

A retrospective study of cognitive function in doctors and dentists with suspected performance problems: an unsuspected but significant concern

Neha Kataria¹, Nick Brown¹, Pauline McAvoy¹, Azeem Majeed² and Martin Rhodes¹

¹National Clinical Assessment Service (NCAS), London SE1 6LH, UK

²Department of Primary Care and Public Health, School of Public Health, Imperial College London, London W6 8RP, UK

Corresponding author: Neha Kataria. Email: Neha.Kataria@pah.nhs.uk

Summary

Objective: To examine the performance assessments and cognitive function of practitioners referred to the National Clinical Assessment Service (NCAS).

Design: Retrospective observational study.

Setting: Practitioners referred to NCAS for performance assessment due to suspected performance problems.

Participants: One hundred and nine practitioners over the age of 45 years referred to NCAS between 1 September 2008 and 30 June 2012.

Main outcome measures: Reasons for referral of practitioners and their characteristics; details of their assessments including screening for cognition using Addenbrooke's Cognitive Examination Revised (ACE-R); outcome of the process.

Results: Reasons for referral included 'clinical difficulties' and 'governance or safety issues'. Eighty-seven practitioners scored above 88 on ACE-R. Twenty-two were found to have an ACE-R score of ≤ 88 . On further assessment, 14 of these 22 practitioners were found to have cognitive impairment. The majority of all practitioners were found to be performing below the expected level of practice for someone at their grade and specialty. Of those scoring ≤ 88 on the screening, only seven continued in clinical practice.

Conclusions: A high proportion of practitioners scoring poorly on ACE-R were found to have cognitive impairment following detailed neuropsychological testing, the youngest aged 46 years. Many were working in isolation. Nearly all practitioners scoring poorly on ACE-R were international medical graduates; reasons for this are unclear. Performance assessment results showed persisting failings in the practitioners' record keeping and in their assessment of patients. Our findings highlight the need for increased vigilance and training of responsible officers to recognise performance problems and emphasise the importance of comprehensive assessment.

Keywords

cognitive impairment, impaired cognition, Addenbrooke's Cognitive Examination, health, neuropsychological tests, practitioner performance, remediation

Introduction

The UK's National Clinical Assessment Service (NCAS) was set up in 2001 and helps improve patient safety by working with the National Health Service (NHS) and other healthcare organisations to resolve concerns about the professional practice of doctors, dentists and pharmacists. NCAS provides a range of services – from telephone advice, through to more detailed and ongoing support, to a full assessment of the practitioner's performance. This consists of a workplace-based assessment, which includes a health assessment by a specialist in occupational medicine, a behavioural assessment by an occupational psychologist and an assessment of clinical practice. The components of the clinical assessment include a record review, observation of clinical practice, case-based assessment, site visit, and peer and patient feedback. It is conducted by a team of trained peer and lay assessors whose performance as assessors is quality assured.

Following assessment, a detailed report is produced which covers the assessment findings mapped to the domains of Good Medical Practice described by the General Medical Council (GMC). Within each domain, a practitioner is either found to be 'poor', 'inconsistent' (assessment displays a combination of poor and satisfactory examples) or 'satisfactory'. A conclusion is drawn stating that the practitioner's performance overall is at the level or below that expected for the grade and specialty and recommendations made to address the deficiencies identified.

The health assessment takes place first and is conducted by an occupational health (OH) physician who determines whether a practitioner has any health concerns, which may be contributing to poor performance. The assessment includes physical problems and screening for anxiety, depression, drugs or alcohol misuse. The OH physician will explore whether the assessment process itself could exacerbate any health problems, and whether the

remediation programme would need to take account for them.

One component of the OH assessment is a screening for cognitive function. NCAS searched for an instrument that would identify those who may have cognitive impairment accounting for their performance issues. The decision was informed by a review of 39 tests¹ which takes less than 20 min which suggested that while there may be no single fail-safe instrument the Addenbrooke's Cognitive Examination Revised (ACE-R) had certain advantages including its sensitivity and specificity for the diagnosis of dementia at cut off scores of ≤ 88 although it does not specifically test reasoning and judgement.²⁻⁴ The ACE-R has now been superseded by Addenbrooke's Cognitive Examination – Third edition (ACE-III). See appendix 1 for further information regarding tests of cognitive function.

An important finding since instituting this process has been that a number of practitioners have been found to have previously unrecognised cognitive deficit. This paper describes the characteristics of practitioners undergoing an NCAS assessment who scored poorly on ACE-R, the results of the assessment, the findings of the specialist assessment and the outcome of the process in terms of the practitioner's continuing practice. It compares the results of the NCAS performance assessments of those practitioners who scored above the 88 cut off point in the ACE-R screening test with practitioners who scored below. There are no studies exploring cognitive impairment in physicians with performance concerns in the UK and the effect this may have on the ability to practise safely.

Methods

Since September 2008, NCAS has performed neuropsychological screening on all practitioners referred for performance assessment using the ACE-R. The test takes between 12 and 20 min to perform and assesses five cognitive domains: attention/orientation (18 points), memory (26 points), verbal fluency (14 points), language (26 points) and visuospatial abilities (16 points), giving a total score of 100 points.⁴ NCAS uses the results of this test and information from the OH assessment to identify those practitioners requiring detailed neuropsychological assessment. Practitioners who score ≤ 88 on ACE-R are referred for specialist neurological assessment. The referring body is advised that those practitioners scoring 82 or below should refrain from practice until further investigations have been performed.

All practitioners referred to NCAS for a performance assessment from 1 September 2008 until 1 June 2012 were identified and information collected for those scoring 88 and above or below on ACE-R.

Details including demographics, specialty, concerns leading to referral, results from the assessment of clinical performance and the occupational assessment were collected and analysed. Because of the relatively small number of practitioners assessed, formal testing for the statistical significance of differences between subgroups was not carried out.

Results

There are approximately 1000 new referrals per year made to NCAS. From 1 September 2008 until 30 June 2012, 135 healthcare practitioners, all of whom were working in the NHS, who were referred to NCAS required assessment due to suspected performance problems. Of those, 22 practitioners were found to have an ACE-R score of ≤ 88 , the youngest being 46 years old. The data on all practitioners referred over the age of 45 years were analysed (109 in total). Eighty-seven practitioners scored ≥ 88 on ACE-R. At the point of referral there were no suspicions of impaired cognition.

Table 1 shows the demographic characteristics of those scoring ≤ 88 and > 88 on ACE-R. One practitioner scored 89, but due to performance issues detected during the OH assessment, he was referred for neuropsychological testing. This practitioner was included in the ≤ 88 group in the analysis.

Twenty-one out of 22 (95.5%) practitioners scoring 88 and below on ACE-R obtained their qualification outside the European Economic Area (EEA), compared with 39/88 (44.3%) in the group scoring > 88 (risk ratio 2.15, 95% confidence interval 1.68–2.77).

Concerns leading to referral

The referrer could give more than one reason for referral. Hence, reasons for referral were often multifactorial in both groups, with the majority being 'clinical difficulties' (41% of concerns) and 'governance or safety issues' (19%) (Table 2).

Performance assessment

The majority of practitioners in both groups were found to be performing below the expected level of practice for someone at their grade specialty. Of those 22 doctors scoring ≤ 88 on ACE-R, seven had their performance assessments halted, five because of significant health concerns found during the OH assessment. One practitioner was excluded by their employer and one practitioner was referred to the GMC under their fitness to practise procedures. To further explore practitioners performing poorly on ACE-R, their assessments and outcome were

Table 1. Demographic characteristics of practitioners referred for assessment to NCAS.

| | ACE-R \leq 88 n = 22 | ACE-R $>$ 88 n = 87 |
|--------------------|---------------------------|------------------------|
| Age | | |
| 45–49 | 3 (14%) | 22 (25%) |
| 50–54 | 1 (5%) | 27 (31%) |
| 55–59 | 7 (32%) | 22 (25%) |
| 60–64 | 6 (27%) | 10 (11%) |
| 65+ | 3 (14%) | 6 (7%) |
| Not known | 2 (9%) | 0 |
| Gender | | |
| Male | 19 (86%) | 78 (90%) |
| Female | 3 (14%) | 9 (10%) |
| Ethnicity | | |
| Black | 1 (5%) | 1 (1%) |
| Asian | 16 (73%) | 25 (29%) |
| White | 1 (5%) | 49 (56%) |
| Other | 4 (18%) | 7 (8%) |
| Not known | 0 | 5 (6%) |
| Specialty | | |
| GP | 14 (64%) | 40 (46%) |
| Dentist | 3 (14%) | 11 (13%) |
| Hospital specialty | 5 (23%) | 36 (41%) |

analysed. Table 3 summarises the overall conclusion of the performance assessment.

Nature of impairment

Table 4 shows the problems detected in their neuropsychological assessments. Fourteen practitioners were found to have cognitive impairment. Eleven were general practitioners (GPs), 10 of whom were principals, one was an associate specialist in adult psychiatry and two were general dental practitioners (GDP). Eight practitioners worked in isolation. Twelve practitioners were males, two females. One practitioner was found to be profoundly depressed. No practitioners were found to have alcohol or drug

Table 2. Reasons for referral.

| | ACE-R \leq 88 | ACE-R $>$ 88 |
|------------------------------------------------|-----------------|--------------|
| Concerns from referrer | | |
| Total no. concerns | 46 | 189 |
| Clinical difficulties | 22 (48%) | 75 (40%) |
| Governance or safety issues | 10 (22%) | 35 (19%) |
| Behavioural difficulties other than misconduct | 5 (11%) | 31 (16%) |
| Misconduct | 0 | 6 (3%) |
| Health problems including substance abuse | 5 (11%) | 24 (13%) |
| Work environment influences | 3 (7%) | 12 (6%) |
| Personal circumstances other than ill health | 1 (2%) | 6 (3%) |

Table 3. Overview of performance assessment.

| | ACE-R \leq 88 n = 22 | ACE-R $>$ 88 n = 87 |
|-------------------------|---------------------------|------------------------|
| Overview of performance | | |
| Below expected level | 10 (45%) | 53 (61%) |
| Expected level | 5 (23%) | 24 (28%) |
| Assessment incomplete | 7 (32%) | 10 (11%) |

misuse problems. Substance misuse is screened for in the health questionnaire, as well as during history taking and examination.

No new physical health problems were identified. Existing conditions included ischaemic heart disease, hypertension, diabetes mellitus, aortic valve disease, hypothyroidism, hyperthyroidism, glaucoma, arthritis, hypercholesterolaemia and hepatitis. One practitioner was known to have dyslexia. Of the 14 practitioners found to have cognitive impairment, eight were found not to be performing at the expected level of practice. Four practitioners did not proceed to a full assessment, two practitioners were found to be performing at the expected level of practice.

Outcome

Table 5 shows the outcome of all the practitioners studied as documented in the NCAS database until July 2012. In the group performing poorly on ACE-R, seven practitioners continued to work,

Table 4. Results following detailed neuropsychological testing.

| Pathology | n = 22 |
|----------------------------------------|--------|
| Mild cognitive impairment | 8 |
| Moderate – severe cognitive impairment | 6 |
| Depression | 1 |
| Inconclusive | 2 |
| No cognitive impairment | 5 |

either as normal or within a remediation programme compared with 44 in the group scoring ≥ 88 . See Appendix 2 for a sample case history of a practitioner referred for performance assessment.

Discussion

Twenty-two practitioners (doctors and dentists) referred to NCAS for performance problems had an ACE-R score of ≤ 88 , indicating a need for further assessment. All but one were international medical graduates. Fourteen of these practitioners were diagnosed with cognitive impairment. The youngest found to have cognitive impairment was aged 46, with two in the 45–49 age group. The oldest was aged over 70. At the point of referral, there were no suspicions of cognitive impairment in any of the cases.

In the group of practitioners scoring ≤ 88 , 15 had a work place performance assessment; 10 were found to be performing below expected level of practice. The assessments were further explored; the subdomains ‘Record keeping’ and ‘Assessment of Patient’s Condition’ were found to be poor in the majority. However, ‘relationships with patients’ and ‘maintaining good medical practice’ were mainly judged to be ‘inconsistent’ with examples of satisfactory practice along with examples of poor practice. Practitioners appear to be maintaining their verbal skills; which could explain why cognitive difficulties were unrecognised until formally assessed.

There was an over representation of men in both groups, reasons for this are unclear. There is also an over representation of GPs in the groups with an ACE-R score ≤ 88 , but a more equal representation of GPs and hospital specialties in the 88 and over group. Single-handed GPs were over represented (eight in those scoring ≤ 88). An explanation for this could be that symptoms and signs of cognitive impairment in those working in isolation are less likely to be identified. If the referring body had

Table 5. Details of outcome.

| Outcome | ACE-R ≤ 88 n = 22 | ACE-R > 88 n = 87 |
|-----------------------|---------------------------|------------------------|
| Working as normal | 1 (5%) | 2 (2%) |
| Remediation programme | 6 (27%) | 42 (48%) |
| Not working | | |
| Illness | 1 (5%) | 1 (1%) |
| Suspended | 9 (41%) | 20 (23%) |
| Retired | 3 (14%) | 5 (6%) |
| Referred to GMC | 2 (9%) | 5 (6%) |
| Not documented | 0 | 8 (9%) |
| Other | 0 | 4 (5%) |

suspicions of practitioners suffering with cognitive deficit, they would not have been referred to NCAS.

On observing the outcome, a greater proportion of practitioners in the group scoring ≥ 88 on ACE-R were able to continue working, either as normal or within a remediation programme, despite a similar proportion in both groups found to be performing below expected level of practice. This could be attributed to the finding of cognitive impairment. Two practitioners diagnosed with cognitive impairment were found to be performing at expected level of practice, showing that it is possible to accommodate cognitive decline in clinical practice.⁵ Assessment tools are unable to predict how cognitive impairment will impact on professional practice.⁶ There are no agreed guidelines to help decide when a practitioner should cease medical practice.^{5,7}

Strengths and weaknesses

To our knowledge, this is the only study in the UK looking at the finding of cognitive impairment in healthcare practitioners with performance concerns. Although this has been demonstrated internationally, this study is unique in that it also looks at reasons for referral, and looks at practitioners’ performance in a clinical setting and highlighting concerns.

A key limitation of this study was that there was no control group. Further work could include testing a group of practitioners not known to have performance concerns. It is also difficult to estimate the number of practitioners with performance problems secondary to cognitive deficit, as this study only includes those where it was not suspected. An explanation for this could be that practitioners were

referred for performance difficulties rather than behavioural changes. It could be that neuropsychological testing is being carried out at a presymptomatic stage before most people are suspected to have cognitive impairment and subsequently referred for testing. Another theory to explain why cognitive impairment is not suspected is that physicians are able to mask the symptoms of cognitive impairment due to their cognitive reserve, which is likely related to their pre-morbid IQ.⁶

Given that the majority of those scoring ≤ 88 did not possess English as their primary language, this raises questions about how it effects the validity and reliability of ACE-R, which was designed with native English speakers in mind, or at least those who speak English fluently.² In order to practice effectively in the healthcare professions in the UK, practitioners need to be proficient in English. However, if communication was an issue at presentation, NCAS would have organised an expert communication competency assessment as part of the NCAS assessment. Although communication proficiency is not formally screened for, the health and behavioural assessments assist in identifying if it is a cause for concern.

For those who did not undergo an NCAS assessment, the full cognitive evaluation would have highlighted linguistic issues if it were the primary concern. It therefore remains unclear why those scoring ≤ 88 on ACE-R were all international medical graduates.

Another issue to consider is whether the cut off scores for this group of professionals are correct. The ACE-R normative values were based on volunteers from the Medical Research Council and spouses of patients attending clinics.² Although education was taken into account, there is no evidence on whether the cut off score of 88 is still as sensitive and specific for those with a higher IQ than the general population. Reports state that according to the overall data for MicroCog, physicians' scores are better than non-physicians.^{8,9} A study exploring the detection of cognitive impairment in highly intelligent individuals was compared using IQ-adjusted norms to predict cognitive decline with age and education-adjusted norms.¹⁰ It found that IQ-adjusted norms provided a better predictor of cognitive decline.¹⁰ As IQ-adjusted impairments were measured from pre-morbid intelligence instead of a normative average, IQ-adjusted cut off scores could detect early changes in cognition that would have been normalised by standardised test norms.¹⁰

Comparison to previous work

Findings of this study mirror what has been found elsewhere; several prior studies have explored

cognitive difficulty in physicians who have performance concerns, and have been referred for competency assessment. In Australia, there has been an increase in the number of notifications for suspected cognition problems.⁵ A recent study found that cognitive impairment in physicians is responsible for 57% of adverse medical events, most of which were determined to be preventable.^{11,12}

A study by Turnbull et al. in 2000 based in Ontario performed cognitive screening tests on 27 physicians with performance concerns who were in the Physician Review Program (PREP). Seven were found to have moderate or severe cognitive impairment. The age range of those with neuropsychological difficulties was 43 years to 76 years.¹³ Forty-five physicians were assessed in the follow on study in 2006. Thirty-one physicians performed poorly on competency assessment, 12 were found to have moderate or severe cognitive impairment, which was likely to have led to their poor performance.¹⁴

Studies by Korinek et al.,¹⁵ Peisah and Wilhelm¹⁶ also report similar findings. Korinek et al. completed a study with 335 physicians in Colorado. Two hundred sixty-seven were referred for competency evaluation due to performance concerns, and 68 participants were in the control group. Physicians in the competency group scored lower than the control in processing speed, processing accuracy and cognitive proficiency. Twenty-four per cent of physicians in the competency group had scores suggesting cognitive impairment, compared with none in the control group. The referred physicians showed slower processing, less accuracy and less proficiency.¹⁵

A descriptive study by Peisah and Wilhelm looked at 41 case records of notifications to the Impaired Registrants Program of the New South Wales Medical Board, Australia, of those aged over 60 years. Cognitive impairment or dementia was found in 22 cases.¹⁶ Another study performed by the California Medical Board (CMB) looked at 148 physicians referred for competency assessment secondary to performance concerns.¹⁷ A number of tests of neuropsychological functioning were used; they found the physicians to be performing lower than expected on tests of intellectual and neuropsychological functioning. Studies by Korinek et al., Turnbull et al., and Perry and Crean all used screening tests to identify neuropsychological difficulties but comprehensive neuropsychological assessments were not performed.

We found the majority of those scoring poorly on ACE-R in our study were aged between 55 and 59 years. In the group scoring >88 , the majority were aged between 50 and 54 years. This supports previous work, which has found that there is a negative

correlation between performance on cognitive screening and age.^{13,14,18–20} Turnbull et al.^{13,14} found that the correlation increased when the sample was altered by excluding physicians with neuropsychological disorders.

There was an over representation of men in both groups.

As mentioned previously, 21 practitioners who scored poorly on ACE-R were international medical graduates. The study by Turnbull et al.¹⁴ found that English as a first language was found to be a positive predictor of performance on PREP. In the studies by Korinek et al.¹⁵ and Perry and Crean¹⁷ those who trained outside the United States or who did not have English as their first language were excluded.

Peisah and Wilhelm¹⁶ found that older doctors suffer from ‘the four D’s – drugs, drink, depression, dementia’ and reported that the presence of substance misuse in 29% of their sample. Substance misuse issues were not found in our group of practitioners, if this were a presenting concern, they would likely be referred locally or to the GMC.

Implications for policy and practice

This study shows an association between performance problems and cognitive impairment. It suggests cognitive screening for health practitioners aged 45 years and above with professional performance problems may be necessary. Selecting a validated screening tool needs further exploration, as this study showed an association between practitioners who trained overseas and scoring poorly on ACE-R for reasons that are not understood. ACE-III has now superseded ACE-R and is very similar in comparison.

Detection of cognitive impairment is essential to determine whether patient safety is at risk and safeguard quality patient care as well as to take it into account when creating and implementing an effective remediation programme. Tailoring to individuals is crucial as well as considering whether the same level of cognition is required for different specialities such as surgery or academia.^{6,7} Frequent assessment would also be required to ascertain whether remediation to safe practice is proving effective. Further work is required to explore effective methods of remediation, and also to identify those in which it would be unlikely to be successful. A wider study would be required to assess whether regular medical and physical screening for healthcare practitioners is necessary.

Our study does however highlight the need for increased vigilance and training of responsible officers to recognise performance problems and emphasise the importance of a comprehensive assessment, which takes into account cognitive function.

Conclusion

A high proportion of practitioners in those referred to NCAS for performance assessment score ≤ 88 on ACE-R, a validated screening tool for detection of cognitive impairment. The majority of those scoring below the predetermined cut off were found to have cognitive impairment following detailed neuropsychological testing. Persisting failings were detected in the practitioners’ record keeping and patient assessment. Although the reasons for this are not clear, a consistent finding was that all practitioners with an ACE-R score of ≤ 88 were international medical graduates. We recommend ensuring that appraisers and responsible officers are trained to detect performance problems and should arrange for cognitive screening such as that provided by NCAS.

Declarations

Competing interests: Nick Brown, Pauline McAvoy and Martin Rhodes are employed by NCAS. The authors declare that there is no other conflict of interest.

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Guarantor: NK

Contributorship: All authors designed the study. NK carried out the literature review, extracted the data and carried out the analysis. All authors reviewed the manuscript. MR is the guarantor.

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Appendix 1

Screening tools

Many screening tests for dementia and cognitive impairment are available, the validity and reliability of those tests are a subject of debate.¹ Studies have shown that the commonly used screening test, Mini Mental State Examination (MMSE), shows poor sensitivity in detecting mild cognitive impairment.^{4,7,16} There are several cognitive domains that are insufficiently examined by this screen, frontal-executive, visuospatial skills and semantic memory.⁴ However, intelligent individuals can score well in MMSE in the presence of moderate dementia.^{6,21} This is reflected in a study by Peisah and Wilhelm,¹⁶ where physicians found to have cognitive impairment had a mean MMSE score of 27.9.

MicroCog, a computerised test battery was used for competency evaluation in Colorado.¹⁵ Created in 1993, it was originally designed to screen elderly physicians for cognitive impairment. It is now for used in the community to screen the elderly for early dementia. It assesses five cognitive domains: attention, memory, reasoning, spatial ability and reaction time. A study showed MicroCog has a sensitivity of 0.98 and specificity of 0.83, suggesting it distinguishes mildly demented individuals from healthy, elderly, community residents.²²

The ACE-R was selected as it is a brief, sensitive and specific test battery, which can identify early cognitive impairment.^{2,4} It has been validated to detect cognitive impairment of many aetiologies.¹ The ACE-R provides age and education dependent norms for the total score and for the individual subtests.^{2,4} One disadvantage of ACE-R is that it does not specifically test reasoning and judgement.¹ A study by Mioshi et al. identified two cut off scores, 88 and 82. The higher cut off has a sensitivity of 0.94 and specificity of 0.89. The lower cut off has a lower sensitivity 0.84 but specificity is 1.00. The study stated at a cut off score of 82, the likelihood of dementia was 100:1.²

Appendix 2

An example case story

A 63-year-old male GP who originally graduated from the Indian subcontinent. He was working in an urban setting having been in the same practice

for over 20 years. He was the principal and he had had a number of salaried GPs working with him.

The referring body which was now the Local Area Team (previously the Primary Care Trust) had identified a number of concerns with regard to the doctor's practice. These included:

In February 20YY, the referring body received a complaint from a patient via the Patient Advice and Liaison Service in relation to a possible missed diagnosis.

Two further incidents regarding Dr X's work were reported at the end of October 20BB, first an allegation of an inappropriate examination of a female patient's breasts by Dr X and an inappropriate attitude. The second related to a prescription for chlorpromazine for an elderly male patient with dementia. The patient's son, who was a social worker, complained about the potentially severe side effects if taken at the dosage prescribed. The referring body service asked Dr X to stop working while it carried out a full investigation of these incidents. The subsequent report, dated February 20CC stated that Dr X acknowledged he did not take an adequate history or perform an adequate examination in relation to the patient with dementia, and concluded that although he recorded a diagnosis before prescribing, he seemed to lack insight into the appropriateness of the prescription at that dosage and amount.

The referring body inspected the practice highlighting further concerns which included:

- 'inappropriate delegation of duties to nursing staff'
- 'breaches of patient confidentiality'
- 'absence of policies and procedures'
- 'expired Patient Group Directives'
- 'dirty cluttered premises'
- 'out of date anaphylaxis pack'
- 'open sharp bins on floor'
- 're-use of disposable items'
- 'the quality of medical documentation'

Following initial assessments, two GPs were commissioned to undertake a further, more in-depth look at the organisation and clinical practice of Dr X in September 20CC. These concerns included the quality of patient care provided by Dr X and her staff and organisational issues. The review found that Dr X's record keeping was poor, and there was no evidence that she used or referred to her practice policies.

The referring body first contacted NCAS in February 20DD. NCAS representatives met with

the practitioner and referring body in May 20DD. On the basis of the information provided by the referring body and the practitioner, NCAS considered that assessment would be an appropriate way forward. The *Agreement to NCAS assessment and follow-up action* was signed by the practitioner, a referring body representative and an NCAS representative and was received in May 20DD.

It was agreed that there were concerns in domains of Good Medical Practice as follows:

1. Knowledge, skills and performance
 - (a) Assessment of the patient's condition
 - (b) Clinical management
 - (c) Record keeping
 - (d) Maintaining professional performance
2. Safety and Quality
 - (a) Contribute to and comply with systems to protect patients
 - (b) Respond to risks to safety
 - (c) Management of the service
3. Communication, partnership and teamwork
 - (a) Communication and the practitioner-patient partnership
 - (b) Working with colleagues
 - (c) Leading and managing teams
4. Maintaining Trust

Dr X underwent an OH assessment in 25 July 20DD, which raised concerns that required further neuropsychological assessment. The assessment confirmed that Dr X suffered with hypertension which was controlled by medication and type 2 diabetes which was treated by diet and medication but which did not appear to be well controlled. Dr X appeared stressed, mildly anxious and a little vague at times but did not show signs or symptoms of depressive or anxiety disorders. Dr X was teetotal and there were no abnormalities in blood tests including haemoglobin, liver function tests, thyroid function tests or urea and electrolytes. The ACE-III was administered and the following scores were achieved

- Attention and concentration 14/18
- Memory 20/26
- Fluency 10/14
- Language 20/26
- Visiospatial 16/16
- Overall 80/100

This along with the impression gained at the assessment led the OH assessor to conclude that specialist assessment was necessary and that the referring body should be advised that, at the least, close supervision of Dr X's work should be put into place.

The specialist health assessment took place in August 20DD. The conclusion was that Dr X's current full scale IQ remained lower than would be expected in a medical practitioner. This is despite it being recorded that she was less anxious than on the original assessment. It was also seen that while the verbal IQ was within the expected range, the performance IQ was less than expected. Full scale IQ 106; verbal 119, performance 92.

The difference between the verbal and the performance scores was said to be statistically significant with much less strong performance on the non-verbal subtests. There was a suggestion of impaired executive functioning, based on the tests used (Hayling and Brixton). In the first report there was a low average score on the Hayling test and an abnormal score on the Brixton test. Speed of information processing was at the 90th centile on the adult memory and information processing battery, with an error rate between the 25th and 50th centiles. Memory testing using the Wechsler Memory scales 111 was considered to be normal, with the lowest scores being obtained on the visual delayed index (58th percentile) and auditory recognition delayed index (52nd percentile). A magnetic resonance imaging scan showed some increase in white matter in the temporal region.

The interpretation was that:

1. Dr X does not currently have dementia.
2. The discrepancy between verbal and performance scores was consistent with physical brain disease.
3. At this point, the presence of a specific neurodegenerative process could not be reliably established and a mild cognitive impairment was established.

From a clinical perspective the results seem to suggest that, with respect to cognitive function, Dr X may be fit to practice clinically. However, the impaired organisational and reasoning skills on testing (performance) suggest that if Dr X were to return to clinical practice, it would be necessary to ensure that he/she was able to manage complex cases within the time constraints of a consultation and a busy surgery. If a decision was taken to permit a return to clinical practice, it would be prudent to ensure that this was to supervised practice only, in the first instance. It would be important to ensure that he/she was not allowed to do locum work and that his/her practice was in a designated and monitored clinical setting. A repeat of neuropsychological testing in, say 12 months, was advised.