

# KICA



*Kimberley Indigenous  
Cognitive Assessment*

The KICA was developed in response to the need for a validated cognitive screening tool for older Indigenous Australians living in rural and remote areas.

The KICA-Cog section is validated with Indigenous Australians aged 45 yrs and above from the Kimberley and Northern Territory. A score of 33/39 and below indicates possible dementia. Those with a low KICA-Cog score should be referred to a doctor for medical screens to rule out other causes of cognitive impairment, some of which are reversible, or to substantiate dementia. The informant (carer) report is an important component of a cognitive assessment. The KICA-Carer has been validated with a score of 3/16 or above indicating that further investigations are required. Other sections of the KICA tool are for information gathering to assist in determining subtypes, severity, differential diagnoses and management.

The KICA-Cog pictures and other KICA information can be found at [www.wacha.org.au](http://www.wacha.org.au)

As language skills are assessed in the cognitive section it is recommended that an interpreter be used when required. In the visual naming task if an individual is unable to name a certain picture (crocodile or emu) due to their own cultural reasons it can be replaced by the dog or horse pictures available on the website.

Tools required:

- Comb
- Pannikin / cup
- Box of matches
- Plastic bottle with top
- Watch/ timer for verbal fluency question.

Acknowledgements

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Date of Interview:.....

Name, Bush name, Skin name:.....

Date of birth:.....

Gender:                *female*                *male*

Name of interviewer:.....

Name of Community:.....

Place of Interview:

<i>Home</i>	<i>Residential care</i>
<i>Home of relative</i>	<i>Hospital</i>
<i>Clinic</i>	<i>Other .....</i>

Interpreter present:

*None*  
*Professional*  
*Family*  
*Other.....*

What languages do you speak?.....

.....

Language of interview:.....

Name of carer or family member: .....

Carers relationship to subject:

<i>dau/son</i>	<i>spouse</i>	<i>brother/sister</i>	<i>grandchild</i>
<i>niece/nephew</i>	<i>cousin</i>	<i>formal carer</i>	<i>other.....</i>

Carer gender:                *female*                *male*

Does the carer live with the subject?    *yes*                *no*

## MEDICAL HISTORY

I want to ask you about any sicknesses you have had. (*circle answer*)

1. Are your eyes good? Can you see everything?

yes                      no                      don't know

2. Are your ears good? Can you hear everything?

yes                      no                      don't know

3. Have you ever had a stroke? (*got weak down one side of your body*)

yes                      no                      don't know

4. Have you got sugar sickness? (*diabetes*)

yes                      no                      don't know

5. Have you got high blood pressure?

yes                      no                      don't know

6. Have you got heart problems?

yes                      no                      don't know

7. Have you got kidney problems?

yes                      no                      don't know

8. Do you have trouble walking?

yes                      no                      don't know

Write details.....

9. Do you have any pain?

yes                      no                      don't know

**9.1 if yes:**    sometimes    most of the time

10. Do you fall down sometimes?

yes                      no                      don't know

**10.1 if yes:** did you hurt yourself?

yes                      no                      don't know

11. Have you ever been hit on the head and knocked out?

yes                      no                      don't know

12. Do you ever have gumbu (urine) problems?

yes                      no                      don't know

**12.1 if yes:** Do you ever make gumbu (urine) in your clothes?

yes                      no                      don't know

13. Have you been sick and gone to hospital? What for?

yes                      no                      don't know

14. What sort of medicines do you take? (*list names or number of tablets*).....

## SMOKING AND ALCOHOL HISTORY

1. Do you drink grog?
- |  |                        |                           |
|--|------------------------|---------------------------|
|  | <i>no</i>              | <i>yes</i>                |
| <b>(If no go to 2)</b>   |                        |                           |
| 1.1 How many times a week?   | <i>only sometimes</i>  | <i>every day</i>          |
| 1.2. How much?   | <i>just few drinks</i> | <i>until you're drunk</i> |
| 1.3 How long have you been drinking for?                             | <i>not long</i>        | <i>long time</i>          |
| <i>(not long is less than 10 yrs, long time is more than 10 yrs)</i> |                        |                           |
2. Did you drink when you were young?
- |  |                      |                                 |
|--|----------------------|---------------------------------|
|  | <i>no</i>            | <i>yes</i>                      |
| <b>(If no go to 3)</b>   |                      |                                 |
| 2.1 Did you drink every day?                                     | <i>no</i>            | <i>yes</i>                      |
| 2.2 Did you used to get drunk?                                   | <i>no</i>            | <i>yes</i>                      |
| 2.3 <i>(If they have quit ask)</i> - when did you stop drinking? | <i>long time ago</i> | <i>last year      this year</i> |
3. Do you smoke?
- |  |   |                                    |
|--|---|------------------------------------|
|  | <i>no</i>                               | <i>yes</i>                         |
| <b>(If no go to 4)</b>   |   |                                    |
| 3.1 Do you smoke every day   | <i>no</i>                               | <i>yes</i>                         |
| <b>(If no go to 3.3)</b>   |   |                                    |
| 3.2 How many in one day?   | <i>little bit: (less than 1 packet)</i> | <i>big mob: (1 packet or more)</i> |
| 3.3 How long have you been smoking?                                  | <i>not long</i>                         | <i>long time</i>                   |
| <i>(not long is less than 10 yrs, long time is more than 10 yrs)</i> |   |                                    |
4. Did you smoke when you were young?
- |   |   |                                    |
|---|---|------------------------------------|
|   | <i>no</i>                               | <i>yes</i>                         |
| <b>(If no go to 5)</b>  |   |                                    |
| 4.1 How many did you smoke in one day?                          | <i>little bit: (less than 1 packet)</i> | <i>big mob: (1 packet or more)</i> |
| 4.2 <i>(If they have quit ask)</i> - when did you stop smoking? | <i>long time ago</i>                    | <i>last year      this year</i>    |
5. Do you chew tobacco?
- |                                       |           |            |
|---------------------------------------|-----------|------------|
|                                       | <i>no</i> | <i>yes</i> |
| 5.1 Did you chew when you were young? | <i>no</i> | <i>yes</i> |

## **KICA-COG: COGNITIVE ASSESSMENT**

I'd like to see if you can remember things. I'll ask you some questions.

*Incorrect answer enter ...0 Correct answer enter...1*

### **Orientation**

- |   |   |   |                          |
|---|---|---|--------------------------|
| 1. Is this week pension/pay week?   | 0 | 1 | <input type="checkbox"/> |
| 2. What time of year is it now?<br><i>(may need to prompt eg. wet time...dry time / hot.....cold time?)</i> | 0 | 1 | <input type="checkbox"/> |
| 3. What is the name of this community/place   | 0 | 1 | <input type="checkbox"/> |

*For questions 4 & 5 you will need three items: comb, pannikin (cup) and matches.*

### **Recognition and naming**

4. *Hold up each item in turn and ask*

- |                        |     |                |   |   |                          |
|------------------------|-----|----------------|---|---|--------------------------|
| What do you call this? | 4.1 | comb           | 0 | 1 | <input type="checkbox"/> |
|                        | 4.2 | pannikin (cup) | 0 | 1 | <input type="checkbox"/> |
|                        | 4.3 | matches        | 0 | 1 | <input type="checkbox"/> |

*(If the subject has poor vision put each object in their hand and ask them to recognise it.)*

5. *Hold up each item in turn and ask*

- |                       |     |          |   |   |                          |
|-----------------------|-----|----------|---|---|--------------------------|
| What is this one for? | 5.1 | comb     | 0 | 1 | <input type="checkbox"/> |
|                       | 5.2 | pannikin | 0 | 1 | <input type="checkbox"/> |
|                       | 5.3 | matches  | 0 | 1 | <input type="checkbox"/> |

### ***Hide each object in turn***

I'm going to put this one here, this one here... Now don't forget where I put them.

*(Omit this if poor vision, and name objects for them to remember.)*

### **Registration**

- |                                      |   |   |   |   |                          |
|--------------------------------------|---|---|---|---|--------------------------|
| 6. Tell me those things I showed you | 0 | 1 | 2 | 3 | <input type="checkbox"/> |
|--------------------------------------|---|---|---|---|--------------------------|

### **Verbal comprehension**

- |   |   |   |   |                          |
|---|---|---|---|--------------------------|
| 7. Shut your eyes                                       | 0 | 1 |   | <input type="checkbox"/> |
| 8. First point to the sky and then point to the ground. | 0 | 1 | 2 | <input type="checkbox"/> |

Verbal fluency

9. Tell me the names of all the animals that people hunt.

*Time for one minute (Can prompt with: any more? what about in the air? in the water?)*

Total No. _____	0 animals:	0	<input type="checkbox"/>
	1-4 animals:	1	
	5 –8 animals:	2	
	9 animals or more:	3	

Recall

10. Where did I put the comb? Where did I put the matches? Where did I put the pannikin?

0    1    2    3   

Visual naming

11. I'll show you some pictures. You tell me what they are. Remember these pictures for later on.

*Point to each picture and ask What's this? (Show boomerang as example)*

Now remember them because I'll ask you one more time.

*boy, emu, billy/fire, crocodile, bicycle*                      0    1    2    3    4    5   

Frontal/executive function

12. Look at this. Now you copy it.

*Show alternating crosses and circles*                      0    1   

Free Recall

13. You remember those pictures I showed you before? What were those pictures?

Tell me. (*Show boomerang as example*)                      0    1    2    3    4    5   

Cued Recall

14. Which one did I show you before? (*one of three pictures, use boomerang page as example*)

0    1    2    3    4    5   

Praxis

15. Open this bottle and pour water into this cup    0    1   

16. Show me how to use this comb                      0    1   

**KICA-COG TOTAL SCORE: \_\_\_\_\_ /39**

*Score of ≤33/39 indicates possible dementia, refer for medical review.*

**KICA-Depression:**

I want to ask you some questions about how you are feeling within yourself:

- |   |                            |
|---|----------------------------|
| 1. How are you feeling now? Good (happy)? No good?  | <i>good</i>                |
| <i>If no good, do you feel no good only sometimes.... all the time?</i>                             | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 2. Do you worry about a lot of things?  | <i>no</i>                  |
| <i>If yes, do you worry about things only sometimes.... all the time?</i>                           | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 3. Do you still do things that make you happy?<br>(eg. go fishing, play cards, visit other people)? | <i>yes</i>                 |
|   | <i>no</i>                  |
| 4. Do you feel grumpy (growling at people a lot)?   | <i>no</i>                  |
| <i>If yes, do you feel grumpy sometimes ...all the time?</i>  | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 5. Do you feel lazy....slack?   | <i>no</i>                  |
| <i>If yes, do you feel slack only sometimes....all the time?</i>                                    | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 6. Do you have a good sleep at night? Do you sleep all night?                                       | <i>yes</i>                 |
| <i>If no, what makes you wake up?</i>   | <i>pain, toilet, noise</i> |
|   | <i>no reason</i>           |
| 7. Are you sleeping too much during the daytime?  | <i>no</i>                  |
| <i>If yes, are you sleeping too much only sometimes...all the time?</i>                             | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 8. Are you eating well?   | <i>yes</i>                 |
| <i>If no, do you not eat well sometimes.....all the time?</i>                                       | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 9. Do you forget things a lot?  | <i>no</i>                  |
| <i>If yes, do you forget things sometimes..... all the time?</i>                                    | <i>sometimes</i>           |
|   | <i>all the time</i>        |
| 10. Do you reckon you are still thinking straight?  | <i>yes</i>                 |
| <i>If no, do you have trouble thinking sometimes..... all the time?</i>                             | <i>sometimes</i>           |
|   | <i>all the time</i>        |



## FAMILY REPORT

I'd like to ask you some questions about (*name*). These questions are about his/her health and memory.

### FAMILY- MEDICAL HISTORY

1. Has s/he ever had a stroke? (*gone weak down one side*)
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
2. Has s/he got sugar sickness? (*diabetes*)
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
3. Has s/he got high blood pressure?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
4. Has s/he got heart problems?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
5. Has s/he got kidney problems?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
6. Has s/he ever been knocked out? (*eg. hit their head and blacked out*)
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
7. Has s/he ever been sad all the time?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------

  - 7.1 *if yes*- have they had medicines for that? (*antidepressants*)
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
8. Does s/he have trouble walking?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
9. Does s/he fall down a lot?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------

  - 9.1 *if yes*- do they hurt themselves?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
10. Does s/he have any pain?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------

  - 10.1 *if yes*- sometimes.....all the time?
 

<i>sometimes</i>		<i>all of the time</i>
------------------	--	------------------------
  
11. Does s/he remember to take their medicines?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------

  - 11.1 Do you have to help?
 

<i>yes</i>	<i>no</i>	<i>don't know</i>
------------	-----------	-------------------
  
12. Is there anything else you are worried about?

## FAMILY - SMOKING AND ALCOHOL HISTORY

1. Does s/he drink grog?

*no* *yes*

**(If no go to 2)**

1.1 How many times a week?

*only sometimes* *every day*

1.2 How much?

*just few drinks* *until s/he's drunk*

1.3 How long for?

*not long* *for a long time*

*(not long is less than 10 yrs, long time is more than 10 yrs)*

2. Did s/he drink when s/he was young?

*no* *yes*

**(If no go to 3)**

2.1 Did s/he drink every day?

*no* *yes*

2.2 Did s/he used to get drunk?

*no* *yes*

2.3 *if they have quit-* When did s/he stop?

*not long ago* *long time ago*

3. Does s/he smoke?

*no* *yes*

**(If no go to 4)**

3.1 How many in one day?

*little bit: (less than 1 packet)* *big mob: (1 packet or more)*

3.2 How long has s/he been smoking?

*not long* *long time*

4. Did s/he smoke when s/he was young?

*no* *yes*

**(If no go to 5)**

4.1 How many in one day?

*little bit: (less than 1 packet)* *big mob: (1 packet or more)*

4.2 *if they have quit-* When did s/he stop?

*not long ago* *long time ago*

5. Does s/he chew tobacco?

*no* *yes*

5.1 Did s/he chew when s/he was young?

*no* *yes*

**KICA-Carer: COGNITIVE INFORMANT REPORT**

- |  |                     |   |       |
|--|---------------------|---|-------|
| 1. Have you noticed that s/he (name) is forgetting a lot of things?  | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 2. Does s/he forget the names of his family?   | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 3. Does s/he forget what happened yesterday?   | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 4. Does s/he forget where s/he is now?   | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 5. Does s/he say the same thing over and over?   | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 6. Can s/he remember which week is pension week?   | <i>yes</i>          | 0 |       |
| <i>If no: Does this happen</i>   | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 7. Does s/he keep walking away and getting lost?   | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |
|  |                     |   |       |
| 8. Does s/he do things that are wrong in Aboriginal way?<br>(eg. calling out names of people who have passed away) | <i>no</i>           | 0 |       |
| <i>If yes: Does this happen</i>  | <i>sometimes</i>    | 1 | _____ |
|  | <i>all the time</i> | 2 |       |

**KICA-Carer TOTAL SCORE: \_\_\_\_\_ /16**  
*Score ≥ 3/16 further investigations required*

## **KICA-Behaviour: Family report**

- |  |                      |
|--|----------------------|
| 1. Is s/he happy most of the time?<br>(If yes, go to 3)  | yes / no             |
| 2. Is s/he sad most of the time?<br>2.1 If yes, is this different from before?                       | yes / no<br>yes / no |
| 3. Is s/he sleeping well at night?<br>3.1 If no, is this different from before?                      | yes / no<br>yes / no |
| 4. Is s/he sleeping all the time? Sleep day and night?<br>4.1 If yes, is this different from before? | yes / no<br>yes / no |
| 5. Is s/he eating properly?<br>5.1 If no, is this different from before                              | yes / no<br>yes / no |
| 6. Is s/he growling a lot (eg. at his grannies)?<br>6.1 If yes, is this different from before?       | yes / no<br>yes / no |
| 7. Does s/he laugh for no reason?<br>7.1 If yes, is this different from before?                      | yes / no<br>yes / no |
| 8. Does s/he blame people for no reason?<br>8.1 If yes, is this different from before?               | yes / no<br>yes / no |
| 9. Does s/he see things that are not really there?<br>9.1 If yes, is this different from before?     | yes / no<br>yes / no |
| 10. Does s/he hear things that are not really there?<br>10.1 If yes, is this different from before?  | yes / no<br>yes / no |
| 11. Is s/he frightened of people for no reason?<br>11.1 If yes, is this different from before?       | yes / no<br>yes / no |
| 12. Does s/he hit people for no reason?<br>12.1 If yes, is this different from before?               | yes / no<br>yes / no |

13. *If family has noticed changes in memory or behaviour:*

Did their memory / behaviour - get worse slowly and gradually?  
- change quickly, all of a sudden?

Write details (*when did memory change, what symptoms etc*)...

14. Is there anyone in their family who forgets things all the time? (*alive today*)

yes                      no                      don't know

Write relationship: \_\_\_\_\_

15. Was anyone else in their family like that before they passed away?

yes                      no                      don't know

Write relationship: \_\_\_\_\_

**KICA-ADL:**

I'd like to ask you questions about what *name* can do for himself / herself.

1. Can s/he still do her own work? (*paid and unpaid eg. cooking/cleaning/making fire*)

yes                      no                      don't know

2. Can s/he still go eg. fishing, play cards? (*activities they enjoy*)

yes                      no                      don't know

3. Can s/he look after his/her own money?

yes                      no                      don't know

4. Can s/he feed himself?

yes                      no                      don't know

5. Can s/he put on his/her clothes?

yes                      no                      don't know

6. Can s/he shower himself/ herself?

yes                      no                      don't know

7. Does s/he have trouble finding the toilet?

yes                      no                      don't know

8. Does s/he make gumbu (urine) in bed in the night?

yes                      no                      don't know

9. Does s/he make gumbu (urine) in trousers/dress in the daytime?

yes                      no                      don't know

10. Does s/he make gura (bowel motion) in his trousers/dress?

yes                      no                      don't know