

# Committee for Examinations Objective Structured Clinical Examination

Station 8  
Melbourne April 2016



## 1.0 Descriptive summary of station:

In this station the candidate is to assess and manage nicotine addiction in Alex, a 35-year-old man who suffers from schizophrenia and requires an extended hospitalisation for an orthopaedic procedure and subsequent rehabilitation. Alex also has comorbid epilepsy. The candidate is required to negotiate a preferred management plan and simultaneously educate the patient about the risks of his using bupropion, which is his preferred choice of treatment (bupropion is contraindicated in epilepsy).

## 1.1 The main assessment aims are:

- To take a relevant history.
- To explain treatment options and assist the patient in making a decision about his treatment.

## 1.2 The candidate MUST demonstrate the following to achieve the required standard:

- The ability to assess the patient's readiness to quit.
- Knowledge that psychological interventions are an essential component of therapy.
- Knowledge of at least 2 pharmacological options from nicotine replacement therapy, varenicline, and nortriptyline.
- The ability to impart adequate information to the patient highlighting the risk of bupropion.

## 1.3 Station covers the:

- **RANZCP OSCE Curriculum Blueprint Primary Descriptor Category of:**  
Substance Use Disorders
- **Area of Practice:**  
Addiction
- **CanMEDS Domains of:**  
Medical Expert, Communicator
- **RANZCP 2012 Fellowship Program Learning Outcomes of:**  
Medical Expert (Assessment, Management)  
Communicator (Conflict Management)

### **References:**

- Mendlesohn CP, Kirby DP, Castle DJ. *Smoking and Mental Illness. An Update for Psychiatrists.* Australasian Psychiatry 2015, 23(1) 37-43.
- Zwar N, Richmond R, Borland R et al. *Supporting Smoking Cessation: A Guide for Health Professionals.* Royal Australian College of General Practitioners, 2014.
- Rustin TA. *Assessing Nicotine Dependence.* Am Fam Physician. 2000 Aug 1;62(3):579-58
- *The New Zealand Guidelines for Helping People to Stop Smoking.* Ministry of Health, June 2014.

## 1.4 Station requirements:

- Standard consulting room; no physical examination facilities required.
- Four chairs (examiner x 1, role player x 1, candidate x 1, observer x 1).
- Laminated copy of 'Instructions to Candidate'.
- Role player – Male. Mid 30s. Preferably slightly overweight. Walks with a limp.
- Pen for candidate.
- Timer and batteries for examiner.

## 2.0 Instructions to Candidate

You have **eight (8) minutes** to complete this station after **two (2) minutes** of reading time.

You are working as a junior consultant psychiatrist in the community team. You have been asked to see Alex, a 35-year-old man, who is a patient of the service and suffers from schizophrenia which is well maintained on his current treatment. He has comorbid stable epilepsy. He is due to have an operation in the near future and will require an extended admission. To avoid acute nicotine withdrawal, the hospital team has advised Alex that he should stop smoking cigarettes before his admission, as smoking is not possible during his hospital stay. His current medication is olanzapine 15mg at night and valproate 500mg twice daily.

Your tasks are to:

- Take focussed history that relates to substance use.
- Explain the management options available to Alex.
- Negotiate a management plan with Alex.

**You will not receive any time prompts.**

## Station 8 - Operation Summary

### Prior to examination:

- Check the arrangement of the room, including seating and other specifics to your scenario.
- On the desk, in clear view of the candidate, place:
  - Duplicate copy of 'Instructions to Candidate'.
  - Any other candidate material specific to the station e.g. investigation results.
  - Pens.
  - Water & tissues are available for candidate use.
- Do a final rehearsal with your simulated patient.

### During examination:

- Please ensure mark sheets and other station information are out of candidate's view.
- At the **first bell**, take your places.
- At the **second bell**, start your timer, check candidate ID number on entry.
- TAKE NOTE – there is no scripted prompt for you to give.
- DO NOT redirect or prompt the candidate unless scripted – the simulated patient has prompts to use to keep to the aims.
- If the candidate asks you for information or clarification say:  
***"Your information is in front of you – you are to do the best you can."***
- At **eight (8) minutes**, as indicated by the timer, the final bell will ring. Finish the examination immediately.

### At conclusion of examination:

- Retrieve all station material from the candidate.
- Complete marking and place your mark sheet in an envelope by / under the door for collection (**do not seal envelope**).
- Ensure room is set up again for next candidate. (See 'Prior to examination' above.)

### If a candidate elects to finish early:

- You are to state the following:  
***"Are you satisfied you have completed the task(s)?"***  
***If so, you must remain in the room and NOT proceed to the next station until the bell rings."***
- If the candidate asks if you think they should finish or have done enough etc. refer them back to their instructions and ask them to decide whether they believe they have completed the task(s).

### 3.0 Instructions to Examiner

#### 3.1 In this station, your role is to:

Observe the history taking, the explanation of management options, the interaction between the candidate and role player in defining a treatment plan and defined tasks as outlined in 1.1 and 1.2.

When the candidate enters the room briefly check ID number.

You have no opening statements or prompts.

The role player opens with:

***“I have a long spell in hospital coming up! They want me to stop smoking before the op.”***

#### 3.2 Background information for examiners

There are higher rates of smoking and nicotine dependence in people with mental illness. About 30% of Australians with mental illness smoke compared to 16% of those without mental illness. There is a greater health and financial burden amongst smokers than the general population. Most of the excess morbidity and mortality is due to smoking related illness - cardiovascular disease, respiratory disease or cancer.

Nicotine is a drug of abuse. It stimulates nicotinic acetylcholine receptors in the mesolimbic pathway to release dopamine in the nucleus accumbens. This leads to positive reinforcement of rewarding behaviour - smoking. Negative reinforcement - relief from withdrawal symptoms - also perpetuates smoking behaviour in those addicted to nicotine. Following repeated exposure, certain situations and activities become associated with the rewards and develop as cues to smoking.

Smoking is often reported as beneficial as it ‘reduces stress’. This is a paradox as multiple studies have identified that cessation of smoking reduces stress, depression, anxiety and improves quality of life. The perceived positive effect of smoking is due to the alleviation of nicotine withdrawal symptoms. Stopping smoking has repeatedly been shown not to exacerbate pre-existing mental illness such as schizophrenia and depression. It is also interesting to note that suicide risk decreases with smoking cessation.

The optimal treatment for smoking is combination of counselling, pharmacotherapy and ongoing support. The treatment pathway of the 5As is a suggested pathway to address smoking in patients.

- **ASK** all patients if they smoke.
- **ADVISE** all smokers to quit in a clear, non-confrontational, personalised way.
- **ASSESS** dependence and readiness to quit.
- **ASSIST** with quitting.
- **ARRANGE** follow up.

Motivation for change and readiness to quit can be assessed by using key questions: ‘How do you feel about your smoking at the moment?’ and ‘Are you ready to quit now?’

There are some simple tools that can be used to help identify dependence.

A modified CAGE questionnaire, 2 ‘yes’ answers identify a positive screen:

1. Have you ever felt a need to **cut down** or **control** your smoking, but had difficulty doing so?
2. Do you ever get **annoyed or angry** with people who criticise your smoking or tell you that you ought to quit smoking?
3. Have you ever felt **guilty** about your smoking or about something you did while smoking?
4. Do you ever smoke within half an hour of waking up (**eye-opener**)?

The 'Four Cs' Test:

**COMPULSION:**

- Do you ever smoke more than you intend?
- Have you ever neglected a responsibility because you were smoking, or so you could smoke?

**CONTROL:**

- Have you felt the need to control how much you smoke but were unable to do so easily?
- Have you ever promised that you would quit smoking and bought a pack of cigarettes that same day?

**CUTTING DOWN (and withdrawal symptoms):**

- Have you ever tried to stop smoking? How many times?
- For how long?
- Have you ever had any of the following symptoms when you went for a while without a cigarette: agitation, difficulty concentrating, irritability, mood swings? If so, did the symptom go away after you smoked a cigarette?

**CONSEQUENCES:**

- How long have you known that smoking was hurting your body?
- If you continue to smoke, how long do you expect to live? If you were able to quit smoking today and never start again, how long do you think you might live?

Other questions that are frequently used include "how soon after waking would you smoke?" - within 30min is a very strong indicator of addiction, and "how many cigarettes do you smoke?" - greater than 20 indicates a higher-level addiction.

Psychological interventions such as motivational interviewing and counselling are **essential** components of therapy. Assessing and understanding reinforcers to smoking behaviour such as sensory rewards, rituals, images and emotional relief help to reduce the risk of relapse. Identifying triggers and high risk smoking situations and developing plans to cope with them increases long-term cessation rates.

Nicotine Replacement Therapy (NRT), varenicline, bupropion and nortriptyline are recommended pharmacological interventions for nicotine addiction. Both combination NRT (patches plus short-acting preparation) and varenicline are the most efficacious pharmacotherapies. Patients with mental illness often require greater doses of NRT and for longer duration due to higher levels of nicotine dependence.

NRT increases quit rates by 60%. The addition of an oral form of NRT significantly increases success as it gives flexible relief to breakthrough cravings. Patients should use enough oral NRT to eliminate cravings. Starting patches 2 weeks before the quit date significantly increases cessation rates. NRT should be continued for 8-12 weeks. The risk of addiction is low as the nicotine is released slower and at lower doses compared to smoking. There are relatively few significant health effects except in pregnancy. Side effects can include insomnia, disturbed dreams, skin irritation (with patch), nausea, heartburn and mouth irritation (with oral preparation). Initially patches of Nicotine 21mg should be used. Oral preparations are available as strips, gum, lozenges, or inhaled cartridges.

Varenicline is the most effective mono therapy for smoking cessation. It should be commenced 1 week before the quit date and continued for 12 weeks. The initially dose is Varenicline 0.5mg daily increasing gradually to 1mg twice daily after 1 week. Nausea occurs in 30% of users. Other side effects include insomnia, disturbed dreams, headache and drowsiness. Meta-analyses have not supported the reports that varenicline has a causal link to reported disturbances of mood, depression or suicidal ideation in those stopping smoking. However, MIMS Australia lists hallucinations, behaviour change and suicidality as side effects of Varenicline and depression and other serious psychiatric conditions as precautions for this product. It is still recommended that patients are educated about potential side effects and should be monitored during treatment. Varenicline can be used safely with other psychotropic medication.

Bupropion is as efficacious as NRT monotherapy. It should be commenced 1 week before the quit date and should be continued for at least 9 weeks. Side effects include insomnia, headache, dry mouth, and seizure (1/1000). It is contraindicated in patients with a history of seizure disorder, eating disorder, head trauma and alcohol dependence. It should be used in caution with other psychotropic medication that can lower the seizure threshold. Bupropion inhibits the metabolism of tricyclic antidepressants, SSRIs, mirtazapine and

antipsychotics. Dose reduction of these agents may be required if bupropion is used in combination with such treatment.

Nortriptyline is a tricyclic antidepressant. It is as efficacious as NRT monotherapy. It should be commenced 1 week before the quit date and maintained for about 12 weeks. The dose can be tapered toward the end of therapy. Side effects are common and include dry mouth, constipation, blurred vision and sedation. It should be used with caution in seizure disorders as it can decrease the seizure threshold.

Tobacco smoke reduces serum levels of a number of psychotropic drugs by inducing cytochrome P450 enzyme. Nicotine does not affect serum levels. Therefore serum levels of certain drugs - olanzapine, clozapine and fluvoxamine can rise significantly after smoking cessation. It is recommended that the olanzapine dose is reduced by 30% within a few days of cessation, and certainly by 1 week. The dose will need to be increased if smoking recommences.

In order to **Achieve** in this station the candidate **MUST**:

- identify, within the history, features of nicotine dependence:
  - the candidate may utilise the modified CAGE questionnaire, 4 Cs test, or similar inquiry.
- assess the motivation to quit:
  - identify how the patient feels about their smoking.
- have a reasonable understanding of management options available for nicotine dependence:
  - understand that psychological interventions are an essential component of therapy;
  - be aware of at least 2 pharmacological options for treatment;
  - be aware of some of the side effects of treatment.
- be able to tailor the management taking into account the patient's wishes and needs.
- be aware that Bupropion is contraindicated in seizure disorders and / or Nortriptyline should be used with caution in seizure disorders.

A better candidate may:

- explore reinforcers for smoking behaviour and / or identify triggers or high risk smoking situations.
- have a detailed understanding of management options for nicotine dependence:
  - understand all pharmacological options and side effects;
  - be aware of varying efficacy of treatments.
- understand the pharmacological impact of smoking cessation, and the pharmacological interactions of agents used in smoking cessation.

### 3.3 The Standard Required

In order to:

**Surpass the Standard** – a better candidate demonstrates competence above the level of a junior consultant psychiatrist in several of the domains described below.

**Achieve the Standard** – the candidate demonstrates competence expected of a junior consultant psychiatrist. That is the candidate is able to demonstrate, *taking their performance in the examination overall*, that

- i. they have competence as a **medical expert** who can apply psychiatric knowledge including medico-legal expertise, clinical skills and professional attitudes in the care of patients, (such attitudes may include an ability to tolerate uncertainty, balance, open-mindedness, curiosity, “common sense” and a scientific approach).
- ii. they can act as a **communicator** who effectively facilitates the doctor patient relationship.
- iii. they can **collaborate** effectively within a healthcare team to optimise patient care.
- iv. they can act as **managers** in healthcare organisations who contribute to the effectiveness of the healthcare system, organise sustainable practices and make decisions about allocating resources.
- v. they can act as **health advocates** to advance the health and well-being of individual patients, communities and populations.
- vi. they can act as **scholars** who demonstrate a life-long commitment to learning as well as the creation, dissemination, application and translation of medical knowledge.
- vii. they can act as **professionals** who are committed to ethical practice and high personal standards of behaviour.

**Below the Standard** – the candidate demonstrates significant defects in several of the domains listed above.

**Does Not Achieve the Standard** – the candidate demonstrates significant defects in most of the domains listed above or the candidate demonstrates significant defects in the first domain of being a medical expert.

## 4.0 Instructions to the Role Player

### 4.1 This is the information you need to memorise for your role:

You are Alex, a 35-year-old man, living alone in rented accommodation.

You have a long history of schizophrenia and currently have regular contact with the community mental health team. You had 2 admissions in your mid 20s when you first developed psychotic symptoms: you believed that the government was spying on you, that the radio was giving you messages, and you could somehow intercept secret radio messages about you with your mind. These symptoms responded well to treatment and once you managed to get into a regular treatment routine they no longer caused you any difficulties.

You had been working as a landscape gardener but were injured in a motor vehicle accident (you were a pillion passenger on a motorbike) earlier this year. Your knee was operated on but there was a subsequent infection affecting the joint requiring another surgery and an admission for a few days. There was a brief relapse of your psychotic symptoms during your first admission following the operation. The psychiatrist in the hospital increased your olanzapine from 10mg to 15mg and referred you to the community mental health team for support.

You are now due to go to hospital for a third operation in about four weeks to try to rectify the problem. The plan involves staying in hospital for an extended period and then having a spell in the rehabilitation unit. As you will be confined to your bed, and then have a long stay in hospital, it has been recommended that you address your smoking habit.

You currently take olanzapine 15mg at night. You also take sodium valproate 500mg twice daily to treat epilepsy. You have not had a seizure for 2 years. Prior to that you had grand mal epilepsy where your entire body would have jerky movements. You are not troubled by side effects besides being a few kilos heavier than you were before starting the olanzapine.

You have smoked from an early age – about 17 years. You smoke about 20 cigarettes per day. This can increase to about 30 cigarettes daily at times of stress but this does not happen often. You feel that smoking helps you feel calm and manage the day better than if you were 'smoke free'. You even feel that you would 'feel naked' without a cigarette in social situations and find that it helps you 'connect' with others. Every day starts with a cigarette but you do not wake up at night to smoke. You frequently need breaks at work for a 'smoko' and your boss has complained that you take too many during the day, but he has never taken any action. You have tried to quit before but have never had any success - you have not made it through the day without smoking. You found that 'break time' at work and drinking a coffee were 'not complete' without a cigarette. The most recent attempt at quitting followed the death of your uncle from lung cancer. He too had schizophrenia and smoked heavily for most of his life. You drink alcohol a couple of times per week - a couple of beers watching the football. You have used marijuana, but only rarely as you found it made you very anxious and 'edgy' and have not used any for over a year. You have not used any other illicit drugs and you do not gamble.

After hearing about 'not smoking' for the entire admission you initially thought that this would not be possible. During your previous stays you were at least able to go outside the hospital in a wheelchair. You have thought about it more and are now willing to listen to what the doctor has to say about potential treatment options for you. You feel it is time to try to quit again. You have had a look on the internet and a medication 'BUPROPION' has appealed to you. You have read positive comments about its success and tolerability from people who have used it. You would prefer to use this if possible.

### 4.2 How to play the role:

You will be dressed in casual clothes. You will be co-operative with the candidate unless their approach is confrontational or judgemental. You are willing to take steps to quit smoking. You will be willing to listen to options proffered and may raise questions about them. You will prefer to use 'bupropion' as a treatment but will be willing to opt for an alternative treatment if the risks are made clear to you. Answer all questions as scripted. Answer any other questions negatively.



**4.3 Opening statement:**

*“I have a long spell in hospital coming up! They want me to stop smoking before the op.”*

**4.4 What to expect from the candidate:**

The candidate will introduce themselves, explain their role and summarise the information that they have been given. They will limit further inquiry to explore your diagnosis, treatment, recent hospitalisation and use of substances (tobacco, alcohol and drugs). The candidate should then explain the various treatment options available highlighting risks and benefits. The candidate should opt to avoid bupropion due to the risk of seizure. They should discuss a plan to start the treatment before a designated quit date. A better candidate will discuss altering the dose of olanzapine because of your stopping smoking.

**4.5 Responses you MUST make:**

*“I have read good reports about bupropion.”*

**4.6 Responses you MIGHT make:**

If asked:

- You are keen to take this opportunity to quit smoking.
- You do not feel guilty about smoking.
- You do not feel annoyed or angry if anyone criticises you for smoking.
- You are aware that smoking is bad for your health.

## STATION 8 – MARKING DOMAINS

### The main assessment aims are:

- To take a relevant history.
- To explain treatment options and assist the patient in making a decision about his treatment.

### Level of Observed Competence:

#### 1.0 MEDICAL EXPERT

#### 1.2 Did the candidate take appropriately detailed and focussed history? (Proportionate value - 30%)

##### **Surpasses the Standard (scores 5) if:**

achieves a score of at least 4 *and* clearly achieves the overall standard with a superior performance in a range of areas; demonstrates prioritisation and sophistication. The candidate would have a sophisticated and in depth understanding of the available screening questions for addiction; will explore reinforcers for smoking behaviour and identify triggers or high risk smoking situations.

##### **Achieves the Standard by:**

demonstrating use of a tailored biopsychosocial approach; conducting a detailed but targeted assessment; obtaining a history relevant to the patient's problems and circumstances with appropriate depth and breadth; obtain information regarding compulsion to smoke, difficulty in quitting, the need to smoke first thing in the morning, history taking is hypothesis-driven; integrating key sociocultural issues relevant to the assessment; demonstrating ability to prioritise.

To score 3 or above the candidate **MUST**:

- assess the patient's readiness to quit smoking.

A score of 4 may be awarded depending on the depth and breadth of additional factors covered; if the candidate includes most or all correct elements.

##### **Below the Standard (scores 2 or 1) if:**

scores 2 if the candidate does not meet (a) above, or has omissions that would detract from the overall quality response. Significant omissions affecting quality score 1.

##### **Does Not Achieve the Standard (scores 0) if:**

omissions adversely impact on the obtained content; significant deficiencies such as substantial omissions in history.

1.2 Category: ASSESSMENT – data gathering content	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>

#### 1.13 Did the candidate formulate and describe a relevant management plan? (Proportionate value - 40%)

##### **Surpasses the Standard (scores 5) if:**

achieves a score of at least 4 *and* provides a sophisticated link between the plan and key issues identified; clearly addresses difficulties in the application of the plan. The candidate has a detailed understanding of pharmacological management of nicotine addiction which may include dosing schedules, combination strategies, varying efficacies of treatments, the pharmacological interaction of agents used in smoking cessation, and the impact of nicotine cessation upon other medication dosing.

##### **Achieves the Standard by:**

demonstrating the ability to prioritise and implement evidence based acute care skills; recommend medication and other specific treatments; have some understanding of side effect profile / dosing of treatment suggested, safe skilful engagement of appropriate treatment resources / support; safe, realistic time frames / risk assessment / review plan; recognition of their role in effective treatment; identification of potential barriers.

To score 3 or above the candidate **MUST**:

- be aware that psychological interventions are an essential component of therapy, such interventions include motivational interviewing, counselling, assessing and understanding reinforcers to smoking behaviour and triggers to reduce the risk of relapse.
- be aware of at least 2 pharmacological options from nicotine replacement therapy, varenicline, and nortriptyline.

A score of 4 may be awarded depending on the depth and breadth of additional factors covered; if the candidate includes most or all correct elements.

##### **Below the Standard (scores 2 or 1) if:**

scores 2 if the candidate does not meet (a) or (b) above, or has omissions that would detract from the overall quality response. Significant omissions affecting quality scores 1.

##### **Does Not Achieve the Standard (scores 0) if:**

errors or omissions will impact adversely on patient care; plan lacks structure or is inaccurate; plan not tailored to patient's immediate needs or circumstances.

1.13. Category: MANAGEMENT - Initial Plan	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>

## 2.0 COMMUNICATOR

2.3 Did the candidate demonstrate capacity to recognise and manage challenging communications (i.e. the ability to explain to the patient why bupropion is inappropriate medication)? (Proportionate value - 30%)

**Surpasses the Standard (scores 5) if:**

achieves a score of at least 4 and effectively manages challenging communications, demonstrates sophisticated reflective listening skills.

**Achieves the Standard by:**

listening to differing views demonstrating empathy and ability to establish rapport; forming a partnership using language and explanations tailored to the functional capacity of the client taking regard of culture, gender, ethnicity etc.; providing education; communicating plans and discussing acceptability; recognising confidentiality and bias.

To score 3 or above the candidate **MUST**:

a. provide information to the patient highlighting the risk of bupropion.

A score of 4 may be awarded depending on the depth and breadth of additional factors covered; if the candidate includes most or all correct elements.

**Below the Standard (scores 2 or 1) if:**

scores 2 if the candidate does not meet (a) above, or has omissions that would detract from the overall quality response. Significant omissions affecting quality score 1.

**Does Not Achieve the Standard (scores 0) if:**

agrees to start the patient on bupropion; *inadequate* ability to reduce conflict, errors or omissions adversely impact on alliance; inadequately reflects on relevance of information obtained; unable to maintain rapport.

2.3. Category: CONFLICT MANAGEMENT	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 <input type="checkbox"/>	4 <input type="checkbox"/>	3 <input type="checkbox"/>	2 <input type="checkbox"/>	1 <input type="checkbox"/>	0 <input type="checkbox"/>

## GLOBAL PROFICIENCY RATING

Did the candidate demonstrate adequate overall knowledge and performance at the defined tasks?

Circle One Grade to Score	Definite Pass	Marginal Performance	Definite Fail
---------------------------	---------------	----------------------	---------------