

Appendices

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Appendix 1. Glasgow Coma Scale

<p>110.050</p> <p>FOR MEDICAL RECORD STAFF ONLY</p> <p>GLASGOW COMA SCALE</p> <p>NEUROLOGICAL CHART</p>		<p>HOSP: _____ MRN: _____</p> <p>SURNAME: _____</p> <p>OTHER NAMES: _____</p> <p>D.O.B: _____ SEX: _____ AMO: _____</p>																					
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>MRN BAR CODE</p> </div> <p>Affix Addressograph Label</p>																							
<p>Frequency</p> <table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> </tr> </table>												<p>Date/Sign</p> <table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> <td style="width: 12.5%;"></td> </tr> </table>											
<p>C</p> <p>O</p> <p>M</p> <p>A</p> <p>S</p> <p>C</p> <p>O</p> <p>R</p> <p>E</p>	<p>Eye</p> <p>Opening</p>	Date																		<p>LEGEND:</p> <p>Eyes closed = C</p> <p>Endotracheal tube or Tracheotomy = T</p> <p>Record beat Arm response</p> <p>Record size in mm</p> <p>+ brisk</p> <p>S sluggish</p> <p>- none</p> <p>C eyes closed</p> <p>O not testable</p> <p>Recorded Right (R) & Left (L) separately if there is a difference</p>			
		Time																					
		Spontaneously	4																				
		To speech	3																				
	To pain	2																					
	None	1																					
	<p>Best</p> <p>Verbal</p> <p>Response</p>	Orientated	5																				
		Confused	4																				
		Inappropriate words	3																				
		Incomprehensible sounds	2																				
<p>Best</p> <p>Motor</p> <p>Response</p>	Obeys commands	6																					
	Localises	5																					
	Withdraw from pain	4																					
	Abnormal flexion	3																					
<p>Extension</p> <p>None</p>	Extension	2																					
	None	1																					
	TOTAL SCORE																						
<p>Pupils</p>	<p>Right</p>	Size																					
		Response																					
<p>Left</p>	<p>Size</p>	Size																					
		Response																					
<p>L</p> <p>I</p> <p>M</p> <p>B</p> <p>M</p> <p>O</p> <p>V</p> <p>E</p> <p>M</p> <p>E</p> <p>N</p> <p>T</p>	<p>A</p> <p>R</p> <p>M</p> <p>S</p>	Normal power																					
		Mild weakness																					
		Severe weakness																					
		Spastic flexion																					
		Extension																					
	<p>L</p> <p>E</p> <p>G</p> <p>S</p>	Normal power																					
		Mild weakness																					
		Severe weakness																					
		Extension																					
		None response																					
<p>COMMENTS:</p>																							

GLASGOW COMA SCALE NEUROLOGICAL CHART 110.050

Pupil Scale (mm)



NO WRITING

Appendix 2. Clinical Institute Withdrawal Assessment for Alcohol (revised) (CIWA-Ar)

Patient..... Date..... Time

Pulse or heart rate, taken for one minute:

Blood pressure:/..... Rater's initials

See following pages for key to scoring.

Nausea and vomiting (0–7)
Tremor (0–7)
Paroxysmal sweats (0–7)
Anxiety (0–7)
Agitation (0–7)
Tactile disturbances (0–7)
Auditory disturbances (0–7)
Visual disturbances (0–7)
Headaches, fullness in head (0–7)
Orientation and clouding of sensorium (0–4)
Total (maximum possible is 67)

Withdrawal severity:
 Mild = <10
 Moderate = 10–20
 Severe = >20

Nausea and vomiting

Ask "Do you feel sick to your stomach? Have you vomited?" and observe.

- 0 No nausea and no vomiting
- 1 Mild nausea with no vomiting
- 2
- 3
- 4 Intermittent nausea with dry heaves
- 5
- 6
- 7 Constant nausea, frequent dry heaves and vomiting

Tremor

Observe patient's arms extended and fingers spread apart.

- 0 No tremor
- 1 Not visible, but can be felt fingertip to fingertip
- 2
- 3
- 4 Moderate, with patient's arms extended
- 5
- 6
- 7 Severe, even with arms not extended

Paroxysmal sweats

- 0 No sweat visible
- 1 Barely perceptible sweating, palms moist
- 2
- 3
- 4 Beads of sweat obvious on forehead
- 5
- 6
- 7 Drenching sweats

Anxiety

Observe, and ask, "Do you feel nervous?"

- 0 No anxiety, at ease
- 1 Mildly anxious
- 2
- 3
- 4 Moderately anxious, or guarded, so anxiety is inferred
- 5
- 6
- 7 Equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

Agitation

- 0 Normal activity
- 1 Somewhat more than normal activity
- 2
- 3
- 4 Moderately fidgety and restless
- 5
- 6
- 7 Paces back and forth during most of the interview, or constantly thrashes about

Tactile disturbances

Ask "Have you any itching, pins and needles sensations, any burning, any numbness or do you feel bugs crawling on or under your skin?"

- 0 None
- 1 Very mild itching, pins and needles, burning or numbness
- 2 Mild itching, pins and needles, burning or numbness
- 3 Moderate itching, pins and needles, burning or numbness
- 4 Moderately severe hallucinations
- 5 Severe hallucinations
- 6 Extremely severe hallucinations
- 7 Continuous hallucinations

Auditory disturbances

Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?", and observe.

- 0 Not present
- 1 Very mild harshness or ability to frighten
- 2 Mild harshness or ability to frighten
- 3 Moderate harshness or ability to frighten
- 4 Moderately severe hallucinations
- 5 Severe hallucinations
- 6 Extremely severe hallucinations
- 7 Continuous hallucinations

Visual disturbances

Ask "Does the light appear to be too bright? Is its colour different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?", and observe.

- 0 Not present
- 1 Very mild sensitivity
- 2 Mild sensitivity
- 3 Moderate sensitivity
- 4 Moderately severe hallucinations
- 5 Severe hallucinations
- 6 Extremely severe hallucinations
- 7 Continuous hallucinations

Headaches, fullness in head

Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.

- 0 Not present
- 1 Very mild
- 2 Mild
- 3 Moderate
- 4 Moderately severe
- 5 Severe
- 6 Very severe
- 7 Extremely severe

Orientation and clouding of sensorium

Ask "What day is this? Where are you? Who am I?"

- 0 Orientated and can do serial additions
- 1 Cannot do serial additions or is uncertain about date
- 2 Disorientated for date by no more than 2 calendar days
- 3 Disorientated for date by more than 2 calendar days
- 4 Disorientated for place and/or person

From: *Clinical institute withdrawal assessment for alcohol — revised.* Sullivan J, Sykora M, Schneiderman J, et al. Assessment of alcohol withdrawal: the revised Clinical Institute withdrawal for alcohol scale (CIWA-Ar). *Br J Addict* 1989; 84: 1353–1357.

Appendix 3. Alcohol withdrawal scale (AWS)

Patient..... Date..... Time

Pulse or heart rate, taken for one minute:

Blood pressure:/..... Rater's initials

See following pages for key to scoring.

Perspiration (0–4)
Tremor (0–3)
Anxiety (0–4)
Agitation (0–4)
Axilla temperature (0–4)
Hallucinations (0–4)
Orientation (0–4)
Total (maximum possible is 27)

<p>Withdrawal severity:</p> <p>Mild = <4</p> <p>Moderate = 5–14</p> <p>Severe = >15</p>
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Perspiration

- 0 No abnormal sweating.
- 1 Moist skin.
- 2 Localised beads of sweat, e.g. on face, chest.
- 3 Whole body wet from perspiration.
- 4 Profuse maximal sweating—clothes, linen are wet.

Tremor

- 0 No tremor.
- 1 Slight tremor.
- 2 Constant slight tremor of upper extremities.
- 3 Constant marked tremor of extremities.

Anxiety

- 0 No apprehension or anxiety.
- 1 Slight apprehension.
- 2 Apprehension or understandable fear, e.g. of withdrawal symptoms.
- 3 Anxiety occasionally accentuated to a state of panic.
- 4 Constant panic-like anxiety.

Agitation

- 0 Rests normally during day, no signs of agitation.
- 1 Slight restlessness, cannot sit or lie still. Awake when others asleep.
- 2 Moves constantly, looks tense. Wants to get out of bed but obeys requests to stay in bed.
- 3 Constantly restless. Gets out of bed for no obvious reason.
- 4 Maximally restless, aggressive. Ignores requests to stay in bed.

Axilla temperature

- 0 Temperature of 37.0°C.
- 1 Temperature of 37.1°C.
- 2 Temperature of 37.6–38.0°C.
- 3 Temperature of 38.1–38.5°C.
- 4 Temperature above 38.5°C.

Hallucinations (sight, sound, taste or touch)

- 0 No evidence of hallucinations.
- 1 Distortions of real objects, aware that these are not real if this is pointed out.
- 2 Appearance of totally new objects or perceptions, aware that these are not real if this is pointed out.
- 3 Believes the hallucinations are real but still orientated in place and person.
- 4 Believes himself to be in a totally non-existent environment, preoccupied, cannot be diverted or reassured.

Orientation

- 0 The patient is fully orientated in time, place and person
- 1 The patient is fully orientated in person but is not sure where he is or what time it is
- 2 Orientated in person but disorientated in time and place
- 3 Doubtful personal orientation, disorientated in time and place; there may be short periods of lucidity
- 4 Disorientated in time, place and person. No meaningful contact can be obtained.

Adapted from NSW Dept of Health (2000).

Appendix 4. Clinical Opiate Withdrawal Assessment Scale (COWS)

Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient's signs or symptoms. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increased pulse rate would not add to the score.

Patient's name: Date and time:/...../.....:.....	
Reason for this assessment:	
<p>Resting Pulse Rate: _____ beats/minute <i>Measured after patient is sitting or lying for one minute.</i></p> <p>0 pulse rate 80 or below 1 pulse rate 81–100 2 pulse rate 101–120 4 pulse rate greater than 120</p>	<p>GI Upset: <i>Over last half-hour</i></p> <p>0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhoea 5 multiple episodes of diarrhoea or vomiting</p>
<p>Sweating: <i>Over past half-hour not accounted for by room temperature or patient activity.</i></p> <p>0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 sweat streaming down face</p>	<p>Tremor: <i>Observation of outstretched hands</i></p> <p>0 no tremor 1 tremor can be felt but not observed 2 slight tremor observable 4 gross tremor or muscle twitching</p>
<p>Restlessness: <i>Observation during assessment</i></p> <p>0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 unable to sit still for more than a few seconds</p>	<p>Yawning: <i>Observation during assessment</i></p> <p>0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times per minute</p>
<p>Pupil size</p> <p>0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible</p>	<p>Anxiety or irritability</p> <p>0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable or anxious 4 patient so irritable or anxious that participation in the assessment is difficult</p>
<p>Bone or joint aches: <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored</i></p> <p>0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort</p>	<p>Gooseflesh skin:</p> <p>0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection</p>
<p>Runny nose or tearing: <i>Not accounted for by cold symptoms or allergies</i></p> <p>0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks</p>	<p>Total score:.....</p> <p>The total score is the sum of all 11 items.</p> <p>Initials of person completing assessment:</p>

Score: 5–12 = mild; 13–24 = moderate; 25–36 = moderately severe; more than 36 = severe withdrawal.

This version may be copied and used clinically.

From: Wesson, D. R., & Ling, W. (2003). The Clinical Opiate Withdrawal Scale (COWS). *Journal of Psychoactive Drugs*, 35(2), 253–259.

Appendix 5. Cannabis Withdrawal Assessment Scale

Patient MRN label here

Cannabis Withdrawal Checklist

Date:													
Time:													
SCORES: 0 – not at all, 1 – mild, 2 – moderate, 3 – severe													
SYMPTOM													
Craving for marijuana													
Decreased appetite													
Sleep difficulty													
Increased aggression													
Increased anger													
Irritability													
Strange dreams													
Restlessness													
Chills													
Feverish feeling													
Stuffy nose													
Nausea													
Diarrhoea													
Hot flashes													
Dizziness													
Sweating													
Hiccups													
Yawning													
Headaches													
Shakiness													
Muscle spasms													
Stomach pains													
Fatigue													
Depressed mood													
Difficulty concentrating													
Nervousness													
Violent outbursts													
TOTAL SCORE													
Person completing assessment – INITIAL													

Note: This is not a validated tool but serves as a useful chart for monitoring withdrawal.

Taken from Budney, A. et al, *Archives of General Psychiatry*, Volume 58 (10) October 2001, 917–924.

Appendix 6. Street names of drugs

Approved name of drug	Street name	Price in NSW, 2004–5 *
Alcohol	Grog, piss, booze, sauce	
Amphetamines	Speed, goey, whiz, uppers, oxblood, point, crystal, crystal meth, ice, shabu	1 weight gram \$90–\$500
Benzodiazepines	Benzos, rowies, moggies, downers, sleepers, tummies, series, pills	
Cannabis	Marijuana, grass, pot, shit, ganja, mull, hash, durry, green, dope, cone	Leaf– Ounce (28 g) \$150 Head – Ounce (28 g) \$200 Hydroponic – (28 g) \$250 Hash/resin- Deal (1g) \$50
Cocaine	Snow, coke	1 gram \$150–\$300
Ecstasy	E, eccies, XTC, fantasy, GBH, liquid ecstasy, good speed	1 tablet/capsule \$30–\$70
Heroin/ opioids	Hammer, H, shit, smack, horse, harry, white, skag, ju	1 taste/cap (0.1–0.3 g) \$50 Full gram \$200–\$500
Ketamine	Special K	Varied across States: ACT – \$65 S.A. – \$200
Lysergic acid diethylamide (LSD)	Acid, blotter, trips, wangers, tabs, dots	\$10 to \$25 per tab
Methylene Dioxyamphetamine (MDA)	Adam	1 tablet/capsule \$30–\$70
Methylene Dioxymethamphetamine (MDMA)	Ecstasy, Utopia, E, XTC	1 tablet/capsule \$30–\$70
Phencyclidine (PCP)	Angel dust	
PMA	Dr Death	
Psilocybin	Magic mushrooms, gold tops	
Solvents	Glue, tol, toluene, bute, nitrus, amyls, petrol, super, aerosol paint-chroming	

* Adapted from the *Illicit Drug Data Report*. 2004–05 Australian Crime Commission

Appendix 7. Drug interactions with methadone

The following table shows drug interactions with methadone. (Adapted from Department of Health, Welsh Office et al. 1999).

Drug	Degree of interaction	Effect	Mechanism
Alcohol	Increased sedation	Additive CNS depression	
Barbiturates	Moderate	Reduced methadone levels, raised sedation	Raised hepatic metabolism, additive CNS depression
Benzodiazepines		Enhanced sedative effect	Additive CNS depression
Buprenorphine		Antagonist effect	Can only be used safely in low doses (20mg or less daily) methadone treatment
Carbamazepine	Moderate	Reduced methadone levels	Raised hepatic metabolism, methadone may need twice daily dosing regime
Chloral hydrate		Increased sedation	Additive CNS depression
Chlormethiazole		Increased sedation	Additive CNS depression
Cimetidine	Moderate	Possible increase in methadone levels	Inhibits hepatic enzymes involved in methadone metabolism
Cisapride Domperidone Metoclopramide		Morphine has an increased rate of onset of action and increased sedative effect when used with these drugs	Unknown
Cyclizine	Severe	Injection with opiates causing hallucinations reported	Unknown
Codeine		Enhanced sedative effect	Additive CNS depression
Desipramine	Moderate	Raised desipramine levels (x2)	Unknown. Interaction not seen with other tricyclic anti-depressants
Dextropropoxyphene		Enhanced sedative effect	Additive CNS depression
Disulfiram	Avoid in combination with methadone formulations containing alcohol (check with manufacturers)	Very unpleasant reaction to alcohol which can be alarming	Inhibits alcohol metabolism allowing metabolites to build up
Erythromycin	In theory, should interact but combination has not been studied	Increase in methadone levels	Decreased methadone metabolism
Fluconazole	In theory, same as ketoconazole		
Fluoxetine	Clinically important	Raised methadone levels but not as significant as for fluvoxamine	Decreased methadone metabolism
Grapefruit juice	In theory, should interact and there have been several anecdotal reports	Raised methadone levels	Decreased methadone metabolism
Indinavir	Clinically important	Raised methadone levels	Decreased methadone metabolism
Ketoconazole	Clinically important	Raised methadone levels	Decreased methadone metabolism

Drug	Degree of interaction	Effect	Mechanism
Monoamine oxidase inhibitors anti-depressants including moclobamide and selegiline	Severe with pethidine although rare with methadone. Concurrent use should be avoided	CNS excitation: delirium, hyperpyrexia, convulsions or respiratory depression	Unknown
Naltrexone	Severe	Reverses the effects of methadone in overdose (long-acting)	Opiate antagonist works by competing for opioid receptors
Naloxone	Severe	Reverses the effects of methadone in overdose (long-acting)	Opiate antagonist works by competing for opioid receptors
Nevirapine	Clinically important	Decreased methadone levels	Increased methadone metabolism
Nifedipine	Has been demonstrated in vitro only	Increased methadone levels	Methadone increases the metabolism of nifedipine
Omeprazole	To date, demonstrated in animals only	Increased methadone levels	Possibly an effect upon methadone absorption from the gut
Other selective serotonin re-uptake inhibitors	Theoretical		
Phenobarbitone	Moderate	Reduced methadone levels	Raised hepatic metabolism (see carbamazepine)
Phenytoin	Moderate	Reduced methadone levels, withdrawal symptoms	Raised hepatic metabolism (see carbamazepine)
Rifabutin	Occasionally clinically important	Decreased methadone levels	Increased methadone metabolism
Rifampicin	Severe	Reduced methadone levels, withdrawal symptoms	Increased metabolism
Ritonavir	Clinically important	May reduce or increase plasma methadone levels	Increased or reduced methadone metabolism
Tricyclic anti-depressants, e.g. amitriptyline	Moderate	Increased sedation	Unknown
Urine acidifiers, e.g. ammonium chloride		Reduced methadone levels	Raised urinary excretion
Zidovudine		Possible raised levels of zidovudine	Unknown
Zopiclone		Increased sedation	Additive CNS depression