morphine Equivalents
- Opioids + benzodiazepines
- Seeing multiple prescribers (4 or more in 90 days)
- Current or previous treatment for opioid dependence
- New opioids / benzodiazepine (i.e. none in the past 90 days)
Dose as a risk factor

Dose is easy to measure … yet on its own it doesn’t explain the risk

Associations with prescription opioid dose
How do we identify risk?
Where does prescription monitoring fit in?
Does a PDMP alert equal clinical risk?
(Picco et al 2021)

Examined 119 patients on long term opioids
• Reviewed medication history and results on clinical risk screening tool ‘ROOM’
• The populations identified by each are different
• No association between risk on PDMP and OUD

Any PDMP alert n= 34
Opioid use disorder n=25
n=12

PDMP- Prescription Drug Monitoring Program, alert based on Victorian algorithm
ROOM- Routine Opioid Outcome Monitoring tool

Louisa Picco
PhD Scholar
Monash Addiction Research Centre
Clinical risk with PDMP ‘high dose alert’

<table>
<thead>
<tr>
<th>ID</th>
<th>Unmanaged pain</th>
<th>OUD</th>
<th>Low mood</th>
<th>Risky alcohol</th>
<th>Any ROOM</th>
<th>SafeScript high dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

High dose alert (>100mg oral morphine equivalent daily dose)

- 16 participants received high dose alert
- 13 ‘at-risk’ and at least one ROOM risk indicator
- Most met 2 or more ROOM risk indicators
- Most common ROOM risks related to **unmanaged pain** and **low mood**
PDMP is just part of the picture

Alerts:

• Can trigger a clinical review
• Won’t inform *how* to manage risk
• May miss patients who are at risk

What tools are available for clinical review?
What are the risks we are worried about?

- Overdose?
- Opioid dependence (addiction/opioid use disorder)?
- Unmanaged pain?
- Excessive supply?
- Seeing multiple prescribers?
DSM-5 Diagnostic Criteria for OUD

Diagnosis of OUD, at least two of the following should be observed within a 12-month period:

1. Opioids are often *taken in larger amounts or over a longer period* than was intended.
2. There is a persistent desire or *unsuccessful efforts to cut down or control* opioid use.
3. A *great deal of time is spent* in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
4. *Craving*, or a strong desire or urge to use opioids.
5. Recurrent opioid use resulting in a *failure to fulfill major role obligations* at work, school, or home.
6. Continued *opioid use despite having persistent or recurrent social or interpersonal problems* caused or exacerbated by the effects of opioids.
7. Important social, occupational, or recreational *activities are given up* or reduced because of opioid use.
8. *Recurrent opioid use in situations in which it is physically hazardous.*
9. *Continued opioid use despite* knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Exhibits *tolerance* (not counted if use in medical context only).
11. Exhibits *withdrawal* (not counted if use in medical context only).

2 -3 = “mild”
4 - 5 = “moderate”
6 or more = “severe”
Opioid Dependence (ICD-10) (Addiction)

Three or more present together during the previous year:

- A strong desire or sense of **compulsion** to take the substance;
- **Difficulties in controlling** substance-taking behaviour
- A physiological **withdrawal state** when substance use has ceased or have been reduced*
- Evidence of **tolerance***
- Persisting with substance **use despite clear evidence of overtly harmful** consequences
- **Increased amount of time** necessary to obtain or take the substance or to recover from its effects
- Progressive **neglect of alternative pleasures** or interests because of psychoactive substance use

*Expected when opioids used solely for medical treatment
Identifying ‘addiction’ or Opioid Use Disorder

- Developed and validated a screening tool
  - Brief (4 questions) & easy to score
  - Language and content appropriate for people with chronic pain
  - Validated in people prescribed opioids
  - Demonstrated to be acceptable to consumers
**4-item Opioid Use Disorder Screen: the OWLS**

Please indicate how often you have been bothered by the following problems over the past three months. There are no right or wrong answers. Do not spend too much time on any one statement.

1. In the past three months did you use your opioid medicines for other purposes, for example, to help you sleep or to help with stress or worry?

2. In the past three months did opioid medicines cause you to feel slowed down, sluggish or sedated?

3. In the past three months did opioid medicines cause you to lose interest in your usual activities?

4. In the past three months did you worry about your use of opioid medicines?

A total score of 3 or more over the four items indicates that it is likely that symptoms of opioid use disorder are emerging. Further assessment with a healthcare professional is warranted.
The OWLS (Opioid Use Disorder screening tool)

- Overuse/use for Other purposes
- Worried about use
- Lose interest in usual activities
- Slowed down or sedated
Scoring the OWLS: What does a positive score mean?

Score **3 or more** → May mean patient is experiencing opioid-related problems (craving, compulsive use, continued use despite harms, loss of control over use)

- Prompt to start a conversation → provide or refer for a more detailed assessment
- OUD → increased risk of opioid poisoning/toxicity (‘overdose’)
- Assess benefits and risks of opioids from the patients perspective
- May need extra strategies to manage opioids
- May consider opioids provided in Opioid Agonist Treatment framework

*OWLS Validated against a diagnostic interview*
Endorsing any item can start a conversation

*Use opioids for *Other reasons (e.g. sleep or stress) — “Would you be interested in exploring other strategies to for insomnia, or to help when you are feeling stressed?”

Opioids should not be ceased on the basis of an OWLS score.
Endorsing any item can start a conversation

Worry about use of opioids – “Which aspects of your opioid use worry you? Can you tell me a little about that?” Is there evidence of loss of control, harms relating to use or other indicators of problematic use? Is the patient concerned for other reasons (e.g. worried about access?)

Opioids should not be ceased on the basis of an OWLS score
Endorsing any item can start a conversation

Losing interested in your usual activities – “Do you feel opioids are becoming a focus in your life?” Could also be mental health related, high co-morbidity with pain and depression.

Opioids should not be ceased on the basis of an OWLS score.
Endorsing any item can start a conversation

Feel **Slowed down, Sluggish or Sedated** – “Is this impacting on your quality of life, or your safety?”

- Could dose be too high – interested in trying a lower dose?
- Other psychoactive medications (benzodiazepines, atypical antipsychotics, pregabalin) interacting with opioids? – are these medications helping –
- Is there a role or interest in a home medicine review or lowering dose?

Opioids should not be ceased on the basis of an OWLS score
Managing risk associated with opioid use disorder

Opioid use disorder does not mean you cannot supply opioids
- May need greater structure around supply (e.g. small quantities)
- Opioids in OAT framework may be more appropriate (e.g. buprenorphine program)
- Sudden cessation can increase the risk for a patient
- OUD screening alone is NOT enough

Consider other clinical risk factors

Q-script alert

‘OWLS’ OUD screen

Detailed assessment of need re OUD + naloxone
*Consider whole clinical picture*
Wong-Baker FACES Pain Rating Scale

0: NO HURT
2: HURTS LITTLE BIT
4: HURTS LITTLE MORE
6: HURTS EVEN MORE
8: HURTS WHOLE LOT
10: HURTS WORST
BEST PRACTICE IN OUTCOME MONITORING FOR PAIN TREATMENT: The Four (or five) “A’s” of Pain Treatment

Early approaches were to screen for risk before prescribing (e.g. Opioid Risk Tool), but:
- Risk is dynamic
- Predicting which patients will develop issues has proved challenging
- Ongoing outcome monitoring is recommended

• Analgesia (pain relief)
• Activity (functioning)
• Adverse effects (side effects)
• Addiction-related (aberrant) behaviours
• Affect (mood) – the fifth A
• (Added Alcohol – toxicity risk)

→ Basis Routine Opioid Outcome Monitoring (ROOM)

→ Need to monitor for more than just ‘addiction’

---

1. Passik & Weinreb, 1998;
## ROOM tool (based on 5As Passik & Weinreb, 1998)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Tool used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesia</td>
<td>Three items assessing Pain, Enjoyment of life and General Activity (PEG)</td>
</tr>
<tr>
<td></td>
<td>(1) (First item)</td>
</tr>
<tr>
<td>Activity</td>
<td>PEG (3-item tool)(1) (Second two items)</td>
</tr>
<tr>
<td>Adverse Effects</td>
<td>Two-part question on constipation</td>
</tr>
<tr>
<td></td>
<td>Single item from Prescribed Opioid Screening Tool</td>
</tr>
<tr>
<td>Addiction</td>
<td>4-item OWLS – Validated using CIDI Opioid Use Disorder Criteria</td>
</tr>
<tr>
<td></td>
<td>*Overuse *Worry *Losing Interest *Sedation</td>
</tr>
<tr>
<td>Affect (mood)</td>
<td>Patient Health Questionnaire-2 (PHQ-2)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Single question alcohol screening test (4) (6th A – risk factor for opioid</td>
</tr>
<tr>
<td></td>
<td>toxicity)</td>
</tr>
</tbody>
</table>

### Validation

- **Validated** in people prescribed long-term opioids
- **Demonstrated to be acceptable to patients** in an implementation study in community pharmacies

---

3. Kroenke et al. PHQ-2
## PEG Pain Screening Tool (Analgesia and Activity)

### 1. What number best describes your pain on average in the past week:

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No pain</td>
<td>Pain as bad as you can imagine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2. What number best describes how, during the past week, pain has interfered with your enjoyment of life?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Does not interfere</td>
<td>Completely interferes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3. What number best describes how, during the past week, pain has interfered with your general activity?

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO PAIN</td>
<td>MILD</td>
<td>MODERATE</td>
<td>SEVERE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4-item Opioid Use Disorder Screen: the OWLS

Please indicate how often you have been bothered by the following problems over the past three months. There are no right or wrong answers. Do not spend too much time on any one statement.

4. In the past three months, did you use opioid medicines for other purposes, for example to help me sleep or to help with stress or worry?

5. In the past three months, did opioid medicines cause you to feel slowed down, sluggish or sedated?

6. In the past three months, did opioid medicines cause you to lose interest in your usual activities?

7. In the past three months, did you worry about your use of opioid medicines?

(already covered)
Affect (mood) ‘the fifth A’

- Of those with chronic pain prescribed opioids, HALF meet criteria for moderate to severe depression and one in five have attempted suicide.
- Low mood can affect both pain and sleep.
- PHQ-2 – Two item screen → positive screen leads to more detailed assessment.

Please indicate how often you have been bothered by the following problems over the last two weeks. There are no right or wrong answers. Do not spend too much time on any one statement.

8. Little interest in doing things
   - Not at all
   - Several days
   - More than half days
   - Nearly everyday

9. Feeling down, depressed or hopeless
   - Not at all
   - Several days
   - More than half days
   - Nearly everyday

A total score of 3 or more indicates that the patient could be experiencing depression and/or anxiety. Further assessment is warranted.
Alcohol use (the 6th A)

- One in three using opioids for chronic pain report a lifetime alcohol use disorder
- Alcohol use implicated commonly in opioid-related deaths
- Alcohol can interact with medications and effect sleep
- Screening for risky alcohol use in primary care is becoming standard (akin to asking if patients smoke)

**How many times in the past year have you had 4 (for women) or (5 for men) or more drinks in a day? _____**
(a response of 1 or greater is considered positive for risky drinking)
Responding to risky drinking

Positives screen → more detailed assessment (e.g. with AUDIT/AUDIT-C)

Risky alcohol use → Brief intervention

Alcohol Use Disorder → Referral for treatment
Constipation

• Common with opioids (maybe less with oxycodone-naloxone formulations)
• Constipation can effect on quality of life
• Lifestyle factors are important (e.g. diet, hydration, exercise)
• Not all patients use appropriate laxatives
• Patients may not ask about it (it is embarrassing)

Osmotic laxatives (e.g. lactulose) may be appropriate with non-responsive constipation.

Bulking agents not usually recommended (↑ risk of bowel obstruction, esp. if poor fluid intake or is immobile)

Using a more holistic approach

Q-script alert

Clinical risk does not mean you cannot supply opioids

• Develop a plan to address specific risk
• Consider naloxone
• Sudden cessation can increase the risk for a patient
• Where supply is unsafe or inappropriate → support referral for appropriate care

ROOM

No other risk factors
Consider naloxone if higher dose (50mg OME+ or benzodiazepine combination)
Consider SLOW opioid taper if limited benefits from opioids

Identify which clinical risk
→ Targeted response (e.g. pain management, AOD referral, + naloxone)
## Identifying risk ROOM implementation study (n = 152)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesia</td>
<td>Average pain score 6.1 out of 10 (SD 2.5)</td>
</tr>
<tr>
<td>Activity</td>
<td>Effect of pain on: enjoyment of life 6.3/10 (SD 2.7)</td>
</tr>
<tr>
<td></td>
<td>General activity 6.0/10 (SD 2.8)</td>
</tr>
<tr>
<td>Adverse</td>
<td>30% report constipation</td>
</tr>
<tr>
<td>Effects</td>
<td>62% report sedation</td>
</tr>
<tr>
<td>Addiction</td>
<td>40% screen positive for opioid use disorder (39% taking more than prescribed, 58% worry about use)</td>
</tr>
<tr>
<td>Affect</td>
<td>22% Meet cut-off for depression</td>
</tr>
<tr>
<td>Alcohol</td>
<td>38% report drinking at risky levels</td>
</tr>
</tbody>
</table>

Most patients met opioid-related risk criteria (n = 152)
- Opioid dose > 100mg Oral Morphine Equivalents (3 in 10)
- Concurrent benzodiazepine use (2 in 10)
- Opioid Use Disorder (4 in 10)
- Risky alcohol use (4 in 10)

What triggers prescription refusal

Factorial experiment (Picco et al 2021, under review)
- Which factors trigger decisions not to supply

Examined:
• patient factors (e.g. gender, age, employment)
• Clinical risk (high dose, benzodiazepines)
• Co-morbidities
• PDMP alerts

PDMP alerts were the **biggest** predictor of supply and other clinical responses

**Known risk factors didn’t influence supply**

Main findings: alerts playing too much of a role in clinical decisions ‘automation bias’
Even better …..

Q-script

Clinical decision

Clinical assessment (Bio-psycho-social)

NO IDENTIFIED RISK

IDENTIFIED RISK?

No other risk factors
Consider naloxone if higher dose (50mg OME+)
Consider SLOW opioid taper if limited benefits from opioids

Identify nature of clinical risk
→ Targeted response that addresses the context of the risk (e.g. psychosocial stressors, pain management, AOD referral, low mood etc) + naloxone

MAY consider opioid taper, but with appropriate supports and a management plan
AVOID SUDDEN CESSATION

Best case scenario
- Assess risk with all patients with opioids, with clinical assessment supplemented by q-script information
- Address clinical risk
- Consider longer term plan with opioids
- Risk assessment not driven by an alert alone
- Supply decision not driven by alert
Reducing risk in the interim

Consider:
• Staged supply
• Naloxone (educate carer/family)
• Specialist consult
  • Pain services
  • Addiction medicine specialists
Naloxone resources for people prescribed opioids

Naloxone information for people who are prescribed opioids

This animation has been created for people prescribed opioids for chronic pain, or anyone interested in learning more about prescription opioid safety. Naloxone is a life-saving medicine that reverses the effects of opioids in case of an emergency, while you wait for an ambulance. If you'd like to know more about opioid safety or naloxone, speak with your pharmacist or GP, and download the ‘maximising opioid safety’ leaflet.
Discussion

• PDMP is one piece of the puzzle in identifying risk
• PDMP combined with clinical assessments can provide a better picture
• Most patients prescribed opioids have meaningful levels of risk → not all associated with opioid use disorder
• Naloxone should be offered to patients with opioid-related risk
• It may be appropriate to continue opioid supply → longer term plan for taper may still be ideal
Acknowledgements

- OWLS development (POINT investigators): Gabrielle Campbell, Briony Larance, Michael Farrell, Louisa Degenhardt
- OWLS/ROOM validation and implementation: Louisa Picco, Melissa Middleton, Paul Sanfilippo, Raimondo Bruno, Michala Kowalski, Pene Wood, Sarah Larney, Alison Ritter
- Naloxone for people with chronic pain: Turning Point, Isabelle Volpe, Jarrod McMaugh, Michael Savic, Victoria Manning

Funding

- NHMRC Translating Research Into Practice Fellowship, NHMRC Career Development Fellowship
- Central and Eastern Sydney Primary Health Network (CESPHN) & Western Sydney Primary Health Network (WSPHN)
- Mindgardens Seed Funding Grant
- Victorian Department of Health (Naloxone Resources)
Thank you!

suzannne.nielsen@monash.edu

DrSuziNielsen Twitter
MonashAddiction Twitter
This map attempts to represent the language, social or nation groups of Aboriginal Australia. It shows only the general locations of larger groupings of people which may include clans, dialects or individual languages in a group. It used published resources from 1988-1994 and is not intended to be exact, nor the boundaries fixed. It is not suitable for native title or other land claims. David R Horton (creator), © AIATSIS, 1996. No reproduction without permission. To purchase a print version visit: www.aiatsis.ashop.com.au

We acknowledge the Traditional Owners of the land on which this event takes place and pay respect to Elders past and present.
Thanks for joining us today!

Join us again next week for
Dr Ian Thong and Anthony Hall
‘Qscript Learning: is it persistent pain, opioid use disorder or both?’

Want to see previous webinars? Subscribe to our YouTube channel.
youtube.com/c/InsightQueensland

For more information head to www.apsadconference2021.com.au