1.0   Descriptive summary of station:

To assess Will Schembri, a 69-year-old with a history of depression and concerns regarding decline in his cognition despite an improvement in his depressive symptoms. The aim is to undertake a series of bedside tests and incorporate available information to come to a preferred diagnosis of dementia.

1.1   The main assessment aims are:

- To evaluate the candidate's ability to accurately conduct a range of focussed bedside cognitive tests and discuss their implications.
- To evaluate the candidate's ability to synthesise and integrate information in order to formulate a likely diagnosis.
- To be able to differentiate the preferred diagnosis from differential diagnoses based on cognitive testing and MRI findings (dementia vs depressive pseudodementia).

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

- Accurately perform immediate recall and delayed recall (short term memory) with appropriate instructions.
- Accurately perform at least 2 out of a range of Frontal Lobe tests.
- Accommodate the patient's slowness in a polite and respectful manner.
- Identify cognitive deficits as more likely to be related to Alzheimer's dementia rather than depression.
- Identify the significance of abnormal MRI findings particularly medial Temporal Lobe atrophy.
- Recommend a multidisciplinary approach to management.

1.3   Station covers the:

- **RANZCP OSCE Curriculum Blueprint Primary Descriptor Category:** Mood Disorders, Neuropsychiatric Disorders
- **Area of Practice:** Old Age Psychiatry
- **CanMEDS Domains:** Medical Expert, Communicator, Collaborator
- **RANZCP 2012 Fellowship Program Learning Outcomes:** Medical Expert (Assessment – Physical - Technique; Diagnosis - Investigational Analysis), Communicator (Patient Communication – To Patient), Collaborator (Teamwork - Treatment Planning)

    References:

- The Mental Status Examination in Neurology, Richard L Strub & F. William Black, Fourth Edition, F A Davis Company, 2000.
- Cognitive Assessment for Clinicians 2nd Edition, John R Hodges, Oxford University Press, 2007.
- Lishman's – Organic Psychiatry: A textbook of neuropsychiatry, 3rd edition, Blackwell Science Ltd 1997.

1.4   Station requirements:

- Standard consulting room; no physical examination facilities required.
- Five chairs (examiners x 2, role player x 1, candidate x 1, observer x 1).
- Laminated copy of 'Instructions to Candidate'.
- Role player: Elderly appearing gentleman, mid 60s.
- Pen for candidate.
- Timer and bateries for examiners.

2.0 Instructions to Candidate

You have **fifteen (15) minutes** to complete this station after **five (5) minutes** of reading time.

You are working as a Junior Consultant Psychiatrist in a Memory Clinic. You are about to see Will Schembri, a 69-year-old man referred by his GP, Dr Morris. He has come to your clinic with this referral letter.

Dear Colleague,

Thank you for seeing Will Schembri for a cognitive assessment. I have been treating him for depression and have trialled several antidepressants at adequate doses and for adequate periods of time with marginal effect.

Will is 69 years old and lives in rural Queensland with his wife, Betty. He has been a pretty healthy man otherwise and doesn't have significant cardiovascular risk factors. He had a colonic cancer resected 15 years ago. At a review with me a few days ago his wife reported ongoing concerns about his memory, as he continues to have progressive memory difficulties, and a decrease in initiative and spontaneity despite a subjective improvement in mood.

His current medication is:
* *Sertraline 150mg/day*
* *Melatonin 4mg nocte*

He has previously tried various antidepressants: Venlafaxine, Desvenlafaxine, Nortryptiline, Mirtazapine.

Other relevant history:
* *Two episodes of depression in his forties, which resolved spontaneously without treatment.*
* *No other relevant past psychiatric or medical history.*
* *No allergies.*
* *No relevant drug or alcohol history.*
* *No relevant family psychiatric history.*

Please find attached a copy of his recent MRI Brain Report.

Thank you for your opinion.

Dr Carl Morris.

MRI Brain Report - June 2016:

Diffuse cerebral atrophy with widened sulci and dilatation of the lateral ventricles can be observed. Disproportionate atrophy of the medial temporal lobes, particularly of the volume of the hippocampal formations can be seen. Dilatation of the peri-hippocampal fissure is noticed. The temporal horns of the lateral ventricles disproportionately enlarged. The midline structures have unremarkable appearance.

Your tasks are to:
* To conduct relevant, focussed bedside cognitive testing with Mr Schembri, interpreting the results **to the examiners** as you do them.
* Based on your testing and the MRI findings, present your working diagnosis and a differential diagnosis **to the examiners.**
* Based on your formulation present a management plan **to the examiners.**

You are only required to take history related to your cognitive assessment.

You will not receive any time prompts.

Station 3 - 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:
  - A copy of 'Instructions to Candidate' and any other candidate material specific to the station e.g. investigation results.
  - Pens.
  - Water and tissues are available for candidate use.
- Do a final rehearsal with your simulated patient and co-examiner.

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 are no cues for any scripted prompt.
- 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 **fifteen (15) 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 co-examiner's and your mark sheet in <u>**one**</u> 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 after the <u>final task</u>:

- You are to state the following:

    'Are you satisfied you have completed the task(s)?
    If so, you <u>must</u> remain in the room and <u>NOT</u> 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 activity undertaken in the station and judge it according to the station assessment aims and defined tasks as outlined in 1.1 and 1.2.

When the candidate enters the room briefly check ID number.

You have no scripted introduction and no specific prompts in this station.

The role player opens with:

> *'Hello doctor.'*

3.2 Background information for examiners

In this station the candidate will be judged on whether they can accurately perform a range of relevant bedside cognitive tests and to interpret their findings. This is a critical requirement in order to 'achieve' in this station.

The candidate should then comment on these findings in order to be able to differentiate and consider a preferred diagnosis (dementia vs depressive pseudodementia) as a most likely diagnosis. The candidate needs to recognise that the presentation is most consistent with dementia, with impairments in memory, frontal executive functioning and apraxia. The candidate needs to be able to postulate as to which form of dementia is more likely; based on the MRI Alzheimer's disease is more likely. Better candidates might talk about possible front-temporal dementia, and why it is unlikely to be a subcortical or multi-infarct picture.

The candidate is not expected to do a physical examination or full neurological examination. They may clarify aspects of history and then perform a cognitive assessment that is relevant and accurate. The candidate is not expected to do a complete MMSE, but do relevant sections.

The candidate is then expected to discuss the important elements of a management plan relevant to this patient.

In order to 'Achieve' this station the candidate **must**:

- Accurately perform immediate recall and delayed recall (short term) memory testing with appropriate instructions.
- Accurately perform at least 2 out of a range of Frontal Lobe tests. (e.g. similarities, differences, proverbs, Luria, set-shifting, Go-no-go, verbal fluency).
- Accommodate patient's slowness in a polite and respectful manner.
- Identify cognitive deficits as more likely to be related to Alzheimer's dementia rather than depression.
- Identify the significance of the abnormal MRI findings particularly medial Temporal Lobe atrophy.
- Recommend a multidisciplinary approach to management.

The approach to this task will vary, the candidate may perform tests for functions of frontal, parietal and temporal lobes with an adequate interpretation of these results. Overall expectation is that the candidate will perform sections from a basic MMSE, ACE or MOCA-type screen for orientation, registration, attention and concentration, short-term memory, construction or drawing, language, repetition, executive function and following simple commands. They may also assess tactile perception (tactile agnosias), and praxis. The patient's intelligence and general knowledge may be assessed.

MEDICATIONS:
Melatonin (N-acetyl-5-methoxytrypramine) is often taken to help relieve stress, tension and mild anxiety as well as assisting to relieve insomnia in usual doses between 0.1-6mg. If taken in the morning it is considered to provide stamina and endurance and some people use melatonin for Alzheimer's disease or memory loss (dementia). The most common melatonin side effects include daytime sleepiness, headaches and dizziness. Other, less common melatonin side effects might include abdominal discomfort, mild anxiety, irritability, confusion and short-lasting feelings of depression.

Less common side effects of Sertraline include confusion and drowsiness, and a lack of energy.

COGNITIVE TESTING:
The following is a summary of the common tests that may be undertaken by the candidate, but they are not expected to perform all of these tests and may include some bedside tests that are not a part of this list.

Mini-Mental State Examination (MMSE)

Patient's Name: _____   Date: _____

Instructions: *Ask the questions in the order listed. Score one point for each correct response within each question or activity.*

Maximum Score	Patient's Score	Questions
5		"What is the year? Season? Date? Day of the week? Month?"
5		"Where are we now: State? County? Town/city? Hospital? Floor?"
3		The examiner names three unrelated objects clearly and slowly, then asks the patient to name all three of them. The patient's response is used for scoring. The examiner repeats them until patient learns all of them, if possible. Number of trials: _____
5		"I would like you to count backward from 100 by sevens." (93, 86, 79, 72, 65, …) Stop after five answers. Alternative: "Spell WORLD backwards." (D-L-R-O-W)
3		"Earlier I told you the names of three things. Can you tell me what those were?"
2		Show the patient two simple objects, such as a wristwatch and a pencil, and ask the patient to name them.
1		"Repeat the phrase: 'No ifs, ands, or buts.'"
3		"Take the paper in your right hand, fold it in half, and put it on the floor." (The examiner gives the patient a piece of blank paper.)
1		"Please read this and do what it says." (Written instruction is "Close your eyes.")
1		"Make up and write a sentence about anything." (This sentence must contain a noun and a verb.)
1		"Please copy this picture." (The examiner gives the patient a blank piece of paper and asks him/her to draw the symbol below. All 10 angles must be present and two must intersect.)
30		TOTAL

(Adapted from Rovner & Folstein, 1987)

1

Attention & Sustained Attention/Vigilance/Alertness:
Ability to sustain attention and keep track of events is an important day-to-day function. A disturbance in attention or alertness can lead to vulnerability to interference and difficulty in inhibiting immediate, inappropriate responses. Disorientation to time and sometimes place may occur if attention is grossly impaired. Maintenance of attention requires integrated activity of the pre-frontal cortex, thalamus and brain-stem linked via the reticular activating system.

Alertness is commonly considered to be normal when the patient is awake and fully cooperative. All other tests are impacted if the person is not alert. The patient's basic level of attention can be readily assessed by using the Digit Repetition Test or Serial Sevens Subtraction Test (or months of year/days of week backwards) and his/her orientation (to time and place).

Tests like serial subtraction of 7s or spelling a familiar word backwards (WORLD – DLROW) examines sustained attention i.e. concentration.

*Serial Sevens***:** The candidate should instruct the patient to '***subtract 7 from 100 and keep subtracting 7 from what is left'***. Once they have started, the patient should not be interrupted until they have completed five subtractions. If they stop before the five subtractions the instruction should be repeated.

In recitation of days of week/months of year many of these are familiar and so people have over-learnt the sequence; therefore, capacity for fast and errorless reverse order recitation is a good measure of sustained attention.

Working memory:
Working memory is short-term memory and is critical for cognitive abilities such as planning, problem solving and reasoning. Working memory requires the information to be available and then the ability to manipulate it.

The amount of information that is readily accessible for individuals varies (working memory capacity/span) and so has a relationship to cognitive ability/general intelligence. Distraction, trying to hold too much information at one time, or engaging in demanding tasks can all affect working memory function.

Various components of working memory are responsible for immediate repetition of words, numbers and melodies as well as for spatial information. It works independent of and parallel to long-term memory and its central component is frontal lobe function (phonological memory in peri-sylvian language areas in dominant hemisphere: visuo-spatial in non-dominant hemisphere). Patients are asked to recall immediately after.

Verbal - orally administered test in which respondent mentally re-orders strings of number and letters and repeats them to the examiner.

Digit span, especially reverse, depends on short-term (working) memory, which in turn depends on frontal executive and phonological processes. It is tested by asking the patient to repeat progressively longer strings of digits; usually starting with three. Two trials are given at each level if required, and the digit span is the highest level the person passes on either trial. The numbers should be read at a speed of one per second (like telling someone your phone number). Normal forward digit span is 6±1 depending on age and intellectual ability, and reverse is usually one less.

The bedside test is repetition and recall of a word list as described in the Folstein MMSE; or an address, after a short period of other cognitive activity.

Long-term memory:
Includes learning new information, retaining newly learned information over time and recognising previously presented material and recalling it when needed. Tests measure declarative (explicit) memory which are available to conscious access and reflection. This memory is responsible for the laying down and recall of personally experienced, and highly temporally specific events or episodes (episodic memory), and knowledge of facts and concepts (semantic memory). They both form components of long-term memory.

Frontal Lobe Functions:
Verbal fluency: refers to the ability to produce spontaneous speech fluently without undue word-finding pauses or failures in word searching. Fluency testing evaluates the patient's ability to scan memory traces rapidly in a specific semantic or phonemic category and to produce a series of responses in a given time frame. Verbal fluency is a test of frontal lobe function of initiation (to generate retrieval strategies) and temporal lobes (where basic information is stored).

Two easily administered evaluations are the Animal Naming Test and the FAS test (a controlled oral word association test).

Semantic/semantic fluency: e.g. names as many animals/vegetables/fruit in 1 minute. The patient should be advised to exclude names of people or places.

Directions for Animal Naming: the candidate is to instruct the patient to recall and name as many animals as possible in 60 seconds - any animal from zoo, farm, jungle, water, or house is acceptable.

Scoring: The normal individual should produce from 18-22 animal names during a 60 second period with expected variation being between 5 to 7. Impaired verbal fluency: less than 13 in person 70 years or under.

Directions for FAS Test: FAS test consists of three separate, timed word naming trials using the letters "F" "A" "S" respectively. Different forms of the same word (short, shorter) are counted as separate responses. No proper names count.

Scoring: Normal is 15 words per letter. Reduced Verbal fluency: less than 12 words per letter.

Abstraction: similarities and proverb interpretation: concrete interpretations or an ability to make analogies are common in frontal lobe dysfunction. Start with simple pairs and progress to more abstract (e.g. praise and punishment/poem and statue). People normally form an abstract category although they will generally be able to put forward 3-4 similarities to each pair. Proverbs are highly dependent on emotional level and cultural background.

Go-no-go test: Tests Response Inhibition: The candidate will ask the patient to place a hand on table and raise one finger in response to a single tap, while holding still to two taps - inhibitory control where the patient does not raise their finger to two taps.

Luria 3-step test: test of motor sequencing with set-shifting, which test complex motor movements, particularly associated with left frontal lesions. The examiner demonstrates 'fist-edge-palm' five times WITHOUT verbal clues, and then asks the patient to repeat the sequence. Patients with frontal deficits are unable to reproduce the movements, even if given specific verbal cues.

Alternating hand movements: the examiner holds arms outstretched with one hand open with fingers extended and other with clenched fist. The positions are reversed alternatively in a rhythmical sequence with alternately opening and closing each hand in a rhythmical sequence. The candidate will ask the patient to copy.

Alternating sequences test: examiner produces a short sequence of alternating triangular and square shapes. The patient is asked to copy the sequence and continue it to the end of the page. There should be no repeats of one shape.
May also include brief evaluation of **Frontal Lobe release reflexes** - Grasp reflex, Sucking (pout, snout, rooting) reflex, Palmo-mental reflex, Glabella tap.

The candidate may assess Parietal Lobe functions and the assessment may feature the following elements:

Bilateral
- Astereognosis (tactile agnosia) – inability to recognise objects by palpation e.g. coins, keys placed in hand(s).
- Agraphaesthesia – inability to name/recognise letters or numbers 'written' on the hand with eyes closed.
- Ideational apraxia – inability to conceptualise and complete multi-step tasks e.g. licking an envelope and putting a stamp on it.
- Ideomotor apraxia –inability to execute a request on command (they can do it automatically) e.g. asked to flip a coin, or do 3 step command.

Dominant hemisphere
- Agraphia/dysgraphias – copying defect (dyspraxic), wide margin or mis-spelling of initial word (neglect), writing or spelling difficulties (general linguistic).
- Acalculia – disturbance in the ability to comprehend or write numbers properly.
- Left-right disorientation – disorder in demonstrating the correct hand (or other part of the body) to command.
- Finger agnosia – inability to name fingers to inability to move a finger when given its name.
- Aphasia – loss or impairment of language function; conductive - having difficulty with repetition and naming but comprehension relatively spared.
  (Gerstmann's syndrome: dysgraphia, dyscalculia, right-left disorientation, finger agnosia associated with lesions of angular gyrus)

Non-dominant hemisphere

- Asomatognosia – inability to recognise parts of the body e.g. "What part of the body is this?"
- Constructional apraxia (visuospatial agnosia) – inability to draw shapes, copy diagrams that require visual-spatial organisation e.g. drawing a clock, copying intercepting pentagons
- Dressing apraxia
- Neglect phenomena – personal, motor and sensory or extrapersonal
- Amusia – inability to recognise musical tunes

Constructional Ability

A high level, non-verbal cognitive function, constructional ability is a very complex perceptual motor ability involving the integration of occipital, parietal, and frontal lobe functions. Both two and three-dimensional drawings are used. The instructions can be: *'Please draw a picture of a clock with the numbers and hands on it';* followed by asking the patient to '*Set the time as 11:10 or 10:20'.* Others include asking the patient to draw a daisy in a flowerpot; or a house in perspective so that you can see two sides and the roof.

The candidate is expected to be able to differentiate dementia from a depressive pseudodementia.

	Dementia	Pseudodementia
Onset Course Distress	Insidious Progressive Usually none	Acute and recent May appear normal at times Depressed and distressed
Insight into memory loss Quality of responses Pattern of responses Principal deficit	Poor Attempts tests May point to specific areas or deficits Higher cortical function	Complains about this Often does not try Inconsistent responses Inattention, slow responses

MRI

The most common cause of dementia is Alzheimer disease. Current diagnosis is made by clinical, neuropsychological, and neuroimaging assessments. Routine structural neuroimaging is based on nonspecific features like atrophy, a late feature in the progression of the disease. Neuropathologic changes underlying Alzheimer disease first occur in the medial temporal lobe. Structural neuroimaging is focussed on detection of medial temporal lobe atrophy (MTA), particularly of the hippocampus, parahippocampal gyrus (including the entorhinal cortex), and amygdala. In early Alzheimer's disease, the medial temporal lobe shows specific volumetric reduction, and the accurate identification of atrophic changes requires detailed anatomic knowledge. A marker for Alzheimer disease is atrophy of the hippocampus and associated dilatation of the peri-hippocampal fissures.

Management

Need to take a multi-disciplinary approach to management:

- Exclude any treatable symptoms of depression or other physical disorders that may be causing this picture.
- Gain collateral with regard to prior history that could indicate other forms of dementia like vascular dementia.
- Consider any role of medications, e.g. acetylcholinesterase inhibitors or antipsychotics.
- Understand the rationale for the current treatment including their duration and impact.
- Conduct more in-depth neuropsychology testing and consider other necessary investigations.
- Assess impact on function and capacity to manage independent living.
- Review the level of carer burden and explore possible options for support in the community.

3.3 The Standard Required

In order to:

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

Achieves 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 medicolegal 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 wellbeing 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 Will Schembri and you have been referred by your General Practitioner Dr. Morris – your wife, Betty, told you that you needed to come to the appointment.

It is unlikely that the candidates will ask you about your personal details and your current wellbeing – the following information is provided in the event that they do:

You are a 69-year-old man, and have retired from your work in 2012 where you were involved in making doors at a factory. You live in your own home in Kingaroy, a small country town, with your 70-year-old wife Betty, to whom you have been married for 50 years. You have a happy relationship with your wife and describe her as a very good support. You have 2 sons, Roy 42 and Mark 41, both of whom are married and live in Brisbane. You have no grandchildren.

You were born in rural Victoria to parents who worked as cattle farmers. You were one of 9 children. Your parents were quite busy and at times money was tight but there was always enough food on the table, and your needs were adequately met. You were a generally average student and completed intermediate level at school.

Thereafter, you moved to Queensland, completed a building apprenticeship and built your current house during your apprenticeship. You worked in the same company for 30 years and were promoted to a foreman, and put in charge of major hospital works and other significant structures.

You were diagnosed with colonic cancer 15 years ago for which they removed part of your intestine. You do not have a bag attached to the outside of your body after the surgery, nor did you need chemotherapy or radiation therapy. You do not have any ongoing symptoms or problems from the cancer.

You are a non-smoker and drink a beer every evening. You have never had any problems with alcohol. You have never experimented with any drugs.

Past Psychiatric History:

You have had couple of periods of low mood and anxiety, which have resolved quickly without any medications in the past. This occurred when you were in your 40s and you do not remember much about it – you prefer not to think about those times as they are now behind you.

Current History:

- You began to lose confidence in yourself and started to get overwhelmed in work demands, and retired from work around 4 1/2 years ago. Your felt sad at the time and lacked enthusiasm and energy.
- You have always been a bit of a loner and never had many interests besides being a good provider for your family, and so cannot comment if these have changed.
- Your sleep was not too bad, 5-6 hours every night and you did not lose your appetite.
- You never felt suicidal.
- You consulted your GP and he gave you some medicines – you do not remember the names but the GP told you he had sent a list in his referral letter. You have never had 'shock treatments' (ECT – electroconvulsive therapy).
- You have been feeling better in your mood, but Betty is worried about your memory and wants you to get checked out.

4.2   How to play the role:

You are adequately groomed man who responds in a polite and cooperative manner to the candidate. However, you do not show much emotion on your face, with limited smiling and you tend to stare at candidate rather blankly. You are slow in your movements and speech. You do not offer information spontaneously, but give accurate information as scripted. You will sit still and not make any abnormal/unusual movements.

You speak slowly, softly, and respond to questions asked. Your speech is mostly unspontaneous and you do not speak unless spoken to. You report your mood as OK. You have difficulty providing time frames for recent events. And so say "I think' or 'approximately' if asked to specify when recent events occurred.

You are willing to undertake the cognitive testing (of your brain function) as suggested by candidate – **please see specifics below under section 4.5**. If asked to complete a drawing (constructional) task you become quite anxious and overwhelmed, and are unable to do it accurately.

If asked you are also unable to do alternating hand sequences (will be explained to you at training). If asked to do 'remember and recall' three unrelated words, you are unable to complete this task accurately, even with cues.

NB: Please practise all the likely tasks as a group so that your responses are similar to other role players.

4.3   Opening statement:

After the candidate introduces themselves say:

> *'Hello doctor'*

4.4   What to expect from the candidate:

The candidate should introduce themselves and commence testing various abilities related to the functioning of the brain by giving you detailed instructions and expecting you to follow the commands/directions. These tasks can involve testing memory about events in your life (based on the script provided); testing date, day, time, place, language, concentration, general knowledge; drawing/copying things, and possibly some physical tasks.

4.5   Responses you MUST make - to memory and cognitive testing:

Actions to be done <u>INCORRECTLY</u>:

Drawing: You may be asked to draw interlocking pentagrams, a cube and/or a clock face (see diagrams)
- Clock face: unable to put numbers inside clock symmetrically.
- Pentagrams are slightly rotated so don't really look like the picture you will be shown.
- If asked to copy other diagrams, you have difficulty doing so.

Concentration: If asked to '***subtract 7 from 100 and keep subtracting 7 from what is left'*** (serial 7's) you go wrong after 2nd. You say: 93…888…80. Then give up. If the candidate does not give the full instruction – start exactly as they tell you to.
You can repeat numbers up to 5 numbers forwards – but you are not able to do more than 2 numbers in reversed order.
You are slow on saying months of the year backwards - please leave one month out towards the end. You can, however, repeat days of the weeks backwards.

Fluency: If asked to say as many words as possible in one minute starting with a particular letter – say at least 5 words. If asked to name animals, supermarket items, or something similar in one minute – say at least 7 words.

Similarities: You can do easy but not hard similarities e.g. banana and orange: what you eat, bicycle and aeroplane – both have wheels as opposed to 'they are forms of transport'; East and West – 'East' there (pointing) and 'West' there (pointing).

Proverb interpretation: If not sure - say "I don't know", otherwise rephrase and repeat the proverb. For instance, "A stitch in time saves nine" - say 'if I do one stitch now I won't need to do nine stitches later'.

Memory: In the 'Three Unrelated Word' test, you will be able to repeat them immediately. After a few minutes you are unable to recall any at all, even if given cues.

General knowledge: For instance, if asked about issues in the distant past like politics etc., answer them as best you can. For more recent memory, e.g. recent general elections – you know they were held recently but you do not recall the name of PM.

Physical tasks: If asked to show how you would do simple imaginary actions, e.g. blow out a match, do it slowly. For more complex imaginary actions, e.g. pour liquid into a glass and stir it: do it slowly, with a bit of hesitancy as trying to work out what step comes next. Cannot do three stage commands.

Luria (fist-palm-edge): Follow the instruction but with slow response, persevere with the same edge and look a bit perplexed.

Go-No-Go: Imitate the examiner's movements – one tap one tap; two taps two taps.

Calculation: Do as well as you can.

Orientation: You should answer questions correctly in the following domains: You are oriented in time, place and person.

Language: You can repeat sentences back to the candidate as they said them; you can write a simple sentence, and you understand most questions and commands; you are able to solve simple problems; you can spell WORLD backwards - correctly but you are a bit slow.

4.6   Responses you MIGHT make:

'I'm not losing my marbles.'

Anticipated Question: How is your mood?
Scripted Response: It's alright, I guess. It's just my energy is a bit down.

Anticipated Question: Do you have problems with your memory?
Scripted Response: I don't think so. Betty seems to think there is a problem.

If the candidate attempts to explore other symptoms not described or take more information about your past history respond with:

   'Dr Morris asked all this stuff and said I was just coming here for a memory check.'

4.7   Medication and dosage that you need to remember:

- Sertraline tablets 150milligrams each day
- Melatonin tablets 4milligrams at night

Previously you have tried various antidepressants but you do not remember the names.

STATION 3 – MARKING DOMAINS

The Main Assessment Aims are:

- To evaluate the candidate's ability to accurately conduct a range of focussed bedside cognitive tests and discuss their implications.
- To evaluate candidate's ability to synthesise and integrate information in order to formulate a likely diagnosis.
- To be able to differentiate preferred diagnosis from differential diagnoses based on cognitive testing and MRI findings (dementia vs depressive pseudodementia).

Level of Observed Competence:

1.0   MEDICAL EXPERT

1.5   Did the candidate demonstrate adequate and accurate technique and appropriate range in the selected bedside testing? (Proportionate value – 30%)

Surpasses the Standard (scores 5) if:
performs bedside testing without any flaws/errors in any test; is able to complete tests in a well organised and efficient manner covering a variety of domains of cognitive assessment.

Achieves the Standard by:
choosing relevant cognitive tests; applying selected tests in a generally accurate manner; using tests that would assess attention, concentration, memory; providing correct verbal instructions; testing for functions for various lobes of the brain; performing the Clock Drawing Test.

To achieve the standard *(scores 3)* the candidate **MUST:**

a. Accurately perform immediate recall and delayed recall (short term memory) testing with appropriate instructions.
b. Accurately perform at least 2 out of a range of Frontal Lobe tests.

A score of 4 may be awarded depending on the depth and breadth of additional tests covered; the candidate includes a variety of tests and administers them accurately.

Below the Standard (scores 2 or 1):
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:
demonstrates incorrect technique for most of the bedside testing utilised.

1.5 Category: ASSESSMENT Physical - Technique	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐	0 ☐

2.0   COMMUNICATOR

2.1   Did the candidate demonstrate an appropriate professional approach to gathering information from patient? (Proportionate value - 10%)

Surpasses the Standard (scores 5) if:
able to generate a complete and sophisticated understanding of complexity; effectively tailors interactions to maintain rapport within the therapeutic environment while taking into account the patient's cognitive limitations.

Achieves the Standard if:
demonstrates empathy and an ability to establish rapport; forming a partnership using language and explanations tailored to the functional capacity of the patient; managing challenging communications; containing behavioural abnormalities; using clear instructions tailored to the functional capacity of the patient.

To achieve the standard *(scores 3)* the candidate **MUST:**

a. Accommodate patient's slowness in a polite and respectful manner.

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

Below the Standard (scores 2 or 1):
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 scores 1.

Does Not Achieve the Standard (scores 0) if:
materially adversely impact on alliance; inadequately reflects on relevance of information obtained; unable to maintain rapport.

2.1. Category: PATIENT COMMUNICATION – To Patient	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐	0 ☐

1.0   MEDICAL EXPERT

1.10   Did the candidate interpret bedside cognitive testing and the MRI report correctly in formulating a diagnosis and differential diagnosis? (Proportionate value - 30%)

Surpasses the Standard (scores 5) if:
demonstrates a superior performance linking relevant investigations with the MRI report; considers possible causal factors for dementia; clearly justifies why this is more likely to be dementia rather than pseudodementia.

Achieves the Standard by:
accurately interpreting the results and incorporating them into a relevant diagnostic profile - any errors are minor and do not materially adversely affect outcomes; using appropriate phenomenological terms to interpret findings; preferencing dementia over pseudodementia; commenting on the type of likely dementia (Alzheimer's); indicating that depression has responded to treatment. Identify MRI findings viz: ventricular enlargement, grey matter atrophy, medial temporal lobe atrophy.

To achieve the standard *(scores 3)* the candidate **MUST:**
a. Identify cognitive deficits as more likely to be related to dementia rather than depression.
b. Identify the significance of the abnormal MRI findings particularly medial Temporal lobe atrophy.

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

Below the Standard (scores 2 or 1):
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:
inaccurate or inadequate interpretation of findings; focusses on depression as the primary diagnosis; errors or omissions do materially adversely effect conclusions.

1.10. Category: DIAGNOSIS - Investigation Analysis	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐	0 ☐

3.0   COLLABORATOR

3.2   Did the candidate appropriately involve the treatment team in developing a management plan? (Proportionate value - 30%)

Surpasses the Standard (scores 5) if:
takes a leadership role in treatment planning; effectively negotiates complex aspects of care; considers impact on the carer and respite and support for wife; considers involvement of a neurologist for ongoing management.

Achieves the Standard by:
proposing a plan to confirm the dementing illness; collecting collateral information from the wife; taking a biopsychosocial approach to treatment planning; including further neuropsychological testing and brain scanning; rationalising medications; engaging other health professionals including the GP and community support services; taking appropriate and effective leadership to ensure positive patient outcomes.

To achieve the standard *(scores 3)* the candidate **MUST:**
a. Recommend a multidisciplinary approach to management.

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):
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 scores 1.

Does Not Achieve the Standard (scores 0) if:
utilises only pharmacotherapeutic approach in further management; prescribes ECT without any further investigations as treatment of choice; errors or omissions impact adversely on the finalised plan.

3.2. Category: TEAMWORK - Treatment Planning	Surpasses Standard	Achieves Standard		Below the Standard		Standard Not Achieved
ENTER GRADE (X) IN ONE BOX ONLY	5 ☐	4 ☐	3 ☐	2 ☐	1 ☐	0 ☐

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