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# REPORT WRITING FOR SACNA CREDENTIALING REPORT LAYOUT

(For a Summary of Report Writing Headings see Appendix pages 13 to 15)

SACNA does not want to be prescriptive as to report layout and is supportive of credentialing applicants developing their own style. However, the report is like a miniresearch report, and there is a convention as to how material is normally laid out. There is an art to good report writing, and it is of great assistance to adhere to tried and tested guidelines. As a training clinician it is advisable not to venture too far from the convention.

Conceptually, there are three main phases attached to an assessment report:

- An historical data base from a number of critical sources is provided: the medical records; prior professional reports; reported history of the problem and current complaints; the family and personal background against which to contextualize the problem.
- 2. A new data base from the present examination is provided, including clinical observations and test results.
- 3. A conclusion is provided in the form of a synthesis and integrated commentary around the historical and current data bases (1 and 2 above), with a diagnostic opinion, prognosis, and recommendations for the way forward.

For clarity and rigour of report writing, material should as strictly as possible be grouped under the proposed relevant headings. Some prefer to put the full detail of the presenting complaint early in the report, as per the ordering of this template. For others it might feel more congruent to provide the background history first, and then provide the detail of the presenting complaint. Either way the data extracted from the history must be directly relevant to what is pertinent for contextualizing the presenting complaint.

The following core areas should be covered, clearly delineated under headings and sub-headings, in a systematic format that works well for the particular case in hand.

# Letterhead with identifying data on the clinician doing the assessment:

The letterhead must comply with the required HPCSA prescriptions, that is name and surname, qualifications, registration category, and contact details. There should be no misleading claims regarding specialist expertise.

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## List of core identifying information of the patient and the report

In point form, this should include: Patient's name and surname, date of birth, date of neuropathological event and age at that time, date (s) of assessment and age at that time, home language, educational level, handedness and occupation. Some like to include the patient's address and contact numbers. Some want an explicit statement of race. Next include name of the referral agent, the name of the clinician (s) involved in the assessment, the date of the report.

(**Note:** If there is no designation made with respect to race, there should be sufficient indication of home language, language usage and sociocultural background supplied in this section and/ or early on in the report, to ratify the manner in which psychometric test data are interpreted and the relevance of the available norms).

# Reason for referral:

This should be a brief statement identifying the purpose of the report (e.g. educational assessment, readiness to return to work, medico-legal, etc.).

#### Sources of information:

In broad terms this section should note the type of documents perused for the purpose of the assessment (e.g., hospital records, RAF claim form, medico-legal reports of medical and psychological experts); specific people interviewed or consulted telephonically (e.g., patient, patient's mother, school principal, two work colleagues). If there is a source of information you feel should have been included, state which that is and why it was not obtained.

## **Assessment procedure:**

In this section detail whether or not the assessment consisted of interviews and psychometric testing (comprehensive or brief screening), or just interviews, when they were conducted, and how they were paced. Some like specification of the time given to the various aspects of the assessment, although this is not obligatory as long as the information can be made available should this be requested.

The language/s used in interview and in the test-session must be specified.

The name and qualifications of any additional professionals involved in the assessment must be supplied, such as another psychologist, a training psychologist, a psychometrist, or a translator. Provide a motivation for the use of such a professional(s) and their suitability to act in that capacity.

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(**Note:** For credentialing purposes it is not permitted to produce a report on a case where the interviewing and/or testing, or part thereof has been conducted by another practitioner e.g., another psychologist or psychometrist.

It is advised that training clinicians should for several years be gaining experience in doing all aspects of an evaluation themselves.

On the other hand, it is of optimal benefit for a clinician to examine a patient whose home language is not their own (e.g., a Xhosa speaking individual), and to use a suitably qualified clinician or psychometrist with the relevant African indigenous first language to assist with the evaluation. However, in these instances the primary clinician in charge of the assessment and final opinion must be actively present and involved in the process at all times of interviewing and/or testing. A report compiled in this manner is deemed highly acceptable under any clinical circumstances. It is also permissible for credentialing purposes, if submitted alongside other reports conducted independently).

# Clinical history based on previous medical, psychological, occupational therapy, physiotherapy, speech therapy, etc. reports:

A list of relevant documentation perused, with name and date of origin should be provided. It is useful to list these in chronological order in terms of date of the reports grouped according to the type of report (e.g., medical neurological; medical orthopaedic; psychological/psychiatric). These may pre- and post-date the event in question.

At the end of the listing, a brief synthesis of the core opinions that are contained in these reports should be provided if the material has prime relevance for integration into the case formulation. **Under no circumstances should this simply be a regurgitation of what is already available in the reports themselves.** Where there is an abundance of documentation it might be beneficial to provide a synthesis of the conclusions of the various reports as per each set of disciplinary inputs (i.e., medical neurological; medical orthopaedic; psychological/psychiatric). Preferably a brief overall synthesis can be provided of one or two paragraphs.

# Clinical history based on the interview data:

The chronology of events and the severity of the condition being investigated as reported by the patient and any collateral interviewees should be logically detailed. These are usually best documented separately including the patient's step-by-step experience of the event, versus that known by the other interviewees. It is important to make sure that the patient reports exactly what they personally remember about the event, and not what others have told him/her about what occurred. This is the only

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way it is possible retrospectively to investigate any amnesic periods associated with the event. The sources of this information should be clearly stated.

## **Current complaints:**

A list of current complaints logically follows on the history of the medical event as described by the patient and/or significant collateral informants. The patient and collateral reports of the various problems would normally be integrated, highlighting commonalities or differences in the observations. Complaints might be reported in order of importance as presented by the patient, followed by what was elicited on questioning, or they can be simply clustered under relevant subheadings such as Physical, Cognitive, Emotional/ Behavioural, Educational/Occupational and Social. In every instance a presenting complaint should be operationalized with concrete examples from the client's life. Who is presenting the complaint (patient/collateral), its frequency, duration and severity, as well as aggravating and mitigating factors, should be clearly indicated.

Keep this section strictly to the complaints as reported by the patient and collateral interviewees. Do not bring in the actual medical data supplied in the formal medical reports. Those linkages become the material for subsequent interpretation and synthesis in the concluding subsections of the report.

## Family history:

With respect to biological and/or other significant family members, this section should include: educational history (including learning problems) and occupational history of parents and siblings; grandparents, uncles/ aunts/ cousins can be included if their information adds to the picture; marital and parental details, including the educational and occupational status of the marital partner (s); educational history (including learning problems) and occupational history of the biological children; highlights of the medical and psychiatric history of all biological family members.

The purpose of this subsection is to establish a solid genetic and environmental basis from which to estimate the premorbid intellectual, educational and occupational potential of the patient. It also serves to establish any premorbid predisposition to medical and/ or psychiatric disorder.

# Personal history:

Specifically with respect to the patient being assessed, this section should cover his/her developmental history; level of educational achievements at each of the primary school, high school and tertiary stages, and whether these might be

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considered below average, average or above average/superior performances relative to his/her peers; the type of educational facilities must be documented at each of the primary, high school and tertiary levels (poorly resourced, relatively disadvantaged township or rural education, versus well-resourced, relatively advantaged private or former Model C education); occupational history that operationalizes the type of responsibilities involved in the job(s); home and socioeconomic circumstances; financial arrangements (i.e., how has this person managed his/her finances over time in operational terms); social activities and hobbies; habits (this includes use of substances; alcohol and drug use); premorbid medical and psychiatric history.

A listing of available school reports, the core contents thereof and a synthesis of the implications should be included as part of the educational history.

Descriptions of the person's basic personality as experienced before the event by the patient and others can be included in this section.

The purpose of this subsection is further to establish a solid genetic and environmental basis from which to estimate the premorbid intellectual, educational and occupational potential of the patient. It also serves to establish any premorbid predisposition to medical and/ or psychiatric disorder. All subsections will be focused on how the person was premorbidly, and can be brought up to the point of the accident including brief reference to how they are currently post-accident. If problems have occurred these should have been dealt with in detail already in the earlier section on 'current problems'.

(Note: Something like patient disclosure of drug usage presents an ethical dilemma when writing a report. It is necessary to write an honest report that has clinical integrity. However, if at the same time the disclosure might compromise the patient in some way, refer to current professional codes of ethics in this regard, and/or seek professional advice on how to proceed).

## Estimate of premorbid level of intellectual functioning:

(This subsection can alternatively be placed in the section on test results and outcome, preceding interpretation of the test data)

Based on the family and personal educational and occupational histories, and any past psychometric examinations, provide a rigorously motivated estimate of the level of intellectual potential **before** the event in question. Importantly, for this estimate, premorbid indications from the present testing are specifically NOT included. For this subsection, the estimate is based purely and strictly on premorbid history and any available premorbid testing. The rationale being that you can never be 100% sure of any "hold" test post brain impairment, as depending on the location and extent of damage even your classical "hold" tests might not hold. Therefore, whatever you do on present testing should be used to corroborate (or not), or adjust this prior estimate

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at a later stage in the report, when interpreting the newly available, postmorbid test results.

## Validity of the history:

Provide a brief comment on your impression of the validity of the history supplied by the formal medical documents perused, and the interviewees. Did the interviewees strike as good witnesses? Were there any obvious inconsistencies within and between the various accounts given of the situation either in the records and/or the interviewees?

# Clinical impression/mental status examination/behaviour during testing:

This section should comment on the following aspects, preferably in this order: appearance and behaviour including striking features that may relate to the presenting problems (such as limp, lameness or scarring), appropriateness of dress code, lack of personal hygiene, ability to relate to the examiner, attitude to deficits and assessment, co-operation, effort; speech (e.g., slurred, slow, disinhibited, articulate or not); mood (e.g., agitated, depressed, anxious, elevated, blunted); psychotic indications (e.g., hallucinations, delusions, derealisation, depersonalization, or nil psychotic indications); cognition (orientation, attention, impression of level of intellectual ability based purely on how the person comes across and not what might be expected from the history since these impressions may not be congruent and have clinical implications; insight and judgement).

Be very specific and provide concrete examples of the observations. For example: The patient spoke with such slurred speech that his conversation was barely intelligible throughout the interview; the patient spoke fluently with good articulation except towards the end of the day's interviewing when clearly fatigued, he/she spoke with somewhat slurred speech. The patient appeared agitated in that he/she kept wringing his/her hands, and was pacing up and down the office when not specifically being questioned. The patient showed good judgement in that ......etc. We should also be told what is not in evidence when expected, so that it is clear that relevant questions were asked or clinical observations made with respect to the particular case in question.

Depending on the complexity of the case, it may be useful to complete the mental status examination according to the above elements, followed by a separate subsection that purely provides the qualitative test-taking observations. It is important to comment on the estimated validity of the test results, with respect to possible interference of depressed mood, fatigue, poor motivation, or other extraneous factors.

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# Psychometric tests administered and outcome:

An explanation of test choices should be provided (e.g., a test of general intellectual functioning was given to provide an estimate of premorbid functioning and pointers for areas of deficit to follow up; in addition a series of more specific tests were given that focus on attention, memory and executive functions in view of the specified referral question/ presenting pathology, viz.,......). It is essential that the battery is a motivated one, and not just a routine shot-gun approach applied to every patient regardless of the referral question and specific problem being assessed. A list of cognitive tests should be grouped separately from psychiatric inventories questionnaires if used.

A useful, clear-cut test grouping is as follows: tests covering a spectrum of cognitive functions (e.g. IQ tests, dementia or general screening tests); tests of handmotor function; language functioning including verbal fluency and word naming; visuoperceptual/visuospatial function (speeded and unspeeded); verbal memory (intentional, incidental, immediate, delayed); visual memory (intentional, incidental, immediate, delayed); wisual memory (intentional, incidental, immediate, delayed); malingering/ suboptimal functioning. In addition there may be special additional tests included for attention/concentration and executive function warranting their own grouping, but only if deemed necessary, as these are modalities that will be evaluated and interpreted across the whole test battery. Different clinicians develop their own favoured modes of grouping tests under functions. Tests are multifunctional so there are not hard and fast rulings on how this is best achieved, but it needs to be very carefully thought out, and best informed by core texts in that regard, such as Lezak et al., (2012); Strauss et al., (2006).

The language of the test versions must be supplied with comment as to whether the tests were in the home language of the patient or not; whether any translations used were formal and standardized, or whether informal translation occurred through the use of a suitably qualified translator present in the test session. The report should state which test norms were used with comment about their suitability in a particular case.

Specific norm information should include (where possible) the names of the researchers, date of study and any other relevant details about the sample (e.g. gender, age range, educational level, quality of education, SES, race, first language, IQ level). This detail is best provided in an appendix that must be submitted for credentialing purposes. It would not normally accompany the report sent to the referral agent, but kept on file should the information be requested for professional purposes.

When presenting the results, develop your own layout, but information indicated under relevant domain headings is helpful as per the groupings laid out above (i.e., tests covering a spectrum of cognitive functions, e.g. IQ tests, dementia or general screening tests); handmotor function; language functioning including fluency and naming; visuoperceptual/visuospatial function (speeded and unspeeded); verbal

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memory; visual memory; attention and concentration; executive function; malingering/suboptimal performance).

Actual test scores need to be available to the examiners. These might be integrated into the text. Alternatively, only an overall interpretation of the results should be provided in the text, and a complete, organized set of results tabled in an appendix together with the normative data applied. This method is economical in terms of the length of the report. As indicated earlier, such an appendix would not normally accompany the report sent to the referral agent, but kept on file should the information be requested for professional purposes.

Comment is also needed on what is not present when expected if a specific syndrome is being investigated (e.g., in the case of the acceleration-deceleration concussive brain injury that processing speed and memory functions were intact; in the case of right hemisphere damage that there was no left-sided neglect). Importantly, comment on the presence or absence of impairment must be based on two comparative indexes: (i) impairment per se relative to the relevant norm base, and (ii) impairment relative to the individual's own estimated premorbid level. These may be different. For instance, someone may be functioning at an average level on a test relative to the norms, but this would be evaluated as an impairment for the individual if they were at a superior level premorbidly. Or, a person may be below average/ borderline relative to the norms, but this may not represent impairment for an individual whose premorbid level was at that level.

### **Case Formulation/ Conclusions:**

The case formulation/ conclusion section should provide a synthesis of the whole case. The referral question should be answered. It must provide a clear opinion and guidance on the way forward for the referral agent. This is often the only section read by the referral agent, and it is important that it provides an overview of the whole case in VERY brief form. If written properly it can be extracted from a longer report and put into a one or two page feedback letter to a professional, who does not need to see a long detailed report such as is required for a medico-legal report.

It is based on an integrated summary of the reason for referral, the presenting condition, current complaints, information obtained from the prior documentation and the interview, clinical observations and test findings. Therefore, it should not contain any new factual information that has not appeared earlier in the report. At the same time it must not simply be a regurgitation of information previously laid out in the body of the report. It is a synthesis and interpretation of the foregoing material taking the case understanding to a new level.

Specifically, the neuropsychological conclusion must include a focused synthesis with implications in terms of brain behaviour relationships, past and present genetic,

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organic and psychosocial contributing factors, and the provision of a clearly motivated differential diagnosis. It is essential to come up with a firm opinion, even if that firm opinion is that the diagnosis is uncertain. In the case of an uncertain diagnosis it is still necessary clearly to state the likely alternatives, including the possibility of there being a combination of possible diagnoses that cannot be separated out. A definitive statement must be made about the finality of the findings. In other words, give a clear opinion as to whether the identified changes can be considered permanent, or whether there may be remission of symptoms over time.

Typically there are six basic areas to cover/ questions to answer in the case formulation. If the task feels overwhelming, think of the bare bones of the situation as though telling a story. It may be helpful to structure your conclusions in five subsections that flow in paragraphs one after the other, preferably without headings, that specifically attend to these questions:

- *Identifying data.* In a nutshell, who is this person? Mrs x is a x old woman, with x education, employed as x, who is currently living xxx.
- Neuropathological event. What happened and when?
- *Premorbid functioning.* What could this person do, and who was this person prior to the event?
- Postmorbid functioning. What are they no longer able to do, and who are they now?
- Relationship between change and brain injury/ co-contributing factors. What is
  the exact link between the difference in current functioning and past functioning
  in terms of brain-behaviour relationships, including the possible total or partial
  contribution of past and present physical, brain-related and/or psychosocial
  factors?
  - *Prognostic indications.* What are the various implications of this for the future?

#### Recommendations:

These are determined by the problems deemed to be present and what can be done to mitigate them. These are usefully specified under a number of relevant subheadings, which may include medical (neurological, psychiatric), psychological (cognitive, emotional, behavioural), educational, occupational, familial, social, financial. An important aspect of the financial recommendations is whether or not the individual will be able to manage any large financial settlement received to compensate for disability.

Again be specific with the recommendations, e.g., referral to an educational psychologist is recommended to make more in depth recommendations on career options for the patient; referral to a psychiatrist is recommended to evaluate the need for psychotropic medication for anxiety and depression.

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# Final Summary (optional):

This is a **very** brief synthesis of the essential ingredients of the case, i.e., a "final word" on the case. **It should be no longer than a few sentences, in one short paragraph**. It states who the patient is, what happened, the gist of the formulation, recommendations and prognosis. At the end of a long report on a complex case this can be of great assistance to the reader. For example:

Mr Joubert is a 45 year old policeman who sustained a traumatic brain injury of moderate severity and extensive orthopaedic injuries in a motor vehicle accident in January 2012. He suffers from chronic pain, major depression, and cognitive dysfunction due to the combined effect of permanent brain injury and psychiatric factors that place his job in jeopardy. Were it not for the accident he had the potential to acquire advanced training within the police service and promotion to brigadier level. Treatment is called for, but in light of the chronicity of the problem, the prognosis for recovery remains guarded.

Mr Smith is a 50 year old accountant who was involved in a motor vehicle accident in October 2007 in which he sustained a mild traumatic brain injury. He is suffering from posttraumatic stress disorder and unresolved grief following the death of his son in the accident, both of which should respond favourably to psychotherapy and anti-depressant medication. There is no evidence of permanent cognitive decline due to brain injury. Despite his psychiatric difficulties, socially and occupationally Mr Smith is still operating at a superior level in keeping with his premorbid capabilities.

**NB: GENERAL ISSUES TO BE TAKEN INTO ACCOUNT** 

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## 1. GENERAL ISSUES TO BE TAKEN INTO ACCOUNT

### **Presentation:**

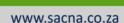
Does the letterhead and whole report create a positive impression? Is the format such that it is easy to read (font size, line spacing, etc) and is the information easy to find? Has the report been proofread and language edited? Is the report signed? Is the report comprehensive, including all necessary aspects, yet non-repetitive and as economically delineated as possible? Screen for repetition and eliminate by appropriate integration of material in the relevant subsections. Acknowledge any repetitive statement deemed unavoidable by the precursory statement: "as previously indicated......"

Numbering each section and subsection of the report is useful, and is particularly indicated for a report prepared for court purposes. Documents submitted to attorneys electronically need to be in a PDF format so that they cannot be altered. This would not apply to documents submitted for credentialling as some examiners may wish to comment by annotating the report.

### Content:

The referral question and referral agent must be clear. There must be sufficient detail to give an indication of the suspected neuropsychological condition and its severity. There must be sufficient history to determine the core demographic details of the person, and who the person being assessed was prior to the onset of the condition, including also sufficient information to ponder differential diagnoses. This is a scientific report and there must be sufficient test-taking detail available to make the assessment replicable and accessible to external validation by another similarly trained professional.

Before submitting a report, ask yourself the following questions: Has appropriate clinical and other collateral information been obtained? If not say why this was not done in order to show knowledge that this would have been optimal, or might still need to be done. Are the clinical and psychometric measures used appropriate and the results interpreted reasonably? If there is any question about the validity of this aspect of the report (e.g., the lack of appropriate norms for the individual being assessed, or failure to provide full coverage of a particular functional modality due to time constraints), show critical awareness of the limitation in the report. Is the material interpreted in an integrated and comprehensive manner? Is the referral question answered? Are reasonable recommendations, based on the derived answers, then made? If any of these aspects have not been attended to, go back to the report and make the relevant additions/ revisions.



Remember this is a hypothesis testing process, always open to re-conceptualization if more information comes to light that challenges the working hypothesis. It is of prime importance to make sure that the reader is aware that all possible alternative explanations have been considered and either competently excluded or retained as possibilities to be considered.

The presence of a neuropathological event does not provide certainty that all that follows can be attributed to that event. As Iverson (2006) eloquently points out, a case analysis taking such a stance, without carefully exploring alternative possibilities or co-existing possibilities to account for the prevailing situation, are in danger of being criticized for being naïve, biased, and using primitive logic, such a "post hoc ergo propter hoc" (after this, therefore because of this). Therefore, the clinician should have considerable evidence to support the nexus between a particular brain-related event and the presenting patient status.

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## References:

Iverson, G.L. (2006). Misdiagnosis of the persistent postconcussion syndrome in patients with depression. *Archives of Clinical Neuropsychology*, *21*, 303-310.

Lezak, M., Howieson, D., Bigler, E., & Tranel, D. (2012). *Neuropsychological Assessment* (Fifth ed.). Oxford: Oxford Univesity Press, Inc.

Strauss, E., Sherman, E., & Spreen, O. (2006). *A compendium of neuropsychological tests: Administration, norms and commentary* (Third ed.). New York: Oxford University Press.

### NOTE:

Document compiled by the SACNA executive committee, updated 18 October, 2018.

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# **APPENDIX: SUMMARY OF RELEVANT HEADINGS**

# **NEUROPSYCHOLOGICAL REPORT**

IDENTIFYING DATA	
Name:	Date of Birth:
Date of Accident/ Neuropathological event:	
Age at time of Accident/ Neuropathological event:	
Date (s) of Assessment:	
Age at time Assessment:	
Address:	
First Language:	
Education Level Achieved:	
Quality of Education:	
Occupation:	
Home status:	
Handedness:	
Referred by:	
Clinician:	
Other Clinician/ Psychometrist/ Translator	
Date of Report:	
REASON FOR REFFERAL	

**SOURCES OF INFORMATION** 

## **ASSESSMENT PROCEDURE**

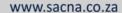
## PREVIOUS MEDICAL/ PSYCHOLOGICAL/ EDUCATIONAL/ OTHER REPORTS

Medical documentation perused

Synthesis of medical documents perused

Psychological reports perused

Synthesis of psychological reports perused



# HISTORY OF THE ACCIDENT/NEUROPATHOLGICAL EVENT AND POSTINJURY FOLLOW UP AS REPORTED BY THE PATIENT AND SIGNIFICANT OTHERS

Accident / Neuropathological event - report of patient

Accident / Neuropathological event - report by significant other (s)

#### **CURRENT PROBLEMS**

Physical

Cognitive

Emotional/behavioural

Social

Educational/ Occupational

#### **FAMILY HISTORY**

Biological Parents (grandparents, foster parents, other family members if relevant), (name, age, education, occupation)

Siblings (name, age, education, occupation)

Family Medical History

### **PERSONAL HISTORY**

Birth and early childhood

Pre-accident / pre-neuropathological event medical history

Education and Occupation (plus record of any formal supporting documentation)

Relationship History

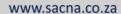
Activities and Habits

Past and present living conditions

Past and present financial arrangements

## **ESTIMATE OF PREMORBID INTELLECTUAL ABILITY**

(This subsection can alternatively be placed in the section on test results and outcome, preceding interpretation of the test data)



#### **VALIDITY OF THE HISTORY**

# MENTAL STATE EXAMINATION OF PATIENT; OBSERVATIONS OF TEST BEHAVIOUR

Appearance, Behaviour and Speech, Mood, Psychotic Indications, Cognition Test Behaviour

### **PSYCHOMETRIC TESTS ADMINISTERED AND OUTCOME**

Tests Employed

Comparative Norming Indicators Employed

Motivated estimate of premorbid intellectual ability (if not done in earlier subsection)

Interpretation of cognitive test results

### **CASE FORMULATION/ CONCLUSIONS**

### **RECOMMENDATIONS**

Medical

Psychological

Educational

Social

Financial

**FINAL SUMMARY (OPTIONAL)** 

## **REFERENCES**