

Teaching the diagnosis of dementia

As an experienced GP, you understand the complexity of diagnosing a dementia with certainty. Imagine then, the difficulty diagnosing a dementia with certainty poses a registrar.

Despite an ageing population and expected increase in the number of dementia diagnoses, a 2018 GPSA webinar poll revealed the majority of participating supervisors had not yet taught their registrar about dementia.

This resource is aimed at helping you teach your registrar to identify dementia with greater certainty, and demonstrate how to deliver a diagnosis of dementia.

Why should I talk to my registrar specifically about dementia?

It is believed more than 50 per cent of patients with moderate to severe dementia are unrecognised by GPs as having cognitive impairment. This is a problem we need to address with registrars to avoid people with dementia (and their family) encountering:

- Service fragmentation
- Poor knowledge of dementia
- Stigma
- Family crisis

Your registrar needs to understand the importance of early assessment to provide appropriate support, information and medication.

How can I best define dementia when teaching my registrar?

Dementia is a progressive, global, life-limiting condition that involves generalised brain degeneration. It affects people in different ways and has many different forms.

The community struggles with the idea that dementia is a terminal illness, so it is important to emphasise this reality to your registrar. You also need to emphasise that while there will be similarities between cases, no two patients will present the same.

Do registrars get adequate exposure to patients with dementia?

It is vital registrars are exposed to older patients during their training to gain experience and confidence in diagnosing and caring for dementia.

However, data from clinical encounter research project, RECENT, shows registrars see fewer older patients than vocationally registered doctors. This can lead to reduced aged-care experience and teaching opportunities for registrars, despite an ageing population and a forecast increase in diagnoses of dementia.

RECENT suggests new diagnoses of dementia in Australia to be:

- 250 people per day in 2018
- 318 people per day by 2025
- 650 people per day by 2056

How can I ensure my registrar is exposed to older patients, and in particular have experience seeing patients with dementia?

As a supervisor, you need to teach and talk about dementia with your registrar. But furthermore, you and your practice team can role model a comprehensive, team-based responsibility for dementia identification and care.

Include your registrars in nursing home rounds and home visits, so they gain a lot of exposure to aged care.

Another strategy by some medical practices to bring dementia identification and care to the attention of registrars is to use a cognitive assessment tools (eg MMSE or GPCOG) for patients older than 75 perhaps as part of an annual Health Assessment.



What is the role of cognitive assessment tools and what should I teach my registrar on how to use it for dementia?

It is important to understand that a cognitive assessment tool is neither a screening tool nor a diagnostic tool. Teach the registrar to be aware of the limitations of that tool. The outcome maybe falsely positive or negative and does not replace clinical judgement. However, a cognitive assessment tool can be very useful to assist in supporting a diagnosis of dementia or tracking a person's cognition over time. They have a better predictive value if the patient already has cognitive decline.

Talk to your registrar about the tools which are available. It is impotent that they find a cognitive assessment tool they are comfortable with, AND is also appropriate for the patient's level of education and cultural background, and actually use it.

Commonly used assessment tools are:

- General Practitioner Assessment of Cognition
 (GPCOG) The GPCOG involves a cognitive test for the patient and, if the result is uncertain, a short interview with an informant. The cognitive test takes less than four minutes and includes the clock drawing test. This online tool also allows for parent/partner or carer input and is available at www.gpcog.com.au
- Mini-Mental State Examination (MMSE) The MMSE takes about 10-15 minutes to administer and should be used in conjunction with the clock drawing test as a supplementary test of frontal abilities. The MMSE is convenient to use because it is part of the Medical Director and Best Practice software packages, and most of the PBS criteria uses the MMSE.

For more information about the GPCOG, MMSE and other validated case-finding tools, see GPSA teaching plan Diagnosing Dementia at http://gpsupervisorsaustralia.org.au/teaching-plans/

How can I find teaching opportunities about dementia outside of a scheduled teaching session?

Teaching opportunities can arise during the course of a regular working day, and GP supervisors should use these opportune moments. Consider the following scenario, for example:

Registrar (to supervisor):

"Anna, 75 years, is coming to see me this afternoon for a flu shot.

She seems to have missed appointments to have her blood pressure prescription filled and she is late for her flu vaccine.

She lives on her own but has a daughter close by.

I'm not sure if she is even taking her medication as she doesn't seem to be aware that the prescription has run out

Her daughter contacted me to say she is a bit worried about her too. I'm not sure what's going on."

There are numerous teaching opportunities here. For example, you could:

- Reflect back to your registrar, "What are the possibilities of what is going on here?"
- Recognise what is going on with Anna doesn't sound right. You don't always have to come up with a diagnosis, simply recognise that something is going on.
- Ask the registrar, "What are your concerns?"
- "What are the possible diagnoses you thinking about?" and "How would you gather more information to collaborate that? What other investigations could you do?"
- Discuss the case further by doing a case analysis, or practise how the registrar could approach the consult when Anna comes for her flu shot. For example, "Would you like to practise what you could say?"
- Offer to supervise the consultation. For example, "Well,
 I will sit with you while you do the consultation with Anna
 and we can talk about it afterwards."
- Discuss how the registrar may broach the subject of having Anna do a memory test.





VIDEO RESOURCE: Patient Anna

Anna's consultation with the doctor is demonstrated in Dementia Training Australia video **GP Consent for Collaborative History** at https://vimeo.com/

This video resource is useful to watch with your registrar during a teaching session on dementia.

The ability to stop and start the video at different points allows for discussion, which you cannot do while sitting in a real-time consultation. For example, you could stop the video at various points and ask your registrar questions such as:

"What do you think is going on here?"
"What could be done differently?"

When I am teaching my registrar about early warning signs for dementia, what sort of things could I ask them to think about?

It can be reassuring for the registrars to know it is not only their responsibility to recognise early warning signs of dementia. So, you really should be engaging the whole of the practice.

For example, receptionists and nursing staff may alert you or your registrar about a patient's cognitive and functional problems, as well as your registrar learning to be on the lookout for the following:

Cognitive problems

- Trouble recalling time or date, events or conversations.
- Losing items.
- Repetitive questioning.
- Inability to follow the plot or story.
- Making bad decisions.

Functional problems

- Difficulty working remote control.
- Forgetting bank pin.
- Change in cooking patterns.

Personality changes

- Withdrawal and/or inertia.
- Inflexible attitude or stubbornness.
- Irritability.

Specific incidents

- Delirium.
- Confusion or unhappiness in strange environments.
- Neglect of long-established behaviour, such as writing Christmas cards to family and friends.







VIDEO RESOURCE: Patient Anna

Again, refer your registrar to the Dementia Training Australia video example about Anna, **GP Consent for Collaborative History** at https://vimeo.com/

You can discuss observations from the video consult.

- 1. You could start the discussion by saying: "Anna seems to be having some memory problems, which is what we always associate dementia with, and what we see first in terms of cognitive problems."
- 2. Ask the registrar to give examples of what Anna had trouble recalling, prompting discussion about: Anna forgetting to take her medication; forgetting to present for a flu vaccine; leaving the stove on at night; starting to make some changes to her usual habits, for example lost interest in gardening. This way, you and your registrar first discuss Anna's cognitive and functional problems, and also personality changes.
 - 3. There are a few specific incidents that might come to the attention of the registrar. For example, a patient with dementia has a low cognitive reserve. You can then explore this further by giving other examples, such as:
 - "If a person has a low cognitive reserve gets a urinary tract infection, or a chest infection, they may experience a delirium. So, if your patient is admitted to hospital and comes back with a discharge of having a delirious episode, that could be a warning sign that this patient has a low cognitive reserve, and warrants further investigation once the patient is well."
 - Or, you may discuss examples your registrar should be on the lookout for, such as the patient's confusion, as noticed by their family:
 - For example, "Dad used to love going out for a Chinese meal, but now really hates going to the restaurant and says he never liked Chinese food."
 - You can also speak to your registrar about taking notice of family observations about a patient's change in long-standing behaviour.
 - For example, "Mum used to always send the children \$5 for their birthday, but she doesn't seem to be doing that anymore."



One of the difficulties with dementia is there is no one single diagnostic test to teach registrars, such as there is with diabetes for example. So, how do I encourage my registrar to consider dementia in a diagnosis?

If your registrar suspects dementia, you might discuss with them about using recalls to help ongoing monitoring of the patient's cognition, known as Cognition for Monitoring (CFM).

If your registrar, or yourself has a concern or thinks "Things just don't add up here", ensure a reminder is placed in the patient's notes to do a dementia screen or GPCOG next time the patient has an appointment.

What advice can I give my registrar about referral criteria for dementia?

With an increasing number of patients presenting with dementia to general practice, and given as GPs we know our patients very well, GPs are very well placed to diagnose the bulk of dementias. For example, Alzheimer's, vascular dementia, mixed picture dementia, and some Lewy body dementia may be confidently diagnosed in general practice. You can offer to support your registrar in the diagnostic process for these conditions. However, your registrar should be encouraged to refer younger onset or atypical presentations to a geriatrician or appropriate local resources.

What are the major barriers for registrars diagnosing dementia?

Diagnosing dementia is a difficult thing to do for experienced GPs, so imagine the uncertainty a registrar must encounter. Barriers they face include:

- Time to take a collaborative history.
- Ability to get a collaborative history.
- Confidence.
- Knowledge.
- Adequate support (supervisors can provide this).

What can I teach a registrar who asks about the importance of early diagnosis of dementia as opposed to a wait and see approach?

FREQUENTLY ASKED QUESTIONS

Emphasise to your registrar that the consequences of not recognising dementia early include:

- Failure to intervene symptomatically.
- Failure to provide assistance for ADL dysfunction.
- Missed opportunities regarding acetyl-cholinesteraseinhibitor (ACHEI) treatment; power of attorney; will; and advance care planning.
- Dangerous decision-making.
- Struggling families, misunderstanding.
- Placement and long-term planning issues.

The following is an example of what you can tell your registrar:

"The problem with not diagnosing dementia early enough is a missed opportunity to intervene and help improve the patient's symptoms and quality of life. Missing an early diagnosis means we are not able to provide any assistance for the deficits they are experiencing. Things like trying medication (although medication is very limited, we really need to be trying it early in the disease); and setting up their power of attorney; ensuring wills are in order; and ensuring there is an advanced care directive while the patient is still able to do these things.

We also know that while there are some cognition problems there, people can make quite dangerous decisions. Missing an early diagnosis can impact on families and carers who are struggling with their behaviours, such as their loved one being difficult to manage and repeated questioning, etc.

An early diagnosis gives the patient the opportunity to look at what to do in the future. For example, they might want to look at nursing homes. An early diagnosis helps get a patient at the centre of their management."



How can I approach talking to my registrar about taking a collaborative history?

You should talk to your registrar about including a carer or family member when they are taking a collaborative history of a patient they suspect may have dementia.

Talk to your registrar about the importance of getting the right people involved; setting up the right environment; and making sure there is enough time.

For example, you could say to your registrar: "It is not often a patient will come to you and say, 'I have got a cognitive problem', it's more likely to be a family member, carer or someone else, such as a practice nurse.

Given that the cognitive concerns are more likely to be raised by someone other than the patient, you will have background work to make it easier to set up the right environment – choosing the right people to be involved and making sure you have enough time to take a collaborative history. So, setting up all these things, and doing all that background work, will make things easier."

How can I teach my registrar strategies to take a collaborative history?



VIDEO RESOURCE: Patient Anna

After watching and discussing the **GP Consent Collaborative History** video with your registrar, watch Dimentia Training
Australia's follow-up video **GP Taking a Collaborative History** at https://vimeo.com/262115486

In summary, this video shows patient Anna's daughter Sophie meeting with the doctor.

Sophie explains her mother has become much less active, less social, fearful of leaving the house, and behaving out of character, such as not always getting dressed despite normally being meticulous about her appearance.

Sophie says she was unaware her mother had not been taking her medication.

The doctor asks Sophie whether she has considered dementia, and explains the memory test Anna is doing with the practice nurse will help him gather more information.

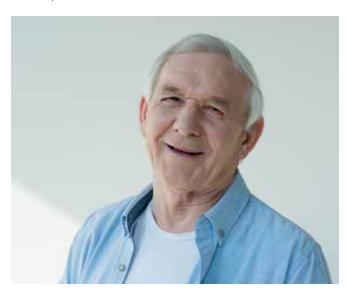
This video demonstrates how a doctor can ask open-ended questions while taking a patient's collaborative history with a family member. While it is a great teaching resource for dementia in particular, it is also a useful tool for teaching effective communication skills to your registrar.

How can a registrar distinguish if a patient's memory loss is a 'normal part of ageing' versus early signs of dementia?

Your registrar needs to be aware most people start to experience some memory loss as they get older but that it shouldn't be impacting on their functional capacity. So, it is important for registrars to have a system to diagnose dementia. One of the important messages you can teach your registrar is, that if a patient has dementia, they will get the much of the needed information by taking a collaborative history from the person closest to the patient.

The diagnosis of dementia is based on history: examination; investigation = 80:10:10.

So, encourage your registrar to involve the right people in the collaborative history. It may be the patient's spouse, son/ daughter, or a mixture of family members, close neighbour and/or paid carer.





What diagnostic criteria can I teach my registrar for Alzheimer's and vascular dementia?

The Diagnostic and Statistical Manual of Mental Disorders (DSM) provide inclusion and inclusion factors that can help with the diagnosis of dementia. However, the DSM-4 and DSM-5 classifications are quite complex. The following is a simplified version that can be helpful for registrars:

Inclusion factors

- Gradual onset of poor memory.
- Worsening of memory problem.
- Failure of function.
- Cortical dysfunction dysphasia, agnosia, dyspraxia.
- For vascular dementia, add neurological sign or CT evidence of stroke.

Exclusion factors

- Delirium.
- Other organic cause.
- Psychiatric illness.

How can I teach my registrar to be alert to how 'cover-ups' of a patient's cognitive deficits or memory problems have hidden their gradual onset of poor memory?

During a dementia teaching session with your registrar, discuss how some patients and their families or carers may knowingly or unsuspectingly develop 'cover-up' strategies to manage cognitive deficits or **gradual onset of poor memory**.

For instance, you could give the following example:

"Dad might suddenly have taken over the cooking from Mum because she is not doing it so well. He gradually takes over more and more of Mum's tasks, so that no-one is aware of her cognitive deficits or memory problems. But when Dad dies, Mum's problems become a lot more evident.

So, for the family it may appear to be a sudden problem, but when doctor and the patient's family go back through her history, they may realise it was indeed a gradual onset." Remind your registrar, memory loss must be a worsening problem when considering dementia. For example, if a patient's daughter says "Oh, Mum's terrible at remembering the grandchildren's birthdays," teach your registrar to probe whether this is a historical problem, or a new and worsening issue. For example, "How was she at remembering their birthdays in the past?" or "How long has she struggled to remember their birthdays?"

How can I stress to my registrar memory loss must be accompanied by a loss of function if considering dementia?

Remind your registrar that cognitive concerns are more likely to be raised by someone other than a patient with dementia.

So, if a patient presents saying they are worried about dementia because they are finding it difficult to remember people's names or appointments, your registrar needs to determine if they are also experiencing a **loss of function**.

Your registrar's questioning may then reveal the patient is functioning at a high level in their work place, or as a carer for young children or elderly parents. Explain to your registrar, dementia is not the cause of the patient's memory loss if they are functioning at a high level.

How can I teach my registrar strategies for testing for cortical dysfunction?

Speak to your registrar about some of the simple tests they can do – and then get them actively learning by doing some tests themselves. Actively doing the tests is a great teaching strategy to help your registrar remember these tests for future use with patients. The idea of a registrar doing things and not just listening to you really helps cement their learning. For example:

- **Dyspraxia** Ask your registrar to name objects which start with the letter P (piano, pen, prints, pole, etc), and as many animals they can think of which start with the letter H (hen, hare, hippopotamus, etc).
- Agnosisa Point to objects and ask your registrar to name them. For example, your pen or watch. Explain that most people will remember how to name general things like pens and watches, but then ask them to identify more sophisticated objects, such as: "What is this around my neck?" (Answer: stethoscope). "What is this beside my desk?" (Answer: a briefcase). "Who am I?" (Answer: My supervisor/doctor).



• Apraxia - Simple ways of teaching your registrar how to test for functional issues include "Show me how you brush your teeth?" They may hold an imaginary toothbrush and circle it around their teeth, demonstrating they are using an 'instrument' to brush their teeth. Explain that a person with dementia, asked to perform the same function, may simply rotate their hand in front of their mouth and not use the imaginary tool (toothbrush) they would ordinarily use.

*If the registrar and yourself are considering vascular dementia, discuss the need to add in a neuro sign, examination, or CT evidence of small vessel disease/stroke, plus-minus the risk factors of vascular disease.

What tips can I give my registrar about exclusion factors for a diagnosis of dementia

- **Delirium** We can't diagnose a dementia in the setting of delirium, but delirium should be a red flag the patient may have a low cognitive reserve. The delirium may unmask a dementia.
- **Depression** A dementia cannot be diagnosed in the setting of a concurrent psychiatric illness.

You can speak to your registrar about some visual prompts which may help them 'unpick' a dementia versus a depression. For example, explain to your registrar if a patient comes in with a depression, they are going to have to 'unpick' that in the patient's history and via examination.

A useful visual prompt to offer your registrar can be explaining that a person who comes in very depressed may look down at their hands and not engage well with the doctor. Whereas, a person with dementia may have their head turned to the side. So, if they come in with a carer and the doctor asks the patient a question, such as "How have you been?" or "How are you going with your medications?" the patient may turn their head directly to their carer to seek assistance to answer. While this is a fairly rudimentary way of 'unpicking' a dementia versus a depression, registrars find great value in visual tips like these.

• Other organic cause - A dementia cannot be diagnosed if there is any other organic cause for the cognitive impairment. For example, vitamin B12, thyroid dysfunction, etc. Ask your registrar to list other organic causes which could cause cognitive impairment – and discuss while these organic causes are not often found, if they are, they can be fixed – and then they can evaluate for dementia later, if required. (Note: Asking your registrar to list a specific number of organic causes also helps them practise college exam technique).

Keeping in mind the way the college exam is set out, you could ask your registrar: "What are five key investigations with a patient you are considering making a diagnosis of dementia?" Committing to a specific number of answers will help the registrar learn about dementia, and also practise exam technique. You can then discuss any/all of the following examples as tests for excluding other diagnoses:

- FBC, ESR or CRP
- Clinical chemistry including calcium
- Thyroid function test
- B12, folate
- Urine MCS
- Fasting glucose, lipids
- Serology for HIV, syphilis
- ECG CXR (EEG)
- CT san of brain (without contrast)
- Neuropsychological assessment. (Note: Expensive and time consuming, but may be helpful with atypicals, such as younger patients).



My registrar has diagnosed a patient with dementia and is nervous about delivering the news to the patient and their family? How can I help my registrar in this situation?

A registrar is likely to have no (or little experience) delivering news of a dementia diagnosis to a patient and their family. So, it is important you have a discussion – and even practice – good principles of how they can deliver the diagnosis.

Before delivering the diagnosis, you and your registrar should:

- Discuss realistic goals about how much information the patient and their family will be able to absorb – so, being clear about what information they need to communicate.
- Consider who needs to be in the room.
- Ensure there is ample time to deliver the news, without interruptions (your registrar should inform reception he/ she cannot be interrupted during this appointment).

During the appointment, the registrar should:

• Establish the patient/family/carer's baseline knowledge.

For example, "What do you think is going on?" or "What do you already know about dementia?"

- Use the term dementia.
- Initially use general breaking bad news rules:
 - 1. Small pieces of information x 3.
 - 2. Give a bit of hope.
 - 3. Follow-up, resources.



VIDEO RESOURCE: Patient Anna

Watch Dementia Training Australia video **GP Conveying Dementia Diagnosis** at https://vimeo.com/262115048

In summary, Anna's doctor meets with her and daughter Sophie, two weeks after the initial appointment (see previous videos GP Consent Collaborative History and GP Taking Collaborative History).

The doctor says, "I have had a look at all your results and the blood tests are normal and your brain scan showed no sign of brain tumour. So, what that means is the likely diagnosis for the changes that have occurred for you over the last six to 12 months is a form of dementia. What do you already know about dementia?

I can explain it to you and I can suggest places where you can find more information, so you can look it up because there is so much for you to take in today...."

Ask your registrar to reflect on the video. For example, "What do you think went well?"

Then list what you think went well. For example, the doctor had the right people in the room (patient and daughter); gave hope ("the blood tests are all normal and brain scan showed no sign of brain tumour"); used the word 'dementia'; checked their baseline understanding; and was realistic about how much information to give during that consult, referring to resources and further discussion.

Dementia - Diagnosis and **Dementia - Management** Teaching plans are currently available at http://gpsupervisorsaustralia.org.au/teaching-plans/